Attachment D

OAK TO NINTH AVENUE PROJECT

Draft Environmental Impact Report

State Clearinghouse No. 2004062013

Prepared for:

City of Oakland, CEDA

August 2005

ESA

Notice of Completion (Appendix C)

For US Mail: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044
For Hand Delivery: 1400 Tenth Street, Sacramento, CA 95814 (916) 445-0613

SCH# 2004062013

Project Title: Oak to Ninth Mixed Use Development

Lead Agency: City of Oakland Community and Economic Devel. Agency Contact Person: Margaret Stanzione
Street Address: 250 Frank H. Ogawa Plaza, Suite 3315 Phone: (510) 238-4932
City: Oakland Zip Code: 94612 County: Alameda County

Project Location

County: Alameda County City/Nearest Community: Oakland
Cross Streets: Fallon/ Embarcadero and 10th Ave/Embarcadero Zip Code: 94607; 94606 Total Acres: 64
Assessor's Parcel No. 0000-0430-001-02; Portion of 0000-0430-001-04; 0000-0460-003; 0000-0460-004; 0000-0465-002; Portions of 0000-0470-002 Section: Twp: Range: Base:

Within 2 Miles: State Hwy #: I-880 Waterways: SF Bay, Oakland Estuary
Airports: Railways: Yes Schools: Yes

Document Type

CEQA:
- ☐ NOP
- ☐ Early Cons
- ☐ Neg Dec
- ☐ MitNeg Dec
- ☒ Draft EIR
- ☐ Supplemental/Subsequent
- ☐ EIR (Prior SCH No.)
- ☐ Other:

NEPA:
- ☐ NOI
- ☐ EA
- ☐ Draft EIS
- ☐ FONSI

Other:
- ☐ Joint Document
- ☐ Final Document
- ☐ Other

Local Action Type

- ☐ General Plan Update
- ☒ General Plan Amendment
- ☐ General Plan Element
- ☐ Community Plan
- ☐ Specific Plan
- ☐ Master Plan
- ☒ Planned Unit Development
- ☒ Site Plan
- ☒ Rezone
- ☐ Prezone
- ☐ Use Permit
- ☒ Land Division (Subdivision, Parcel Map, Tract Map, etc.)
- ☐ Annexation
- ☒ Redevelopment
- ☐ Coastal Permit
- ☒ Other Final Design Review; Tree Removal Permit, Creek Protection Permit

---

Development Type

- ☒ Residential: *Units* 3,100 *Acres* 28
- ☐ Office: *Sq. ft.* *Acres* *Employees*
- ☒ Commercial: *Sq. ft.* 200,000 *Acres* *Employees*
- ☐ Industrial: *Sq. ft.* *Acres* *Employees*
- ☐ Educational:
- ☒ Recreational: Public Open Space

Total Acres (approx.) 64

- ☐ Water Facilities: *Type* MGD
- ☐ Transportation: *Type*
- ☐ Mining: *Mineral*
- ☐ Power: *Type* *Watts*
- ☐ Waste Treatment: *Type*
- ☐ Hazardous Waste: *Type*
- ☐ Other

Funding (approx.) **Federal $** **State $** *Total $*

Project Issues Discussed in Document

- ☒ Aesthetic/Visual
- ☐ Agricultural Land
- ☒ Air Quality
- ☒ Archaeological/Historical
- ☐ Coastal Zone
- ☒ Drainage/Absorption
- ☒ Economic/Jobs
- ☐ Fiscal
- ☒ Flood Plain/Flooding
- ☐ Forest Land/Fire Hazard
- ☒ Geologic/Seismic
- ☐ Minerals
- ☒ Noise
- ☒ Population/Housing Balance
- ☒ Public Services/Facilities
- ☒ Recreation/Parks
- ☒ Schools/Universities
- ☐ Septic Systems
- ☒ Sewer Capacity
- ☒ Soil Erosion/Compaction/Grading
- ☒ Solid Waste
- ☒ Toxic/Hazardous
- ☒ Traffic/Circulation
- ☐ Vegetation
- ☒ Water Quality
- ☒ Water Supply/Groundwater
- ☒ Wetland/Riparian
- ☒ Wildlife
- ☒ Growth Inducing
- ☒ Land Use
- ☒ Cumulative Effects
- ☒ Other: Indirect Physical Impacts due to Retail and Housing Development

Present Land Use/Zoning/General Plan Designation: Industrial Land Uses; M-40 Heavy Industrial Zone and S-2 Civic Center Zone / S-4 Design Review Combining Zone; Planned Waterfront Development (PWD) General Plan Designation.

Project Description

The project would construct approximately 3,100 residential dwelling units (a mix of flats, townhomes, and lofts) on 13 development parcels. Approximately 200,000 square feet of ground-floor retail/commercial space would be distributed throughout each of the 13 development parcels and would be designed to provide a variety of active retail, restaurant, service, and small office uses to support the new residential neighborhood and serve visitors to the site. Approximately 28.4 acres (or 44 percent) of the site would be developed with parks and open spaces, including and existing 7.7-acre park (Estuary Park). The project would demolish a maximum of 165,000 square feet of the existing 180,000 square-foot Ninth Avenue Terminal building (an historic resources) to create the largest (9.7 acres) of a series of interconnected parks and waterfront space. The project would retain a minimum of 15,000 square feet of the Terminal's Bulkhead Building envisioned to contain a variety of uses consistent with the Tidelands Trust. A continuous public pedestrian trail and Class I bicycle facility along the entirety of the project's waterfront would also be created as a segment of the Bay Trail. The majority of existing uses and structures on the project site would be removed or demolished.

Suggested Distribution

- ☒ Air Resources Board
- ☒ Caltrans District #4
- ☒ Caltrans Planning
- ☒ Fish & Game Region #3
- ☒ Housing & Community Development
- ☒ Native American Heritage Commission
- ☒ Office of Historic Preservation
- ☒ Regional WQCB #2
- ☒ S.F. Bay Conservation & Development
- ☒ State Lands Commission
- ☒ SWRCB: Water Quality
- ☒ Toxic Substances Control, Department of
- ☒ Water Resources, Department of

Public Review Period

Starting Date: September 1, 2005 Ending Date: October 24, 2005

Lead Agency:

City of Oakland
Community & Economic Development Agency – Planning
250 Grank Ogawa Plaza, Suite 3315
City/State/Zip: Oakland, CA 94612
Contact: Margaret Stanzione
Phone: (510) 238-4932
mstanzione@oaklandnet.com

Project Applicant:

Oakland Harbor Partners
4670 Willow Road, Suite 200
City/State/Zip: Pleasanton, CA 94588
Phone: (925) 463-1122

Signature of Lead Agency Representative _____ Date: 8/31/05

OAK TO NINTH AVENUE PROJECT

Draft Environmental Impact Report

State Clearinghouse No. 2004062013

Prepared for: August 2005

City of Oakland

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Suite 600
Oakland, CA 94612
510.839.5066
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Draft Environmental Impact Report

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CHAPTER I
Introduction

A. Environmental Review

The project sponsor, Oakland Harbor Partners, LLC, (a partnership between Signature Properties and Reynolds & Brown) has submitted an environmental review application to the City of Oakland for the redevelopment of an approximately 64.2-acre[1] project site along the Oakland Estuary and the Embarcadero, east[2] of Jack London Square and south of Interstate 880 (I-880) along the city of Oakland's southern boundary. Estuary Park, the southern portion of Lake Merritt Channel, Clinton Basin, and the Ninth Avenue Terminal are included in the project site, but approximately six acres of privately held property on two sites along and east of 5th Avenue are not included. The project is referred to throughout this document as the "Oak to Ninth Avenue Project" or "the project."

The proposed project would redevelop the project site, an underused maritime and industrial area on the Oakland Estuary, into a mixed-used neighborhood containing approximately 3,100 residential dwelling units on 13 development parcels; approximately 200,000 square feet of active ground-floor retail uses; approximately 28.4 acres of new and improved parks and open space; and renovation of Clinton Basin Marina and Fifth Avenue Marina.

Subsequent to receiving the application for environmental review, the City decided to prepare an environmental impact report (EIR) for the Oak to Ninth Avenue Project.

Consistent with the California Environmental Quality Act (CEQA), this EIR is a public information document for use by governmental agencies and the public to identify and evaluate potential environmental consequences of a proposed project, to recommend mitigation measures to lessen or eliminate adverse impacts, and to examine feasible alternatives to the project. The information contained in the EIR is reviewed and considered by the City prior to the ultimate decision to approve, disapprove, or modify the proposed project.

Among the EIR's key purposes is to identify mitigation measures or alternatives that would substantially lessen or avoid significant adverse environmental effects.

The EIR includes an Initial Study Checklist that identified environmental issues that are addressed in the EIR and environmental issues that could be excluded from further analysis. This Draft EIR

---

1 The total after-project land area would total 64.2 acres, including pile-supported pier area and excluding approximately 11.4 acres of water surface for marina facilities.

2 For purposes of this EIR and following Oakland convention, the hills are to the north; therefore, the Estuary and the Embarcadero run east-west, and 10th Avenue and streets parallel to it run north-south.

addresses topics where the project could result in a potentially significant impact and therefore required further study. The Initial Study also documents those issues that would clearly result in less than significant impacts. On May 28, 2004, the City sent a Notice of Preparation (NOP) to governmental agencies and organizations and persons interested in the project. The NOP is included in this EIR as Appendix A. The NOP requested that agencies with regulatory authority over any aspect of the project describe that authority and identify the relevant environmental issues that should be addressed in the EIR. Interested members of the public were also invited to comment. This Draft EIR addresses those responses to the NOP that involved environmental issues associated with the project site and proposed project. A summary of comments is also provided in Appendix B. Copies of responses to the NOP are available for review at all locations where the Draft EIR is available for review (please refer to the Notice of Availability for specific locations).

The Draft EIR is available for public review for the period identified on the notice that is inside the front cover of the document, during which time written comments on the Draft EIR may be submitted to the City of Oakland Community and Economic Development Agency, Planning Division, at the address indicated on the notice. Responses to all comments received on the environmental analysis in the Draft EIR and submitted within the specified review period will be prepared and included in the Final EIR.

B. Organization of the Draft EIR

The *Summary* (Chapter II) of this EIR contains a summary of the document and allows the reader to easily reference the analysis of potentially significant effects, proposed mitigation measures, residual environmental impacts after mitigation, if any, and alternatives to the project that reduce or avoid significant effects on the environment. Table II-1, Summary of Environmental Impacts and Mitigation Measures, is provided at the end of Chapter II. Detailed analysis of these issues is contained in the main body of the document.

The *Project Description* (Chapter III) describes the project location, a description of the project, the objectives of the project, the anticipated phasing of the project, a list of the City's required project approvals, and other agencies that must consider aspects of the project.

Environmental Setting, Impacts, and Mitigation Measures (Chapter IV) contains a discussion of the setting (existing conditions and regulatory framework), the environmental impacts (including cumulative impacts) that could result from the project, and the mitigation measures that would reduce or eliminate the identified adverse impacts. As appropriate and relevant, activities on each development parcel and phase have been assessed for potential impacts during and after construction. Also where appropriate and relevant, potential impacts are identified throughout this EIR by development parcel and/or phase, and measures are identified accordingly. The criteria used to assess the significance of adverse environmental effects are identified, and the significance of the impact both prior to and following mitigation is reported.

Alternatives (Chapter V) evaluates a range of alternatives to the proposed project. These following alternatives are included: Alternative 1A: No Project (required by CEQA); Alternative 1B: No

Project/Estuary Policy Plan (required by CEQA); Alternative 2: Enhanced Open Space/Partial Preservation; and Alternative 3: Reduced Development / Preservation. A Full Preservation Sub-Alternative is also included.

Impact Overview (Chapter VI) describes the significant, unavoidable impacts and cumulative impacts identified in Chapter IV and describes the project's potential for inducing growth.

Report Preparation (Chapter VII) identifies the authors of the EIR. Persons and documents consulted during preparation of the EIR are listed at the end of each analysis section (Sections IV.A, through IV.M).

The NOP and Initial Study, as well as supporting background documents and technical information for the impact analyses, are presented in Appendices A through K. All reference documents listed at the end of each analysis section (throughout Chapter IV) are available for review by the public at the City of Oakland Community and Economic Development Agency, Planning and Zoning Division, under reference Case Number ER04-0009.

CHAPTER II
Summary

A. Project Description

The project sponsor, Oakland Harbor Partners, LLC,[1] proposes to redevelop the 64.2-acre[2] project site located along the Oakland Estuary and the Embarcadero, east[3] of Jack London Square, and south of Interstate 880 (I-880). Estuary Park, the southern portion of Lake Merritt Channel, Clinton Basin, and the Ninth Avenue Terminal are part of the project site, but approximately six acres of privately-held property on two sites along and east of 5th Avenue are not included.

The project would convert an underutilized, maritime and industrial area into a mixed-use neighborhood with residential, retail/commercial, open space, and marina uses. The majority of existing uses and structures on the project site would be removed or demolished. Approximately 28.4 acres (or 44 percent) of the site would be developed with parks and open spaces, including the existing Estuary Park and Jack London Aquatic Center.

The project would consist of approximately 3,100 residential dwelling units (a mix of flats, townhomes, and lofts) on 13 development parcels. Approximately 200,000 square feet of ground-floor retail/commercial space would be distributed throughout each of the 13 development parcels and would be designed to provide a variety of active retail, restaurant, service, and small office uses to support the new residential neighborhood and serve visitors to the site.

The project would demolish a maximum of 165,000 square feet of the existing 180,000 square-foot Ninth Avenue Terminal building and a portion of its existing wharf to create the largest (9.7 acres) of a series of interconnected parks and waterfront space. The project would retain a minimum of 15,000 square feet of the Terminal's Bulkhead Building envisioned to contain a variety of uses consistent with the Tidelands Trust. A continuous public pedestrian trail and Class I bicycle facility along the entirety of the project's waterfront would also be created as a segment of the Bay Trail.

Building heights would range from six to eight stories (up to 86 feet) in height, with highrise tower elements of up to 24 stories (240 feet) on certain parcels. A variant to the project allows

1 Oakland Harbor Partners is a joint venture between Signature Properties, Inc., and Reynolds & Brown.
2 The total land area of the project site after implementation would total 64.2 acres, including pile-supported pier areas and excluding approximately 11.4 acres of water surface for marina facilities.
3 For purposes of the EIR and following Oakland convention, the hills are to the north; therefore, the Estuary and the Embarcadero run east-west, and 5th Avenue and streets perpendicular to it run north-south.

consideration of increased maximum building heights from 86 feet to 120 feet on certain development parcels.

The project would rebuild and expand the existing Fifth Avenue Marina and Clinton Basin Marina, which would entail dredging activities and straightening the existing undulating and unprotected condition of Clinton Basin's shoreline. The project would improve the existing shoreline along the project site with varying treatments, including marsh habitats, and riprap, and bulkhead walls. Site remediation would also occur as part of the project.

The project would provide a total of approximately 3,534 onsite parking spaces to meet City Code parking requirements and parking demand.[4]

The "Planned Waterfront Development-1" Estuary Plan land use classification exists on nearly the entire project site, except Estuary Park and the Jack London Aquatic Center which is designated as Park, Open Space, and Promenades. East of Lake Merritt Channel, the project site is within the M-40 Heavy Industrial Zone. West of the channel, Estuary Park and the Jack London Aquatic Center are within the S-2 Civic Center Zone / S-4 Design Review Combining Zone. The project would not be consistent with the existing land use classification or the existing zoning and would require a General Plan Amendment and Rezoning to accommodate the proposed densities and residential uses.

The project would be remediated and developed in eight phases over a period of approximately 11 years: 2007 to 2018.

B. Environmental Impacts and Mitigation Measures

Potentially significant environmental impacts of the project are summarized in Table II-1 at the end of this chapter. This table lists impacts and mitigation measures in three major categories: significant impacts that would remain significant even with mitigation (significant and unavoidable); significant impacts that could be mitigated to a less than significant level (significant but mitigable); and impacts that would not be significant (less than significant) Beneficial effects that would result from the project are also listed. For each significant impact, the table includes a summary of mitigation measure(s) and an indication of level of significance after implementation of mitigation measures. A complete discussion of each impact and associated mitigation measure is provided in Chapter IV, Environmental Setting, Impacts, and Mitigation Measures.

[4] An additional approximately 450 spaces would be available primarily for use by park and marina users: approximately 75 spaces in surface parking lots in the proposed open space areas, and approximately 375 on-street parking spaces. These spaces would not count toward satisfying parking demand or City Code-required parking.

C. Alternatives

Alternative 1A: No Project

With the No Project Alternative, redevelopment of the 64.2-acre Oak to Ninth project site as proposed by the project would not occur. Consistent with recent-year trends on the site, there would be no substantial change to existing Port of Oakland (property owner) tenant occupancies or existing facilities, infrastructure, or site conditions.

Alternative 1B: No Project / Estuary Policy Plan

The No Project / Estuary Policy Plan Alternative is included in the EIR to provide a comparison of the project to an alternative that further considers the objectives and policies of the Estuary Policy Plan and what could be reasonably developed on the site.[5] Key elements of this alternative include:

- Demolition of the Ninth Avenue Terminal.
- Approximately 41.5 acres of parks and open space (66 percent of project site, adjusted for comparison with the proposed project).
- Approximately 102,900 square feet of existing space in Fifth Avenue Point retained with some intensification and infill expansion anticipated, including approximately 35,000 square feet of additional artisan studio space for work-live and work-only uses.
- About 5,500 square feet of new restaurant and marina-related uses on the west side Clinton Basin.
- New development is anticipated east of Clinton Basin and would include: 30,000 square feet of restaurant and retail uses, a smaller, 250-room hotel, a larger, 400-room hotel with a 50,000 square feet conference facility, and 70,000 square feet for educational, cultural, and recreational facilities/uses, such as a museum, community recreation center, gallery space, and/or other uses.

Alternative 2: Enhanced Open Space / Partial Ninth Avenue Terminal Preservation and Adaptive Reuse

The Enhanced Open Space / Partial Ninth Avenue Terminal Preservation Alternative is included in the EIR to allow a comparison of the project to a scenario with increased open space acreage on the site, and additional preservation of a portion of the Ninth Avenue Terminal building. Key elements of this alternative include:

[5] The perspective portion of **Figure V-1** is referenced from page 89 of the Estuary Policy Plan, Figure III-11, Oak to 9th Bird's-eye Perspective.

- Approximately 40.6 acres of parks and open space (approximately 41.5 acres), with a new major park that is substantially larger than that proposed by the project and for each of the alternatives.

- Preservation and adaptive reuse of the 1920s portion of the Ninth Avenue Terminal building and partial removal of its associated wharf structure. The retained 1920s portion Terminal would contain approximately 88,000 square feet of community use –educational, cultural, and/or recreational activities. Most of the 1950s portion of the Terminal building would be demolished, except the alternative could include maintaining aspects of the 1950s roof trusses. Future uses in the retained Terminal would be consistent with the Tidelands Trust designation that currently exists on the project site.

- Approximately 1,800 residential units, 95,000 square feet of commercial retail/restaurant. New residential buildings with ground-floor retail/commercial uses would be developed adjacent to Fifth Avenue Point.

- Realigned Embarcadero to curve through the eastern part of the site, separating new park area from the clustered residential development parcels.

Alternative 3: Reduced Development / Ninth Avenue Terminal Preservation

The Reduced Development / Ninth Avenue Terminal Preservation Alternative is included in the EIR to allow consideration of a reduced development scenario that could be developed on the site, and comparison of this scenario to the project. Key elements of this alternative include:

- Preservation and adaptive reuse of the entire Ninth Avenue Terminal, except for partial removal of its associated wharf structure to accommodate new public open space.

- Uses in the retained Terminal building would contain a conference facility (about 50,000 sq. ft.), and a potential mix of educational, cultural, and/or recreational uses (70,000 sq. ft.), totaling 120,000 square feet of community use.[6] Future uses in the retained Terminal would be consistent with the Tidelands Trust designation that currently exists on the project site.

- Approximately 39.9 total acres of parks and open space (63 percent of project site).

- Approximately 540 residential units, 10,000 square feet of retail/restaurant use.

Sub-Alternative: Full Ninth Avenue Terminal Preservation and Adaptive Reuse

The Ninth Avenue Terminal Preservation Full Preservation Sub-Alternative would retain and adaptively reuse the Ninth Avenue Terminal and related wharf structure to avoid the significant and unavoidable impacts (project and cumulative) that would occur with the project. This

[6] Proposed uses are consistent with those envisioned in the Estuary Policy Plan and assumed in Alternative 1B.

alternative is considered a stand-alone alternative that could be combined with the proposed project and other alternatives. Full preservation of the Ninth Avenue Terminal is addressed in this Sub-Alternative only and is not addressed elsewhere in the EIR. Future uses in the retained Terminal would be consistent with the Tidelands Trust designation that currently exists on the project site.

Environmentally Superior Alternative

The No Project alternative (Alternative 1A) would avoid all significant unavoidable and significant impacts associated with the project and each of the other alternatives, and therefore would be the environmentally superior alternative. However, as required by CEQA, a second alternative shall be identified when the "no project" alternative emerges as the Environmentally Superior Alternative (CEQA *Guidelines*, Section 15126.6(e)). In this case, the Reduced Development / Preservation (Alternative 3) with the Full Preservation Sub-Alternative would therefore be considered environmentally superior since it would avoid (or reduce to the greatest extent) several significant and unavoidable impacts that would occur with the project. The No Project / Estuary Plan (Alternative 1B) is also considered a "no project" alternative, but is evaluated as a development alternative.)

The Environmentally Superior Reduced Development / Preservation Alternative would:

- Avoid two of the three significant and unavoidable project impacts at area intersections under Buildout (2025) (Impact B.2).
- Avoid four of the six significant and unavoidable project impacts resulting from the project's contribution to cumulatively significant impacts at local intersections in 2025 (Impact B.3).
- Avoid the project's significant and unavoidable impact on regional air emissions (PM-10) in cumulative conditions (2025) (Impact C.7).
- Reduce (or avoid with Full Preservation Sub-Alternative) the significant and unavoidable impacts that would occur with the project in terms of demolition of a historic resource (Impact E.3, Impact E.4, and Impact E.8).
- Have less adverse effect on Fifth Avenue Point in terms of new, incompatible land uses and change in environment (Impact A.1 and Impact A.3).

It is recognized, however, that Alternative 3 would meet to a much lesser degree the project objectives to 1) provide a range of needed housing opportunities, 2) help address the existing jobs/housing imbalance, and 3) provide housing with access to alternative modes of transportation, each of which is consistent with policies in the General Plan LUTE, the Estuary Policy Plan, and the Housing Element.

D. Areas of Controversy

Areas of controversy regarding the project that are known to the City of Oakland are listed below. These areas of controversy were identified based on comments received from public agencies and members of the public in response to the Notice of Preparation (NOP) of this EIR, as well as input received during a series of public meetings (conducted separate from the formal environmental review process) on the proposed project.[7] All issues raised that pertain to potential environmental impacts of the project and that are appropriate for inclusion in the EIR pursuant to CEQA, are summarized in Appendix B.

Areas of controversy include, but are not limited to, the following:

- Consistency with the *Estuary Policy Plan*
- Preservation of the Ninth Avenue Terminal
- Amount of open space proposed by the project
- Appropriateness of scale and density of development
- Social and economic impacts
- Visual access of new open spaces and the Oakland Estuary
- Site accessibility and connections to surrounding areas
- Relationship to Fifth Avenue Point
- Wetland habitat impacts
- Consistency with the Public Trust

[7] Copies of NOP comment letters and minutes of the Public Scoping Meeting held June 16, 2004, and copies of the *Oak Street to Ninth Avenue Waterfront Project Summary Report – Small Group Interviews and Public Meetings*, May 2005, are available for review at the City of Oakland Community and Economic Development Agency.

TABLE II-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Significant and Unavoidable Impacts *(Significant, with Mitigation, or not in Lead Agency's Control)*		
B. Transportation, Circulation, and Parking		
B.1b: The LOS F conditions at the signalized intersection of *5th Street and Broadway*, which would prevail during the PM peak hour under 2010 baseline conditions, would worsen with the addition of traffic generated by Phase 1 of the project. The project-generated increases in vehicle delay on a critical movement would exceed the four-second threshold of significance.	No feasible mitigation measures are available that would fully improve operations at 5th Street and Broadway to acceptable levels. While improvements such as reconfiguring lanes on Broadway and adding directional signage, as discussed in the JLS EIR, would improve traffic flow conditions on some movements, downstream bottlenecks in the Webster Tube would continue to cause substantial backups and delay on 5th Street approaching Broadway, and the previously described unacceptable LOS F conditions would continue. The constrained capacity of the tube is an issue of multi-jurisdictional concern (solutions are being explored by the cities of Oakland and Alameda, Caltrans, and the Alameda County Congestion Management Agency), and no feasible measures to increase the tube's capacity have been identified to date (e.g., the tube cannot simply be widened as can a roadway).	**Significant and Unavoidable**
B.1c: The signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp* would degrade from LOS E to LOS F during the PM peak hour with the addition of traffic generated by Phase 1 of the project.	B.1c: Optimize the traffic signal timing at the signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented (because the City of Oakland, as lead agency, could not implement Measure B.1c without the approval of Caltrans. However, in the event that Mitigation Measure B.1c could be implemented, the impact would be less than significant.
B.1e: Traffic generated by Phase 1 of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and I-880 Northbound Off-Ramp – 6th Avenue*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant, during the PM peak hour.	B.1e: Install traffic signals at the unsignalized intersection of *Embarcadero and I-880 Northbound Off- Ramp – 6th Avenue*. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.1e without the approval of Caltrans. However, in the event that Mitigation Measure B.1e could be implemented, the impact would be less than significant.

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	streets). Signal installation shall meet City of Oakland and Caltrans design standards.	
B.2a: The signalized intersection of *Atlantic Avenue and Webster Street* would degrade from LOS E to LOS F during the AM peak hour with the addition of traffic generated by buildout of the project.	B.2a: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *Atlantic Avenue and Webster Street*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2a without the approval of the City of Alameda). However, in the event that Mitigation Measure B.2a could be implemented, the impact would be less than significant.
B.2c: The LOS F conditions at the signalized intersection of *5th Street and Broadway*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen with the addition of traffic generated by buildout of the project. The project-generated increases in vehicle delay would exceed the two-second threshold of significance.	No feasible mitigation measures are available that would fully improve its operations to acceptable levels. While improvements such as reconfiguring lanes on Broadway and adding directional signage, as discussed in the JLS EIR, would improve traffic flow conditions on some movements, downstream bottlenecks in the Webster Tube would continue to cause substantial backups and delay on 5th Street approaching Broadway, and the previously described unacceptable LOS F conditions would continue. The constrained capacity of the tube is an issue of multi-jurisdictional concern (solutions are being explored by the cities of Oakland and Alameda, Caltrans, and the Alameda County Congestion Management Agency), and no feasible measures to increase the tube's capacity have been identified to date (e.g., the tube cannot simply be widened as can a roadway).	**Significant and Unavoidable**
B.2d: The signalized intersection of *5th and Oak Streets at the I-880 Southbound On-Ramp* would degrade from LOS E to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project.	B.2d: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *5th and Oak Streets at the I-880 Southbound On-Ramp*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2d without the approval of Caltrans. However, in the event that Mitigation Measure B.2d could be implemented, the impact would be less than significant.

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
B.2e: The signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp* would degrade from LOS E to LOS F during the AM peak hour with the addition of traffic generated by buildout of the project, and the LOS F conditions that, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (total intersection average vehicle delay would exceed the two-second threshold of significance) with the addition of traffic generated by buildout of the project.	No feasible mitigation measures are available. The 2010 analysis concluded that the impact from Phase 1 development could be mitigated through optimization of signal timing (see Mitigation Measure B.1c). However, with the additional growth in background traffic and the growth in project traffic that would occur from 2010 to 2025, this retiming could not fully mitigate the impact from Project Buildout. Given the constrained right-of-way at this location, the addition of turn lanes or other similar improvements would not be feasible.	**Significant and Unavoidable**
B.2h: The LOS F conditions at the signalized intersection of *Lakeshore Avenue and MacArthur Boulevard*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (an increase in the average vehicle delay for a critical movement of more than four seconds) with the addition of traffic generated by buildout of the project.	No feasible mitigation measures are available. Assessment of possible mitigation measures indicates that optimization of signal timing at this intersection would reduce average vehicle delays by about 15 seconds, but would not fully mitigate the project's impact. Other improvements, such as additional turn lanes, do not appear feasible given the constrained right-of-way at the intersection.	**Significant and Unavoidable**
B.2l: Traffic generated by buildout of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and I-880 Southbound On-Ramp – 10th Avenue*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour.	B.2l: Install traffic signals at the unsignalized intersection of Embarcadero and I-880 Southbound On- Ramp – 10th Avenue. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Prior to the installation of this traffic signal, a complete traffic signal warrant analysis would be conducted at this location to verify that this location meets MUTCD signal warrants, which include both daily and peak-hour volume, accidents, and pedestrian volumes. Signal installation shall meet City of Oakland and Caltrans design standards.	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2l without the approval of Caltrans. However, in the event that Mitigation Measure B.2l could be implemented, the impact would be less than significant.
B.3a: Traffic generated by buildout of the project would contribute at least five percent of the cumulative traffic increases at the signalized intersection of *Atlantic Avenue and Webster Street* in Alameda during the AM and PM peak hours, as measured by the difference between existing and cumulative (with project) conditions.	B.3a: Implement Mitigation Measure B.2a (optimize traffic signal timing).	This cumulative impact would be **significant and unavoidable**, both because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2a without the approval of the City of Alameda), and because even though the increased

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
		average delay for the above-described mitigated condition would be less than the threshold of significance established by the City of Oakland, implementation of Mitigation Measure B.2a would not reduce volumes at this intersection, and the project's percent contribution would remain cumulatively considerable.
B.3c: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *5th Street and Broadway* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	No feasible mitigation measures are available that would fully improve its operations to acceptable levels. While improvements such as reconfiguring lanes on Broadway and adding directional signage, as discussed in the JLS EIR, would improve traffic flow conditions on some movements, downstream bottlenecks in the Webster Tube would continue to cause substantial backups and delay on 5th Street approaching Broadway, and the previously described unacceptable LOS F conditions would continue. The constrained capacity of the tube is an issue of multi-jurisdictional concern (solutions are being explored by the cities of Oakland and Alameda, Caltrans, and the Alameda County Congestion Management Agency), and no feasible measures to increase the tube's capacity have been identified to date (e.g., the tube cannot simply be widened as can a roadway).	**Significant and Unavoidable**
B.3d: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *5th and Oak Streets at the I-880 Southbound On-Ramp* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3d: Implement Mitigation Measure B.2d (optimize traffic signal timing).	This cumulative impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2d without the approval of Caltrans. However, in the event that Mitigation Measure B.2d could be implemented, the impact would be less than significant.
B.3e: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp* during the AM and PM peak hours, as measured by the difference between	No feasible mitigation measures are available. The 2010 analysis concluded that the impact from Phase 1 development could be mitigated through optimization of signal timing (see Mitigation Measure B.1c). However, with the additional growth in background traffic and the growth in project traffic that would	**Significant and Unavoidable**

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
existing and cumulative (with project) conditions.	occur from 2010 to 2025, this retiming could not fully mitigate the impact from Project Buildout. Given the constrained right-of-way at this location, the addition of turn lanes or other similar improvements would not be feasible.	
B.3f: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of Lakeshore Avenue and Foothill Boulevard during the AM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3f: Implement Mitigation Measure B.2g (optimize traffic signal timing).	This cumulative impact would be **significant and unavoidable** because even though the increased average delay for the above-described mitigated condition would be less than the threshold of significance established by the City of Oakland, implementation of Mitigation Measure B.2g would not reduce volumes at this intersection, and the project's percent contribution would remain cumulatively considerable.
B.3g: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of Lakeshore Avenue and MacArthur Boulevard during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	No feasible mitigation measures are available. Assessment of possible mitigation measures indicates that optimization of signal timing at this intersection would reduce delays, but would not fully mitigate the project's impact. Other improvements (to achieve an acceptable LOS D or better condition), such as additional turn lanes, are not feasible because there is not sufficient right-of-way available for additional lanes at the intersection.	Significant and Unavoidable
B.3k: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the unsignalized intersection of *Embarcadero and I-880 Southbound On-Ramp* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3k: Implement Mitigation Measure B.2l (install traffic signals).	This cumulative impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2l without the approval of Caltrans. However, in the event that Mitigation Measure B.2l could be implemented, the impact would be less than significant.
B.3m: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *14th Avenue and 7th/East 12th Streets (Southbound)* during the PM peak hour, as measured by the difference between existing and	B.3m: Implement Mitigation Measure B.2n (optimize traffic signal timing).	This cumulative impact would be **significant and unavoidable** because even though the average delay for the above-described mitigated condition would be lower than under the No Project condition, implementation of Mitigation Measure B.2n

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
cumulative (with project) conditions.		would not reduce volumes at this intersection, and the project's percent contribution would remain cumulatively considerable.
B.9: The project would contribute to 2025 changes to traffic conditions on the regional and local roadways.	Direct mitigation of the project's significant impact on the freeway segment is not feasible. Factors that limit the mitigation of impacts include constrained right-of-way, no regional or local traffic impact fee mechanism to collect and disperse funds for roadways improvements, and the inherent difficulties with widening the freeways, such as the need to widen over crossings and structures adjacent to the freeway.	**Significant and Unavoidable**
C. Air Quality and Meteorological Conditions.		
C.7: The project together with anticipated future cumulative development in Oakland and the Bay Area in general would contribute to regional air pollution.	C.7: To reduce the significance of the operational impacts of the project, the project sponsor shall, as feasible and practical, implement a combination of the following mitigation measures:	With implementation of the above mitigation measures, the cumulative air quality impact would be **significant and unavoidable**. Based on the effectiveness of these measures as determined by the BAAQMD, the above mitigation measures would reduce the operational impacts of the project by reducing motor vehicle trips by the project by 15 to 20 percent (BAAQMD, 2004). However, no feasible mitigation is available to reduce the residual impact to a less than significant level.
E. Cultural Resources		
E.3: The project would result in the substantial demolition of the Ninth Avenue Terminal, which is an historic resource as defined in CEQA Guidelines Section 15064.5.	E.3a: Photograph the affected historic resource through large-format, black and white photographs meeting the Photographic Specifications of the Historic American Building Survey (HABS). The documentary photographs would be archived locally at the Oakland History Room (OHR) of the Oakland Public Library along with a copy on archival paper of the Oakland Landmark and S-7 Preservation Combining Zone Application Form for the Ninth Avenue Terminal. Digital copies of the photographs would be forwarded to the Oakland Cultural Heritage Survey. Even with extensive documentation, however, the demolition of a substantial portion of the building would result in the permanent	**Significant and Unavoidable**

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	loss of the historic resource that is associated with Oakland's history.	
	E.3b: Although the historic resource would no longer retain its historic significance, adaptive use and rehabilitation of the Bulkhead Building would comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties. The current concept depicts a design that appears to comply, although their conceptual nature precludes the ability to reach an informed conclusion. The project sponsor would be subject to submitting more detailed designs, including, but not limited to, proposed window treatments, materials palette, awnings, signage, and interior configurations for review. For the latter, particular attention would be paid to the significance of the interior's "Expansive, unimpeded space with exposed trusses," and the statement "A key feature of the transit shed is its expansive interior with exposed trusses." In addition, the first story of the existing office in the Bulkhead Building, mentioned in Attachment 2 of the Oakland Landmark and S-7 Preservation Combining Zone Application Form for the Ninth Avenue Terminal, would be retained and rehabilitated. The review should be conducted by a professional meeting the standards for Historic Architecture or Historic Preservation Planning as set forth in the Secretary of the Interior's Professional Qualification Standards, 1997 Proposed Changes (not adopted). The results of the review should be forwarded to the Secretary of the Landmarks Preservation Advisory Board, City of Oakland, for final approval.	**Significant and Unavoidable**
E.4: The project would substantially alter the wharf structure supporting the Ninth Avenue Terminal and surrounding areas, which is an historic resource, as defined in CEQA Guidelines Section 15064.5.	(See E.3a and E.3b.)	**Significant and Unavoidable**
E.5: The project would construct a new mixed-use, multi-story development within approximately 100 feet of the remaining Bulkhead Building which may not be architecturally compatible with this structure as a potential future Oakland City Landmark.		**Significant and Unavoidable**

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
G. Noise		
G.1: Project construction activities would intermittently and temporarily generate noise levels above existing levels in the project vicinity. Project construction noise levels could exceed City of Oakland standards and cause disturbances in noise-sensitive areas, such as residential areas.	G.1a: The project applicant shall require construction contractors to limit standard construction activities as required by the City of Oakland Building Services Division. Such activities are generally limited to between 7:00 AM and 7:00 PM Monday through Friday, with pile driving and/or other extreme noise-generating activities (greater than 90 dBA) limited to between 8:00 AM and 4:00 PM Monday through Friday, with no extreme noise generating activity permitted between 12:30 PM and 1:30 PM. No construction activities shall be allowed on weekends, except that interior construction shall be permitted after buildings are enclosed, without prior authorization of the Building Services Division, and no extreme noise-generating activities shall be allowed on weekends and holidays. G.1b: To reduce daytime noise impacts due to construction, the project applicant shall require construction contractors to implement the following measures: • Equipment and trucks used for project construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds, wherever feasible). • Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible; this could achieve a reduction of 5 dBA. Quieter procedures, such as use of drills rather than impact tools, shall be used whenever feasible. • Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures to the extent	**Significant and Unavoidable**

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	feasible. • If feasible, the noisiest phases of construction (such as pile driving) shall be limited to less than 10 days at a time to comply with the local noise ordinance. G.1c: To further mitigate pile driving and/or other extreme noise-generating construction impacts, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted for review and approval by the City of Oakland Building Services Division to ensure that maximum feasible noise attenuation will be achieved. G.1d: Prior to the issuance of each building permit, along with the submission of construction documents, the project applicant shall submit to the City Building Services Division a list of measures to respond to and track complaints pertaining to construction noise.	
G.4: The project would locate noise-sensitive multifamily residential uses and public parks in a noise environment where noise levels are above what is considered "normally acceptable" according to the City of Oakland General Plan Noise Element. (Potentially Significant)		**Significant and Unavoidable**
Significant Impacts *(Reduced to Less Than Significant, with Mitigation)*		
A. Land Use, Plans, and Policies		
A.1: The project would develop new and different uses and buildings immediately adjacent to and surrounding Fifth Avenue Point and may result in the physical division of an existing community.	A.1: The project applicant shall incorporate into the project site plan design elements that 1) address the relationship (setback, height and upper-story stepbacks, etc.) of new buildings located adjacent to Fifth Avenue Point to minimize the physical division of the outparcels from the existing Oak-to-Ninth District; 2) provide safe, direct, and well-designed pedestrian and bicycle access between the outparcels and the new public open spaces, trails, and marina uses on the project site; 3) provide appropriate landscaping and/or other feature(s) to provide	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	appropriate buffering between the outparcels and the project site, where necessary and feasible. The proposed Planned Waterfront Zoning District (PWD-1) regulations discussed in Impact A.2 shall incorporate, as appropriate, specific design standards to address the aforementioned elements in areas abutting Fifth Avenue Point.	
A.2: The project would not be consistent with the current existing Estuary Plan land use classification and zoning districts for the project site.	A.2a: The project sponsor shall apply for and obtain City approval for a General Plan Amendment to the Planned Waterfront Development-1 land use classification in the Estuary Policy Plan to 1) include residential as a permitted land use, 2) incorporate the density, FAR, and the other land use and development standards (as appropriate to include in the General Plan) outlined in the proposed Planned Water Development-1 Zone-1, and 3) explicitly state the intended treatment of the Ninth Avenue Terminal. If approved, the General Plan Amendment would eliminate the project's inconsistency with the Estuary Policy Plan. A.2b: The project sponsor shall apply for and obtain City approval for an amendment to the Oakland Planning Code to add the "Planned Waterfront Zoning District" (PWD-1) and associated regulations, and to amend the Oakland General Plan and Zoning Map to apply the PWD-1 District to the geographic area of the project site. The project would be required to adhere to the PWD-1 District district regulations, development standards, design guidelines, and other requirements, including allowable uses, requirements for open space, streets, building heights, maximum densities, maximum commercial space, and parking. If approved, the change in zoning from the existing industrial (M-40 Zone) and special (S-2/S-4 Zone) districts to the PWD-1 District district would eliminate the project's inconsistencies with the existing zoning as well as any zoning inconsistency with the General Plan.	Less than Significant
A.3: The project would introduce new land uses, and residential densities, and large building masses, forms, and significant height to the project site. The project may likely increase noise, light and glare, and traffic, and that may reduce or eliminate existing views from public vantage points. As a result, the project would result in a substantial change in	A.3a: The project sponsor shall implement all mitigation measures identified throughout this EIR to address the significant physical impacts associated with the environmental changes that would occur as a result of the project, reducing each impact to less than significant, where feasible.	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
existing environment and existing land uses.	A.3b: The project sponsor shall implement the specific regulations and standards of the proposed Planned Waterfront Zoning District (consistent with Mitigation Measures A.1 and A.2b), if approved. To specifically address the physical impacts resulting from the change in land use and environment in proximity to Fifth Avenue Point and adjacent residential development, the project shall adhere to the regulations and standards for allowable uses, open space, streets, setbacks, building heights and upper-story stepbacks, maximum densities, maximum commercial space, pedestrian and bicycle access, and landscaping and buffering.	
B. Transportation, Circulation, and Parking		
B.1: Traffic generated by Phase 1 of the project would affect traffic levels of service at local intersections in the project vicinity in 2010.		
B.1a: Traffic generated by Phase 1 of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and Oak Street*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant.	B.1a: Install traffic signals at the unsignalized intersection of Embarcadero and Oak Street. The signals shall have fixed-time controls with permitted left-turn phasing, which would not require a separate left-turn arrow. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.	Less than Significant
B.1d: Traffic generated by Phase 1 of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and 5th Avenue*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour.	B.1d: Install traffic signals at the unsignalized intersection of *Embarcadero and 5th Avenue*. The signals shall have fixed-time controls with permitted left-turn phasing, which would not require a separate left-turn arrow. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.	
B.2: Traffic generated by buildout of the project would affect traffic levels of service at local intersections in the project vicinity in 2025.		
B.2b: Traffic generated by buildout of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and Broadway*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour.	B.2b: Install traffic signals at the unsignalized intersection of *Embarcadero and Broadway*. The signals shall have fixed-time controls with permitted left-turn phasing, which would not require a separate left-turn arrow. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.	Less than Significant
B.2f: The LOS F conditions at the signalized intersection of *West Grand Avenue and Harrison Street*, which would prevail during the AM peak hour under 2025 baseline conditions, would worsen (total intersection average vehicle delay would exceed the two-second threshold of significance) with the addition of traffic generated by buildout of the project.	B.2f: Optimize the traffic signal timing for the AM peak period at the signalized intersection of *West Grand Avenue and Harrison Street*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant
B.2g: The LOS E conditions at the signalized intersection of *Lakeshore Avenue and Foothill Boulevard*, which would prevail during the AM peak hour under 2025 baseline conditions, would worsen (an increase in the total intersection average vehicle delay of more than four seconds) with the addition of traffic generated by buildout of the project.	B.2g: Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Lakeshore Avenue and Foothill Boulevard*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant
B.2i: The LOS E conditions at the signalized intersection of *Lakeshore Avenue and Lake Park Avenue*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (an increase in the average vehicle delay for a critical movement of more than six seconds) with	B.2i: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *Lakeshore Avenue and Lake Park Avenue*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
the addition of traffic generated by buildout of the project.	approaches, and coordination with signal phasing and timing of adjacent intersections.	
B.2j: The LOS F conditions at the intersection of *Embarcadero and 5th Avenue*, which would prevail during the PM peak hour under 2025 baseline unsignalized conditions, would continue under traffic signal control (installed by 2010 [see Mitigation Measure B.1d]) with the addition of traffic generated by buildout of the project.	B.2j: Widen Embarcadero to provide two through travel lanes in each direction along the project site frontage (i.e., from north of 4th Avenue to 9th Avenue), with separate left-turn lanes provided at the intersections, and provide appropriate lane configurations on the streets that intersect Embarcadero within the above-cited limits.	Less than Significant
B.2k: The intersection of *Embarcadero and I-880 Northbound Off-Ramp* (to be signalized by 2010 [see Mitigation Measure B.1e]) would degrade from LOS B to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project.	B.2k: Implement Mitigation Measure B.2j.	Less than Significant
B.2m: The signalized intersection of *5th Avenue and 7th/8th Streets* would degrade from LOS D to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project.	B.2m: Optimize the traffic signal timing for the PM peak period at the signalized intersection of 5th Avenue and 7th/8th Streets. Additionally, the westbound and eastbound (5th Avenue) approaches of the intersection would be restriped within the current paved approach, and on-street parking spaces adjacent to the intersection would be removed, to provide separate left-turn, through, and through/right-turn lanes. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant
B.2n: The signalized intersection of *14th Avenue and 7th/12th Streets (Southbound)* would degrade from LOS E to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project.	B.2n: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *14th Avenue and 7th/12th Streets (Southbound)*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant
B.2o: The signalized intersection of *Foothill Boulevard and 14th Avenue (Westbound)* would degrade from LOS D to LOS E during the AM peak hour with the addition of traffic generated by buildout of the project.	B.2o: Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Foothill Boulevard and 14th Avenue (Westbound)*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
B.2p: The LOS F conditions at the signalized intersection of *Foothill Boulevard and 14th Avenue (Eastbound)*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (total intersection average vehicle delay would exceed the two-second threshold of significance) with the addition of traffic generated by buildout of the project.	B.2p: Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Foothill Boulevard and 14th Avenue (Eastbound)*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant
B.2q: The LOS E conditions at the signalized intersection of *16th Street and 23rd Avenue*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (an increase in the average vehicle delay for a critical movement of more than six seconds) with the addition of traffic generated by buildout of the project.	B.2q: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *16th Street and 23rd Avenue*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant
B.3: Traffic generated by buildout of the project would contribute to cumulatively significant impacts at local intersections in the project vicinity in 2025.		
B.3b: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the unsignalized intersection of *Embarcadero and Broadway* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3b: Implement Mitigation Measure B.2b (install traffic signals).	Less than Significant
B.3h: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *Lakeshore Avenue and Lake Park Avenue* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3h: Implement Mitigation Measure B.2i (optimize traffic signal timing).	Less than Significant
B.3i: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the unsignalized intersection of *Embarcadero and 5th Avenue* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3i: Implement Mitigation Measure B.2j (widen Embarcadero).	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
B.3j: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the unsignalized intersection of *Embarcadero and I-880 Northbound Off-Ramp* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3j: Implement Mitigation Measure B.2j (widen Embarcadero).	Less than Significant
B.3l: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *5th Avenue and 7th/8th Streets* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3l: Implement Mitigation Measure B.2m (optimize traffic signal timing).	Less than Significant
B.3n: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *Foothill Boulevard and 14th Avenue (Westbound)* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3n: Implement Mitigation Measure B.2o (optimize traffic signal timing).	Less than Significant
B.3o: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *16th Street and 23rd Avenue* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3o: Implement Mitigation Measure B.2q (optimize traffic signal timing).	Less than Significant
B.4: The project would generate demand for alternative transportation service for the area.	B.4a: The project applicant shall redesign the project site plan to include transit facilities, including bus turnouts on the Embarcadero at a minimum, to ensure that bus service could be accommodated if agreement with AC Transit were to be met to extend service to the project site. Additional facilities would include bus stops within the project, or even a dedicated transit center at which public buses and/or private shuttles could stop. B.4b: The project applicant shall operate a private shuttle service to complement AC Transit service that might be extended to the project site. The shuttle service shall have an adequate number of shuttle stops located onsite, and shall operate on a frequency sufficient to attract use of the service by project residents and employees.	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
B.7: The project would increase the potential for conflicts among different traffic streams.	B.7: The project applicant shall redesign the site plan as follows: • Reconfigure the intersections of Embarcadero/7th Avenue and Embarcadero/9th Avenue intersection for right-in/right-out movements only (to ensure proper spacing between signalized intersections). • Install a traffic signal at the intersection of Embarcadero and 8th Avenue. • Install signal interconnect on Embarcadero between 5th and 10th Avenues to allow for coordination of traffic signals along Embarcadero (to minimize queuing [back-ups] on Embarcadero). • The design of pedestrian facilities including sidewalks, crosswalks, and curb ramps shall comply with ADA standards and other applicable legislation.	Less than Significant
B.10: Project construction would temporarily affect traffic flow and circulation, parking, and pedestrian safety.	B.10: Prior to the issuance of each building permit, the project applicant and construction contractor shall meet with the Traffic Engineering and Parking Division of the Oakland Public Works Agency and other appropriate City of Oakland agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction. The project applicant shall develop a construction management plan for review and approval by the City Traffic Engineering Division. The plan shall include at least the following items and requirements: • A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. In addition, the information shall include a construction staging plan for any right-of-way used on the Embarcadero, including sidewalk and lane intrusions and/or closures.	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	• Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur. • Location of construction staging areas for materials, equipment, and vehicles (must be located on the project site). • Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation and safety; and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant. • Temporary construction fences to contain debris and material and to secure the site. • Provisions for removal of trash generated by project construction activity. • A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an onsite complaint manager. • Provisions for monitoring surface streets used for truck routes so that any damage and debris attributable to the trucks can be identified and corrected.	
C. Air Quality and Meteorological Conditions		
C.1: Activities associated with demolition, site preparation and construction would generate short-term emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions.	C.1a: During construction, the project sponsor shall require the construction contractor to implement the following measures required as part of BAAQMD's basic and enhanced dust control procedures required for sites larger than four acres (aggregate): Basic Control Measures – The following controls should be implemented at all construction sites: • Water all active construction areas at least twice daily. • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	feet of freeboard. • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. • Sweep daily (with water sweepers) all paved access roads, parking areas and staging area at construction sites. • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. Enhanced Control Measures – The following measures shall be implemented during project construction because the site is greater than four acres in area: • All “Basic” control measures listed above. • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more). • Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.). • Limit traffic speeds on unpaved roads to 15 miles per hour. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways. • Replant vegetation in disturbed areas as quickly as possible. The following control measures shall be implemented during project construction because the site is large in area and located near sensitive receptors: • Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site. • Install wind breaks, or plant trees/ vegetative wind breaks at windward side(s) of construction areas.	

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	• Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 miles per hour. • Limit the area subject to excavation, grading and other construction activity at any one time. C.1b: Demolition and disposal of any asbestos containing building material would be in accordance with the procedures specified by Regulation 11, Rule 2 (Asbestos Demolition, Renovation and Manufacturing) of BAAQMD's regulations. *Rideshare Measures* C.7a: Encourage all tenants (commercial and residential) at the site to implement carpool/ vanpool programs (e.g., carpool, ride matching for employees, assistance with vanpool formation, provision of vanpool vehicles, guaranteed ride home program, etc.). Distribute information about the Alameda County Congestion Management Agency's Guaranteed Ride Home Program to tenants of the building to facilitate alternative transportation modes. As part of the program, a person who uses an alternate mode of travel, including transit or a carpool, is provided with free taxi service in the case of unexpected circumstances. These circumstances might include unscheduled overtime or a family illness or emergency. C.7b: Encourage commercial tenants to implement employee rideshare incentive programs providing cash payments or pre-paid fare media such as transit passes or coupons. *Transit Measures* C.7c: Construct transit facilities, such as bus turnouts/bus bulbs, benches, shelters, etc., as determined appropriate by AC Transit, consistent with Transit Mitigation Measure B.4a. C.7d: Encourage commercial tenants to meet standard, minimum employee ridesharing requirements or to provide incentives to encourage employees to rideshare. C.7e: Encourage commercial tenants to implement a parking cash-out program for employees (e.g., non-driving employees receive transportation allowance equivalent to the value of subsidized parking).	

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	Shuttle Measures	
	C.7f: The project applicant shall operate a private shuttle service between the project site and nearby activity centers and transit nodes (e.g., Lake Merritt BART station) with an adequate number of shuttle stops located onsite, and on a frequency sufficient to attract use of the service by project residents and employees.	
	Bicycle and Pedestrian Measures	
	C.7g: Provide bicycle lanes and/or paths, connected to the community-wide network.	
	C.7h: Provide secure, weather-protected bicycle parking for employees.	
	C.7i: Provide direct, safe, attractive pedestrian and bicycle access to transit stops and adjacent development.	
	C.7j: Provide adequate street lighting within the street right of way immediately adjacent to and within the project site.	
	C.7k: Provide secure short-term bicycle parking for retail customers and other non-commute trips.	
D. Hydrology and Water Quality		
D.1: Project construction would involve activities (excavation, soil stockpiling, boring and pile driving, grading, and dredging, etc.) that would generate loose, erodable soils that, if not properly managed, could violate any water quality standards or waste discharge requirements; result in substantial erosion or siltation; create or constitute substantial polluted runoff; or otherwise substantially degrade water quality.	D.1: The project sponsor shall comply with all NPDES requirements, RWQCB General Construction Permit requirements, and all City regulations and Creek Protection Permits requirements.	Less than Significant
D.2: Project construction activities would include dredging in Clinton Basin, which could require disturbance, removal, and disposal of contaminated sediment that may result in adverse impacts to aquatic organisms and water quality.	D.2: The project sponsor shall obtain and comply with all water quality certification and requirements required for dredging activities, which shall include a Section 404 permit process pursuant to the Army Corps of Engineers (Corps) and pursuant to the oversight, permitting, and approval of the Dredged Material Management Office (DMMO).	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
D.5: Site development under the project would involve new landscaping and open lawns. If not properly handled, chemicals used to establish and maintain landscaping and open lawn areas, such as pesticides and fertilizers, could flow into the waterways and result in water quality impacts to the Oakland Estuary, and eventually San Francisco Bay.	D.5: The project sponsor shall prepare a landscape management plan (LMP) for all public open spaces that includes, but is not necessarily limited to, a description of application, storage, and safety measures involving the use of pesticides and fertilizers. The LMP shall include but not be limited to the following: • Transportation and storage: Pesticides and fertilizers shall be transported and stored as per state and federal guidelines. They shall be stored in designated bermed areas onsite. • Pesticide Application: Pesticides and fertilizers shall be handled and applied according to the procedures set by the manufacturer. The LMP shall address methods to optimize and reduce the use of pesticides and fertilizers and present strategies to incorporate environmentally-safe (organic) pest and growth enhancement materials. These strategies shall address eventually eliminating the use of chemicals such as diazinon that harm water quality. The RWQCB has found that the pesticides have a reasonable potential to cause or contribute to exceedances of water quality standards. Therefore, the NPDES permit requires the City of Oakland (as a permittee) to address pesticides. The project sponsor shall adhere to the Diazinon Pollutant Reduction Plan or the Pesticide Plan submitted by the ACCWP to the RWQCB. The goals of the Pesticide Plan and of its resulting implementing actions are to reduce or substitute pesticide use (especially diazinon use) with less toxic alternatives (ACCWP, 2003). • The Plan shall identify pesticide and fertilizer application schedules. • Container Disposal: The contractor shall dispose of empty containers carefully. The containers shall never be disposed at locations that would contaminate natural waterways. The LMP and its recommendations for use, control, and eventual reduction of nonorganic pesticide and fertilizer use shall be approved by the City prior to installing the landscape	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	and shall be implemented throughout the life of the project.	
D.6: The project sponsor could deplete groundwater supplies or interfere with groundwater recharge and cause contamination of surface.	D.6: The project sponsor shall comply with NPDES permit requirements by the RWQCB for dewatering activities.	Less than Significant
E. Cultural Resources		
E.1: Construction of the project could cause substantial adverse changes to the significance of currently unknown cultural resources at the site, potentially including an archaeological resource pursuant to CEQA Guidelines Section 15064.5 or CEQA Section 21083.2(g), or the disturbance of any human remains, including those interred outside of formal cemeteries.	E.1a: Pursuant to CEQA Guidelines 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore, in the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project proponent and/or lead agency shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the County. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards. In considering any suggested mitigation proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, County Planning Staff shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is carried out. E.1b: In the event that human skeletal remains are uncovered at the project site during construction or ground-breaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and follow the	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.	
E.2: The project may adversely affect unidentified paleontological resources at the site.	E.2: The project sponsor shall notify a qualified paleontologist of unanticipated discoveries, who shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in Section 15064.5 of the CEQA Guidelines. In the event of an unanticipated discovery of a breas, true, and/or trace fossil during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards (SVP 2004)). The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The paleontologist shall submit the excavation plan to the City for review and approval.	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
F. Geology, Soils, and Seismicity		
F.1: In the event of a major earthquake in the region, seismic ground shaking could potentially injure people and cause collapse or structural damage to proposed structures.	F.1: A site-specific, design level geotechnical investigation for each site area (which is typical for any large development project) shall be required as part of this project. Each investigation shall include an analysis of expected ground motions at the site from known active faults. The analyses shall be in accordance with applicable City ordinances and policies and consistent with the most recent version of the California Building Code ,which requires structural design that can accommodate ground accelerations expected from known active faults. In addition, the investigations shall determine final design parameters for the walls, foundations, foundation slabs, and surrounding related improvements (utilities, roadways, parking lots and sidewalks). The investigations shall be reviewed and approved by a registered geotechnical engineer. All recommendations by the project engineer and geotechnical engineer shall be included in the final design. Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the project design phase, shall be incorporated in the project. The final seismic considerations for the site shall be submitted to and approved of by the City of Oakland Building Services Division prior to the commencement of the project.	Less than Significant
F.2: In the event of a major earthquake in the region, seismic ground shaking could potentially expose people and property to liquefaction and earthquake-induced settlement.	F.2: Prepare an updated site specific, design level geotechnical investigation for each building site to consider the particular project designs and provide site specific engineering recommendations for mitigation of liquefiable soils. Liquefiable soils under the conditions described in the geotechnical report shall be mitigated using various proven methods to reduce the risk of liquefaction. Liquefaction mitigation measures include subsurface soil improvement, deep foundations, structural slabs, and soil cover. Site improvement methods to address potential liquefaction include dynamic compaction, compaction grouting, jet grouting, and vibroflotation can significantly reduce the risk of liquefaction. Deep foundations extending below the liquefiable layers can be designed to support structures despite the occurrence of liquefaction. Structural slabs are designed to span across areas of non-support, such as in the case of liquefaction or settlement. The presence of a sufficiently thick, engineered fill layer over liquefiable soil can reduce the potential for damage at the ground surface due to liquefaction	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	by helping to bridge across isolated liquefaction zones. Other methods of mitigating potential liquefaction hazards suggested in the *California Geological Survey's (CGS) Geology Guidelines for Evaluating and Mitigating Seismic Hazards* (CGS Special Publication 117, 1997) include edge containment structures (berms, dikes sea walls, retaining structures, compacted soil zones), removal or treatment of liquefiable soils, modification of site geometry, lowering the groundwater table, in-situ ground densification, deep foundations, reinforced shallow foundations, and structural design that can accommodate predicted displacements (CDMG, 1997). These measures shall be evaluated during the site specific geotechnical investigation and the most effective, practical and economical methods should become part of the project. Prior to incorporation into the project, geotechnical engineering recommendations regarding the mitigation and reduction of liquefaction for each site shall be reviewed for compliance with the CGS Geology Guidelines. The purpose of these guidelines is to protect the public safety from seismic effects such as liquefaction.	
F.3: Development at the project site could be subjected to settlement.	F.3: As with standard geotechnical practices, site specific geotechnical investigations and reports would be required in order to obtain permits from the City of Oakland. Such geotechnical investigations and reports prepared for the project site shall include generally accepted and appropriate engineering techniques for determining the susceptibility of the project site to settlement and reducing its effects. Where settlement and/or differential settlement is predicted, mitigation measures such as lightweight fill, geofoam, surcharging, wick drains, deep foundations, structural slabs, hinged slabs, flexible utility connections, and utility hangers could be used. These measures shall be evaluated and the most effective, feasible, and economical measures shall be recommended. Engineering recommendations shall be included in the project engineering and design plans. All construction activities and design criteria shall comply with applicable codes and requirements of the 1997 UBC with California additions (Title 22), and applicable City construction and grading ordinances.	Less than Significant
F.4: Development at the project area may include use of dredged material as fill which would be subject to settlement	F.4: Any dredged material used for fill will have to undergo an appropriate process of consolidation and stabilization to render	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
and subsidence.	it suitable for the support of engineered fill. A geotechnical investigation and report will be required in order to obtain permits from the City of Oakland in addition to the Dredged Material Management Office permitting requirements. The geotechnical investigations and reports prepared for the project site shall include generally accepted and appropriate engineering techniques for determining the susceptibility of the project specific site to settlement and reducing its effects. Engineering recommendations shall be included in the project engineering and design plans. The use of dredged materials as fill shall be limited to open space areas.	
F.5: Construction activities at the project area could loosen and expose surface soils. If this were to occur over the long term, exposed soils could erode by wind or rain causing potential loss of topsoil. In addition, shoreline areas exposed to wave action could be subject to erosion and loss of topsoil.	F.5: Consistent with Mitigation Measure D.1 (which addresses construction-related water quality impacts), the project sponsor shall comply with all applicable NPDES requirements, RWQCB General Construction Permit requirements, and all City regulations, including Creek Protection Permits, as detailed in Mitigation D.1.	Less than Significant
G. Noise		
G.2: Noise from project-generated traffic and other operational noise sources, such as mechanical equipment and truck loading/unloading, could exceed City of Oakland Noise Ordinance standards and disturb project occupants and nearby residents.	G.2: The project applicant shall incorporate the following design features into the final site plans: • Building equipment (e.g., HVAC units) shall be located away from nearby residences, on building rooftops, and properly shielded within an enclosure that effectively blocks the line of sight of the source from receivers in order to meet City of Oakland Noise Ordinance standards. • Truck delivery areas shall be located as far from adjacent residences as possible. To the extent feasible, project buildings shall be located so that they block noise related to truck deliveries and waste collection from residential or other sensitive receptors.	Less than Significant
G.3: The project would locate noise-sensitive multifamily residential uses in a noise environment where noise levels are above what is considered “normally acceptable” according to the City of Oakland General Plan Noise Element.	G.3: To comply with the requirements of Title 24 and achieve an interior noise level of less than 45 dBA, noise reduction in the form of sound-rated assemblies (i.e., windows, exterior doors, and walls) shall be incorporated into project building design. Final recommendations for sound-rated assemblies will depend on the specific building designs and layout of buildings on the	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	site and shall be determined during the design phase. (Oak to 9th Residential Development, Oakland, California, Environmental Noise Assessment by Charles M. Salter Associates, Inc., November 2002. Table 4 of the Salter Associates document lists conceptual window and wall Sound Transmission Class (STC) ratings for different noise environments and gives an estimate of the STC requirements needed to meet interior noise criteria.)	
H. Hazardous Materials		
H.1: Disturbance and release of contaminated soil during remediation, demolition and construction phases of the project, or transportation of excavated material, contaminated groundwater or dredged sediment could expose construction workers, the public, or the environment to adverse conditions related to hazardous materials handling.	H.1a: The applicant shall retain a qualified environmental consulting firm to prepare a cleanup plan for the contaminated soil and groundwater which would be based on a comprehensive remedial investigation report for the project area. This plan shall be approved by the appropriate regulatory agencies which may include but not be limited to the DTSC and the RWQCB. The plan shall also include the preparation of a health and safety plan to protect the workers and the public during all remediation and construction activities proposed. Following agency approval of the plan, remediation and removal work shall be conducted according to all applicable OSHA worker safety regulations. Remediation activities at the site may include, without limitation, closure or removal of subsurface structures, excavation and disposal of contaminated materials, natural and enhanced bioremediation of soil and groundwater, restoration and improvement of shoreline structures, limited dredging of sediments, and institutional and engineering controls to prevent exposure to and migration of contaminated materials. Throughout the course of remediation and construction activities, the handling, transport, and storage of any hazardous waste or potentially hazardous waste shall be conducted appropriate to all local and state agency protocols. H.1b: Prior to offsite disposal, the project applicant shall adequately profile excavated soils to establish the proper classification of the soils for hazardous or non-hazardous waste disposal. The soils shall be handled, stored and transported according to all applicable regulations for the appropriate classification. H.1c: Soil generated by construction activities shall be	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	stockpiled onsite and sampled prior to reuse or disposal at an appropriate facility. Any reuse of soils shall be conducted by prior approval from the appropriate state oversight agency. H.1d: Groundwater generated during construction dewatering shall be contained and transported offsite for disposal at an appropriate facility, or treated, if necessary, prior to discharge into the sanitary sewer to levels acceptable to the East Bay Municipal Utilities District. H.1.e: Prior to dredging any materials from the Clinton Basin, the project applicant shall retain a qualified environmental consulting firm to prepare a Sampling and Analysis Plan (SAP) as described by the Corps of Engineers (PN 99-4). The SAP shall be approved by the Dredged Material Management Office (DMMO) and shall include a proposal for a disposal location and a disposal alternatives analysis. Following agency approval of the plan, sediment removal work shall be conducted in accordance with all applicable OSHA worker safety regulations. In addition, the handling, transport, and storage of any hazardous waste or potentially hazardous waste shall be conducted consistent with all local and state agency protocols.	
H.2: Disturbance and release of hazardous structural and building components (i.e. asbestos, lead, PCBs, USTs, and ASTs) during demolition and construction phases of the project or transport of these materials could expose construction workers, the public, or the environment to adverse conditions related to hazardous materials handling.	H.2a: A pre-demolition ACM survey shall be performed by a state-certified asbestos consultant prior to demolition of any of the structures located on the project site. The survey shall include sampling and analysis of suspected ACMs. Abatement of known or suspected ACMs shall occur prior to demolition or construction activities that would disturb those materials. Pursuant to an asbestos abatement plan developed by a state-certified asbestos consultant and approved by the City, all ACMs shall be removed and appropriately disposed of by a state certified asbestos contractor. H.2b: The project applicant shall implement a lead-based paint abatement plan, prepared by a qualified consultant, which shall include the following components: • A pre-demolition LBP survey for all structures proposed for demolition at the project site. The survey shall include	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	sampling and identification of suspected materials containing LBP. • Development of an abatement specification plan which shall be based on survey work and detail proposed abatement work areas and procedures. • A site Health and Safety Plan. • Containment of all abatement work areas to prohibit offsite migration of paint chip debris. • Removal of all peeling and stratified lead-based paint on building surfaces and on non-building surfaces to the degree necessary to safely and properly complete demolition activities per the recommendations of the survey. The demolition contractor shall be identified as responsible for properly containing and disposing of intact lead-based paint on all equipment to be cut and/or removed during the demolition. • Appropriately remove paint chips by vacuum or other approved method. • Collection, segregation, and profiling waste for disposal determination. • Appropriate disposal of all hazardous and non-hazardous waste. H.2c: A pre-demolition PCB survey shall be performed prior to demolition of any of the structures located on the project site. The survey shall include sampling and identification of suspected PCBs. Abatement of known or suspected PCBs shall occur prior to demolition or construction activities that would disturb those materials. In the event that electrical equipment or other PCB-containing materials are identified prior to demolition activities they shall be removed, and shall be disposed of by a licensed transportation and disposal contractor at an appropriate hazardous waste facility.	

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	H.2d: When known or previously unidentified USTs are encountered during construction, construction in the immediate area shall cease until the UST is removed with oversight from the City of Oakland Fire Department Hazardous Materials Unit or other applicable oversight agency. If there is any indication that the tank has leaked, then the lead agency shall direct any appropriate remediation measures. Removal of the UST shall include, to the extent deemed necessary by the lead agency, over-excavation and disposal of any impacted soil that may be associated with such tanks to a degree satisfactory to the oversight agency.	
H.3: Hazardous materials used onsite during construction activities (i.e., solvents) could be released to the environment through improper handling or storage.	H.3: The use of construction best management practices shall be implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following: • Follow manufacturer's recommendations on use, storage and disposal of chemical products used in construction; • Avoid overtopping construction equipment fuel gas tanks; • During routine maintenance of construction equipment, properly contain and remove grease and oils. • Properly dispose of discarded containers of fuels and other chemicals.	Less than Significant
I. Biological Resources / Wetlands		
I.2: Construction activities required for the project would result in a substantial adverse effect on potentially jurisdictional wetlands or waters of the U.S. under the jurisdiction of the Corps, waters of the state under the jurisdiction of the Regional Water Quality Control Board (RWQCB), and wetlands under the jurisdiction of BCDC jurisdiction.	I.2a: *Corps-Verified Wetland Delineation*. A preliminary identification of potentially jurisdictional areas was conducted in 2004 (LSA, 2004), and the project sponsor submitted the draft potentially jurisdictional wetland delineation to the Corps in July 2005. The project sponsor shall obtain Corps verification of the preliminary identification of jurisdictional areas prior to submitting permit applications. A verified wetland delineation would be required prior to the submittal of regulatory permit applications.	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	Mitigation Measure I.2b: *Wetland Avoidance*. Section 404 first requires that projects avoid or minimize adverse effects on jurisdictional waters to the extent practicable. To the extent feasible, the final project design shall minimize effects on wetlands and other waters in accordance with Section 404 of the Clean Water Act. Areas that are avoided shall be subject to Best Management Practices (BMPs), as described in Mitigation Measure I.2.d below. Such measures shall include installation of silt fencing, straw wattles or other appropriate erosion and sediment control methods or devices. Equipment used for the removal of debris and concrete rip-rap along the estuary edge will be operated from land using backhoes and cranes. Construction operations along Clinton Basin and Shoreline Park shall be barge-mounted or shall involve water-based equipment such as scows, derrick barges and tugs. Additionally, the existing restoration project at the southwest end of Clinton Basin, implemented by the Port of Oakland, shall be protected during construction activities. The extent of this area shall be clearly marked by a qualified biologist prior to the start of any grading or construction activities and a buffer zone established. All construction personnel working in the vicinity of the restoration area shall be informed of its location and buffer zone. I.2c: Obtain Regulatory Permits and other Agency Approvals. Prior to the start of construction activities for the project, the project applicant shall obtain all required permit approvals from the Corps, the RWQCB, BCDC, and all other agencies with permitting responsibilities for construction activities within jurisdictional waters of other jurisdiction areas. Permit approvals and certifications shall include, but not be limited to Section 404/Section 10 permits from the Corps, Section 401 Water Quality Certification from the RWQCB, and BCDC permit. *Section 404 / Section 10 Permits.* Permit approval from the Corps shall be obtained for the placement of dredge or fill material in waters of the U.S., if any within the interior of the project site, pursuant to Section 404 of the federal Clean Water Act. Construction along the estuary edge below MHW elevation will be considered dredging by the Corps and will require a Section	

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	10 permit. In addition, dredging of Clinton Basin will also require a Section 10 permit. *Section 401 Water Quality Certification*. Approval of Water Quality Certification (WQC) and/or Waste Discharge Requirements (WDRs) shall be obtained from the RWQCB for work within jurisdictional waters. Preparation of the Section 401 Water Quality Certification applications will require an application and supporting materials including construction techniques, areas of impact, and project schedule. *BCDC Permit*. Permit approval from BCDC placing solid material, pilings floating structures boat docks, or other fill and/or dredging or other extraction of material from the Bay and the 100-foot shoreline band inland from mean high tide line along the length of the project site. Activities would include dredging for rebuilding the marina in Clinton Basin, and replacing the 5th Avenue marina with a new marina that will contain approximately 170 boat slips. The proposed project will include the removal of approximately 33,780 square feet of solid Bay fill as part of the shoreline design and the placement of 74,110 square feet of solid Bay fill for the creation of a village green at Clinton Basin. The project also includes the removal of approximately 129,920 square feet of pile-supported fill with the removal of a portion of the Ninth Avenue Terminal wharf. Additionally, floating fill will be required to create the two proposed marinas. The project will be required to comply with all BCDC permit conditions that typically include requirements to construct, guarantee and maintain public access to the bay, specified construction methods to assure safety or to protect water quality, and mitigation requirements to offset the adverse environmental impacts the project. I.2d: *Best Management Practices (BMP*s). The project applicant shall implement standard BMPs to maintain water quality and control erosion and sedimentation during construction, as required by compliance with the General National Pollution Discharge Elimination System (NPDES) Permit for Construction Activities and established by Mitigation Measure D.1 to address impacts on water quality. Mitigation measures would include, but would not be limited to, installing silt fencing along the	

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	edges of the project site to protect estuarine waters, locating fueling stations located away from potential jurisdictional features, and isolating construction work areas from the identified jurisdictional features. The project applicant shall also implement, BMPs to avoid impacts onwater quality resulting from dredging activities within the Bay, and that as identified in the *Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region* (LTMS) (Corps, 2001). These BMPs include: silt fencing and gunderbooms or other appropriate methods for keeping dredged materials from leaving the project site.	
	I.2e: *Compensatory Mitigation.* The project applicant shall provide compensatory mitigation for temporary impacts to, and permanent loss of, waters of the U.S., including wetlands, as required by regulatory permits issued by the Corps, RWQCB, and BCDC. Measures shall include, but not be limited to 1) onsite mitigation through wetland creation or enhancement, 2) development of a Mitigation and Monitoring Plan, and 3) additional wetland creation or enhancement or offsite mitigation:	
I.3: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on fisheries resources in the Oakland Inner Harbor.	I.3a*: Protection of Fish and Migrating Salmonids*. The project applicant shall implement measures for protection of salmonids and Pacific herring during dredging projects and for indirect impacts on the San Francisco Bay "Essential Fish Habitat" (EFH) that are identified in the Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region (LTMS) (Corps, 2001).	Less than Significant
I.4: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on nesting habitat for breeding raptors and passerine birds, including Cooper's hawk.	I.4a*: Timing of Construction.* To the extent feasible, construction activities shall be conducted outside the breeding season for birds and raptors (August 1-January 30) Trees and shrubs that could provide potential nesting habitat may be removed during this period to avoid future nesting within the project site.	Less than Significant
	I.4b: *Preconstruction Surveys. If seasonal avoidance is infeasible, the following measures* shall be required to avoid potential adverse effects on nesting special-status raptors and other nesting birds:	

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	• A qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within 500 feet of construction activities. Preconstruction surveys should occur no later than two weeks prior to the start of construction activities. • If active nests of raptors or other bird species are found during preconstruction surveys, a no-disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of these buffer zones and types of construction shall be determined in consultation with the CDFG and shall be based on existing noise and human disturbance levels at the project site. • If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees, shrubs, and buildings that have been determined to be unoccupied by special-status birds or that are located more than 500 feet from active nests may be removed.	
I.5: The project could have a substantial adverse effect, either directly or through habitat modifications, on special-status nesting and roosting bats.	I.5: Before demolition of abandoned or underused buildings on the project site, such as the Ninth Avenue Terminal building, a qualified biologist who is familiar with bat biology and who is able to recognize signs of bats using abandoned buildings shall conduct pre-demolition building surveys in order to adequately make a determination on the presence of bat nurseries. If abandoned or underused buildings slated for destruction are being used by bats as nursery sites, demolition shall be postponed until young are reared and able to forage on their own. This determination shall be made by a qualified biologist specializing in bat biology. If bats are found to be roosting in abandoned or underused buildings on the project site, the bats shall be actively relocated to a temporary roosting structure (preferably onsite) during	Less than Significant

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	demolition activities. In addition, permanent bat roosting structures ("bat boxes") shall be created in order to properly mitigate the effects of a loss of roosting structure. The design of the bat boxes shall conform to the specifications appropriate to the species of bats found on the project site and vicinity, and shall be approved by a qualified bat biologist knowledgeable in the design of bat boxes. The bat boxes shall conform to the architectural design of the project buildings to reduce the visibility and obtrusiveness of the boxes and to avoid vandalism or disturbance to bat colonies.	
Less Than Significant, and as noted, Beneficial or No Impacts *(No Mitigation Required)*		
B. Transportation, Circulation, and Parking		
B.5: The project would create demand for bicycle parking.	None Required.	
B.6: The project would increase the potential for pedestrian safety conflicts.	None Required.	
B.8: The project would contribute to 2010 changes to traffic conditions on the regional and local roadways.	None Required.	
C. Air Quality and Meteorological Conditions		
C.2: The project would result in an increase in regional ROG, NOx, and PM emissions due to project-related traffic.	None Required.	
C.3: Project traffic would increase localized carbon monoxide concentrations at intersections in the project vicinity.	None Required.	
C.4: Operation of project facilities would produce objectionable odors that would affect a substantial number of people.	None Required.	
C.5: Construction and operation of the project would expose existing sensitive receptors in the project vicinity and planned multifamily residential land uses associated with the project to	None Required.	

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
health risks from diesel emissions.		
C.6: The proposed project could result in hazardous wind conditions.	None Required.	
C.8: The proposed project could result in cumulative hazardous wind conditions.	None Required	
D. Hydrology and Water Quality		
D.3: Development of the project would result in a substantial decrease in impervious area. The project would implement post-construction BMPs to increase stormwater infiltration; to treat and direct stormwater runoff or discharge into a stormwater system and the estuary; and to prevent illicit discharge. Therefore, the project would not violate regulatory water quality standards or waste requirements.	None Required / Beneficial Effect.	
D.4: Project operation would involve increased use of the marinas at the project site. As required by the RWQCB, the project design would incorporate post construction BMPs to treat stormwater and control discharge of wastes from the vessels used at the marinas. Therefore, the project would not violate water quality standards or waste discharge requirements.	None Required.	
D.7: The project would not result in flooding due to its proximity to a 100-year flood hazard area, or expose people or property to other substantial risks related to flooding, seiche, tsunami, or mudflow.	None Required.	
D.8: The project would result in a net decrease in impervious surfaces and would reconfigure and stabilize the shoreline along the project site, thereby decreasing the volume of stormwater runoff. Therefore the project would not increase runoff and result in substantial flooding on or offsite, or exceed the capacity of the existing stormwater drainage system.	None Required / Beneficial Effect.	
D.9: The increased construction activity and new development resulting from the project, in conjunction with population and density of other foreseeable development in the city, would not result in cumulative impacts with respect to hydrology and water quality.	None Required.	

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
E. Cultural Resources		
E.6: The project would demolish the remaining buildings on the project site	None Required.	
E.7: The project would construct a new mixed-use, multi-story development, diminishing the industrial character of the project site and vicinity, and altering the existing setting of the Fifth Avenue Point neighborhood.	None Required.	
F. Geology, Soils, and Seismicity		
F.6: The project would not expose people or structures to substantial risk or hazards as a result of 1) expansive soils, or 2) conditions that would potentially result in landslides or 3) surface fault rupture.	None Required.	
F.7: The project would not create substantial risks to life or property as a result of being located above a well, pit, swamp, mound, tank vault, or unmarked sewer line; above landfills for which there is no approved closure and post-closure plan, or unknown fill soils; or soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.	None Required.	
F.8: The development proposed as part of the project, when combined with other reasonably foreseeable development in the vicinity, would not result in significant cumulative impacts with respect to geology, soils or seismicity.	None Required.	
G. Noise		
G.5: The proposed project, together with anticipated future development in Oakland, could result in long-term traffic increases that could cumulatively increase noise levels.	None Required.	
H. Hazardous Materials		
H.4: Project operations would generate and involve the handling of general commercial/retail and household hazardous waste in small quantities, and therefore would not cause an adverse effect on the environment.	None Required.	
H.5: The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances,	None Required.	

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
or waste within one-quarter mile of an existing or proposed school.		
H.6: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	None Required.	
H.7: Development proposed as part of the project, when combined with other foreseeable development in the vicinity, would not result in cumulative hazardous materials impacts.	None Required.	
I. Biological Resources / Wetlands		
I.1: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on special-status mammal species, specifically the Pacific harbor seal.	None Required.	
I.6: Increased lighting and shading associated with the new project buildings could have a substantial adverse effect, either directly or through habitat modifications, on biological resources.	None Required.	
I.7: The removal of any protected trees identified within the project site would be conducted in compliance with the City of Oakland's Tree Preservation and Removal Ordinance.	None Required.	
I8: Construction activity and new development resulting from the project, in conjunction with other foreseeable development in the city and along its shoreline, could result in impacts on wetlands, other waters of the U.S., and special-status species.	None Required.	
J. Population, Housing, and Employment		
J.1: The project would not displace substantial numbers of existing housing units; nor would the project displace substantial numbers of people, necessitating construction of replacement housing.	None Required / No Impact.	
J.2: The project would displace existing businesses and jobs, but not in substantial numbers necessitating construction of replacement facilities, or resulting in substantial increases in distances traveled.	None Required.	

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
J.3: The project would not induce substantial population growth directly by proposing new housing, or indirectly through infrastructure improvements.	None Required.	
J.4: The project would not induce substantial population growth in a manner not contemplated in the General Plan, with infrastructure requirements not previously considered or analyzed.	None Required.	
J.5: The project would not induce substantial population growth as a result of business and employment growth proposed in the project.	None Required.	
(Non-CEQA) Potential for new retail development to cause ripple effects of store closures and long-term vacancies that result in physical deterioration and urban decay	N/A	
(Non-CEQA) Potential for housing market effects to lead to displacement or physical deterioration of housing or neighborhoods	N/A	
K. Visual Quality and Shadow		
K.1: The project would construct new buildings that would be taller and have more bulk than existing buildings in the area along pedestrian and vehicular routes and adjacent to the Oakland Estuary, and would substantially demolish the Ninth Avenue Terminal building. This would substantially, but not adversely, alter the existing visual character and quality of the project area.	None Required / Beneficial Effect.	
K.2: The project would construct new buildings that would be taller and have more bulk than existing nearby buildings which would result in changes to views from nearby public viewpoints, but that would not adversely affect scenic vistas of which the project site is a part.	None Required.	
K.3: The project would increase the amount of light and glare emitted from the project site but would not result in substantial adverse effects to day or nighttime views.	None Required.	

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
K.4: The project would create additional shadow on adjacent areas west and north of the project site, however, the project would not cast shadow on historic resources (retained Ninth Avenue Terminal Bulkhead Building), would not introduce landscaping conflicting with the California Public Resource Code; would not cast shadow on buildings using passive solar heat, solar collectors for hot water heating, or photovoltaic solar collectors; and would not cast shadow that impairs the use of any public or quasi-public park, lawn, garden, or open space.	None Required.	
K.5 The project would require approval of a general plan amendment and rezoning (among other discretionary approvals), but would be consistent with the policies and regulations addressing the provision of adequate light to appropriate uses.	None Required.	
L. Public Services and Recreation Facilities		
L.1: The increased population and density resulting from the project would not involve or require new or physically altered governmental facilities in order to maintain acceptable service ratios, response time, or other performance objectives for police protection services.	None Required.	
L.2: The increased population and density resulting from the project would not involve or require new or physically altered governmental facilities in order to maintain acceptable service ratios, response time, or other performance objectives for fire protection and emergency medical services and facilities.	None Required.	
L.3: The students generated by the project would not require new or physically altered school facilities in order to maintain acceptable service ratios or other performance objectives at local public schools.	None Required.	
L.4: The project would create new parks, and the increased population resulting from the project would not result in increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of these facilities would occur or be accelerated, nor would the project include recreational facilities or require the construction or expansion of recreational facilities that	None Required / Beneficial Effect	

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
might have an adverse physical effect on the environment.		
L.5: The project would increase the on-site resident population and increase the demand for library services; however, the increase in demand for such services would not result in the need to construct or expand libraries that might have an adverse physical effect on the environment.	None Required.	
L.6: The increased population and density resulting from the project, in conjunction with population and density of other foreseeable development in the city, would result in a cumulative increase in the demand for public services and parks. However, the project's contribution to such impacts would not be cumulatively considerable.	None Required.	
M. Utilities and Service Systems		
M.1: The project would not exceed water supplies available to serve the project from existing entitlements and resources and require or result in the construction of water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	None Required.	
M.2: The project's projected wastewater demand would not result in the city of Oakland exceeding its citywide allocation under the Wet Weather Program or East Bay Municipal Utility District's (EBMUD) capacity to serve the project's projected demand in addition to its existing commitments within its service area.	None Required.	
M.3: The project would not require or result in construction of new offsite stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	None Required.	
M.4: The project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs, and therefore the project would not require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects. The project would not impede the City of Oakland's ability to meet the waste diversion requirements of the California Integrated Waste Management Act or the	None Required.	

TABLE II-1 (CONTINUED)

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Alameda County Waste Reduction and Recycling Initiative, nor cause the City to violate other applicable federal, state, or local statutes and regulations related to solid waste.		
M.5: The project would not violate applicable federal, state, or local statutes and regulations relating to energy standards. The project would not result in a determination by the energy provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments, nor require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects.	None Required.	
M.6: The increased development resulting from the project, in conjunction with population and density of other foreseeable development in the city, would result in increased demand for utilities and service systems. However, the project's contribution to such impacts would not be cumulatively considerable.	None Required.	

CHAPTER III
Project Description

A. Project Location and Characteristics

Project Location

The approximately 64.2-acre[1] Oak to Ninth Avenue Project site exists along the Oakland Estuary[2] and the Embarcadero, east[3] of Jack London Square, and south of Interstate 880 (I-880) (**Figures III-1 and III-2**) along the city of Oakland's southern boundary. Estuary Park, the southern portion of Lake Merritt Channel (or "the channel"), Clinton Basin, and the Ninth Avenue Terminal are included in the project site, but approximately six acres of privately-held parcels along 5th Avenue are not included.[4]

The site lies partially within the city of Oakland's Chinatown/Central Planning District. The General Plan land use designation for the majority of the project site is Mixed Use Waterfront/Estuary Plan Area as established by the General Plan Land Use and Transportation Element (LUTE). The remainder of the site is designated Urban Open Space and extends along the entire shoreline[5] of the project site. The *Estuary Policy Plan*, which was later adopted as part of the General Plan, assigns a land use designation of Planned Waterfront Development-1 (PWD-1) for nearly the entire project site, except Estuary Park and the Jack London Aquatic Center which is designated as Park, Open Space, and Promenades.

East of the channel, the project site is within the M-40 Heavy Industrial Zone. West of the channel, Estuary Park and the Jack London Aquatic Center are within the S-2 Civic Center Zone / S-4 Design Review Combining Zone.

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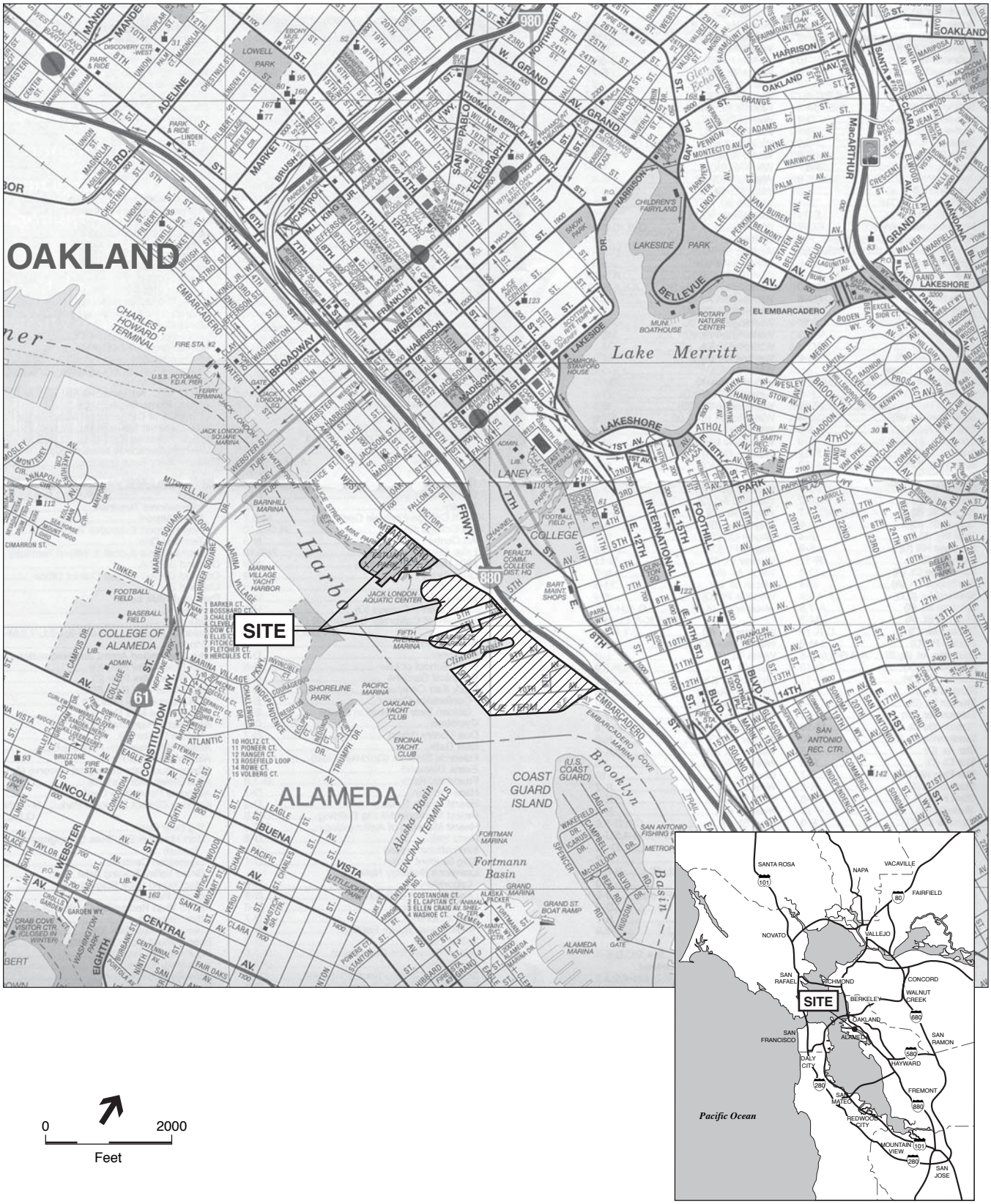
1 The total project site after implementation would consist of 64.2 acres of land area, including pile-supported pier area and excluding approximately 11.4 acres of water surface for marina facilities.

2 The estuary connects with the east side of San Francisco Bay approximately three miles from the site.

3 For purposes of the EIR and following Oakland convention, the hills are to the north; therefore, the Estuary and the Embarcadero run east-west, and 5th Avenue and streets perpendicular to it run north-south.

4 Approximately 6.0-acre Silviera-owned property west of 5th Avenue and approximately 28,000 square-foot Schultz-owned parcel east of 5th Avenue.

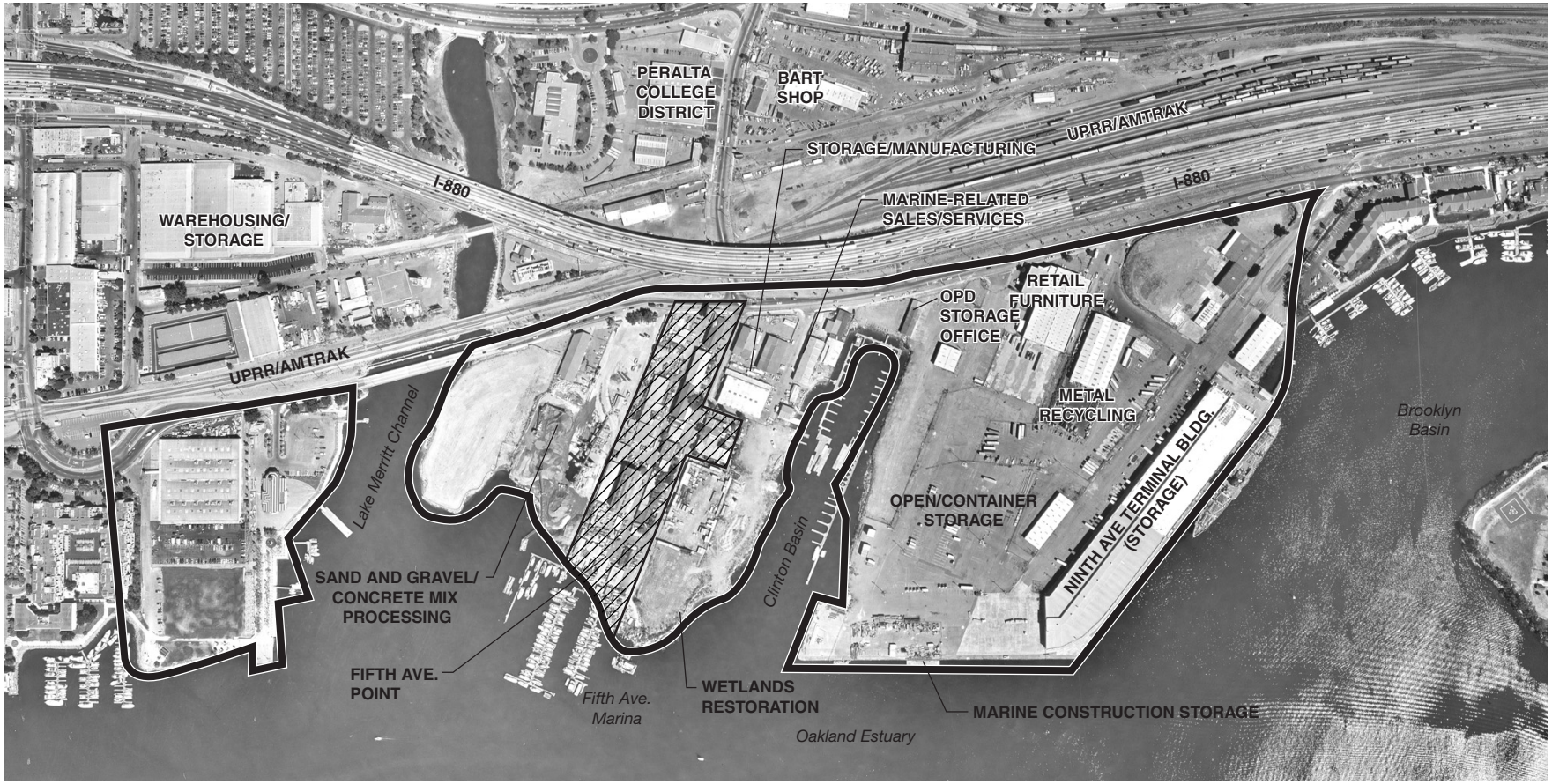
5 Except where noted in reference to a regulatory agency's definition (e.g., BCDC, Army Corp of Engineers), "shoreline" is considered generally the area between the top of bank (or pier) to mean low tide, which would be established as part of the project development.



SOURCE: Environmental Science Associates

Oak to Ninth Avenue . 202622

Figure III-1
Location Map



Not Part of Project Site

0 500
Feet

SOURCE: Environmental Science Associates

Oak to Ninth Avenue . 202622

Figure III-2
Project Site Aerial
and Existing Uses

Portions of the project site are governed by the *Central City East Redevelopment Plan* (east of Lake Merritt Channel) and the *Central District Urban Renewal Plan* (west of Lake Merritt Channel). The project site also includes Oakland Estuary waterfront areas covered by the *San Francisco Bay Trail Plan*.

The existing land area within the project site boundaries (Embarcadero, Oakland Estuary, Brooklyn Basin, and Fallon Street) is approximately 68.1 acres, including 5.9 acres of pile-supported pier structure adjacent to the Ninth Avenue Terminal building. After implementation of the Oak to Ninth Project, the site would consist of approximately 64.2 acres of land area, resulting from demolishing part of the existing pile-supported pier structure associated with the Ninth Avenue Terminal and changes in land area resulting from shoreline alterations in Clinton Basin. There is also approximately 11.4 acres of water surface (existing marina facilities) that is part of the project site, but that is not considered in the 64.2 acres of land area typically referenced throughout this document.

The project site consists of Alameda County Assessor's Parcels Numbers 0000-0430-001-02, portion of 0000-0430-001-04, 0000-0460-003, 0000-0460-004, 0000-0465-002, and a portion of 0000-0470-002.

Vicinity Land Uses

The project site is located among a variety of uses that include important Oakland transportation corridors and freeway interchanges, maritime-based recreation and commercial activities, public parks, offices, a community college, warehouses, restaurants, apartments and lofts, and retail operations. The Oakland Estuary, to the south, is currently used by the Port of Oakland, the U.S. Coast Guard, recreational boat owners, several college and high school rowing teams, and commercial vessels. Downtown Oakland and Oakland Chinatown are located approximately two miles northwest of the project area. The San Antonio District, located north of I-880, contains various residential types and densities and a range of commercial uses along the major east-west corridors of International Boulevard and East 12th Street.

To the north, the Embarcadero runs immediately adjacent and parallel to I-880 and the Amtrak and Union Pacific Railroad west of 5th Avenue. Further north, beyond I-880, significant land uses include the continuation of the Union Pacific Railroad east of 5th Avenue, Peralta Community College District facilities and Laney College Campus, Bay Area Rapid Transit (BART) maintenance shop facilities, and the San Antonio District.

To the south of the project site, across the Oakland Estuary, is the city of Alameda Coast Guard Island[6] is immediately southeast.

East of the project site are hotel and marine-related retail uses along the Embarcadero and marina facilities along Brooklyn Basin.

[6] Coast Guard Island is a 68-acre man-made island within the city limits of Alameda and is only accessible from the city of Oakland. Facilities at the Island support the U.S. Coast Guard's operations along the West Coast.

To the west lie the Portobello and The Landing residential condominium developments; commercial warehouses, a television broadcasting storage facility, and commercial, residential, and live-work uses in the Jack London District approximately one mile to the west. The Oakland/San Francisco Ferry stations in Oakland and Alameda are each located approximately 1.0 to 1.5 miles to the west, and the Oakland Amtrak train station near Jack London Square is about 0.75 mile west along the Embarcadero. The nearest Bay Area Rapid Transit (BART) station is Lake Merritt Station, nearly 1.0 mile to the northwest.

Existing Site Access

The Embarcadero runs east-west, generally from 23rd Avenue to Market Street and provides direct access to the project site. In addition, 5th Avenue extends in a north-south direction from the waterfront to East 18th Street and also provides direct access to the site.

The Embarcadero crosses Broadway in the Jack London Square area; 5th Avenue intersects an I-880 off-ramp. The nearest southbound I-880 on-ramp is at 10th Avenue and the Embarcadero, and the nearest northbound I-880 on-ramp is at 6th and Jackson Streets. Southbound and northbound I-880 off-ramps nearest to the project site are located at Oak Street, on 5th and 6th Streets, respectively.

Existing Project Site Land Use

The Port of Oakland currently owns the project site and leases it to a variety of commercial and industrial tenants. A large portion of the site was formerly used as the Port of Oakland's break bulk facility (dismantling of incoming and outgoing bulk cargo) and is now used primarily as a storage and industrial-site as depicted in the aerial photograph of the area (**Figure III-2**). Existing land uses and activities on the site are also identified in **Figure III-2**.

The Ninth Avenue Terminal building is an approximately 180,000 square-foot structure located at the easternmost portion of the site, between 9th and 10th Avenues. Other major uses in the eastern portion of the site include a 44,000 square-foot retail furniture store, a metal recycling facility, marine-related repair and storage, and outdoor storage of shipping containers**.**

Major uses in the central portion of the site, between Clinton Basin and Lake Merritt Channel, include a mix of manufacturing and outdoor storage uses, and a sand and gravel processing operation that manufactures concrete mix. Two sites within this central part of the project area are privately-owned parcels that are not part of the proposed development project: a 27,000 square-foot parcel between 5th and 6th Avenues (Schultz properties), and the western portion of Fifth Avenue Point, the nearly six-acre area along and somewhat west of 5th Avenue that includes a work-live artist community and a mix of industrial and commercial uses (Silviera properties)**.** These properties are referred to throughout the EIR as Fifth Avenue Point, or "outparcels." This area also includes the Clinton Basin Wetland Restoration and Enhancement Project, a Port of Oakland project that covers approximately two-thirds of an acre on the west shore of the mouth of

Clinton Basin (discussed below). This Port of Oakland project was designed to improve the habitat value for shore birds, gulls, ducks, and other avian life that frequent the area.

Estuary Park and Jack London Aquatic Center and an East Bay Municipal Utility District (EBMUD) dechlorinization facility are located immediately west of Lake Merritt Channel and within the project site. Estuary Park is an approximately 7.7-acre[7] City park that includes the Jack London Aquatic Center. The lawn area/playing field (excluding the Aquatic Center and existing seating and parking lot) is nearly 3.5 acres, with a depth of approximately 300 to 400 feet from the south shoreline. This park currently provides picnic facilities, public restroom facilities, a fishing and observation pier, a boat launch, surface parking, and playing fields that are used by local soccer and other leagues, and/or for special events. A nearly 80,000 square-foot wholesale grocery warehouse is located at the western edge of the project site, immediately north of Estuary Park, at Fallon Street and the Embarcadero.

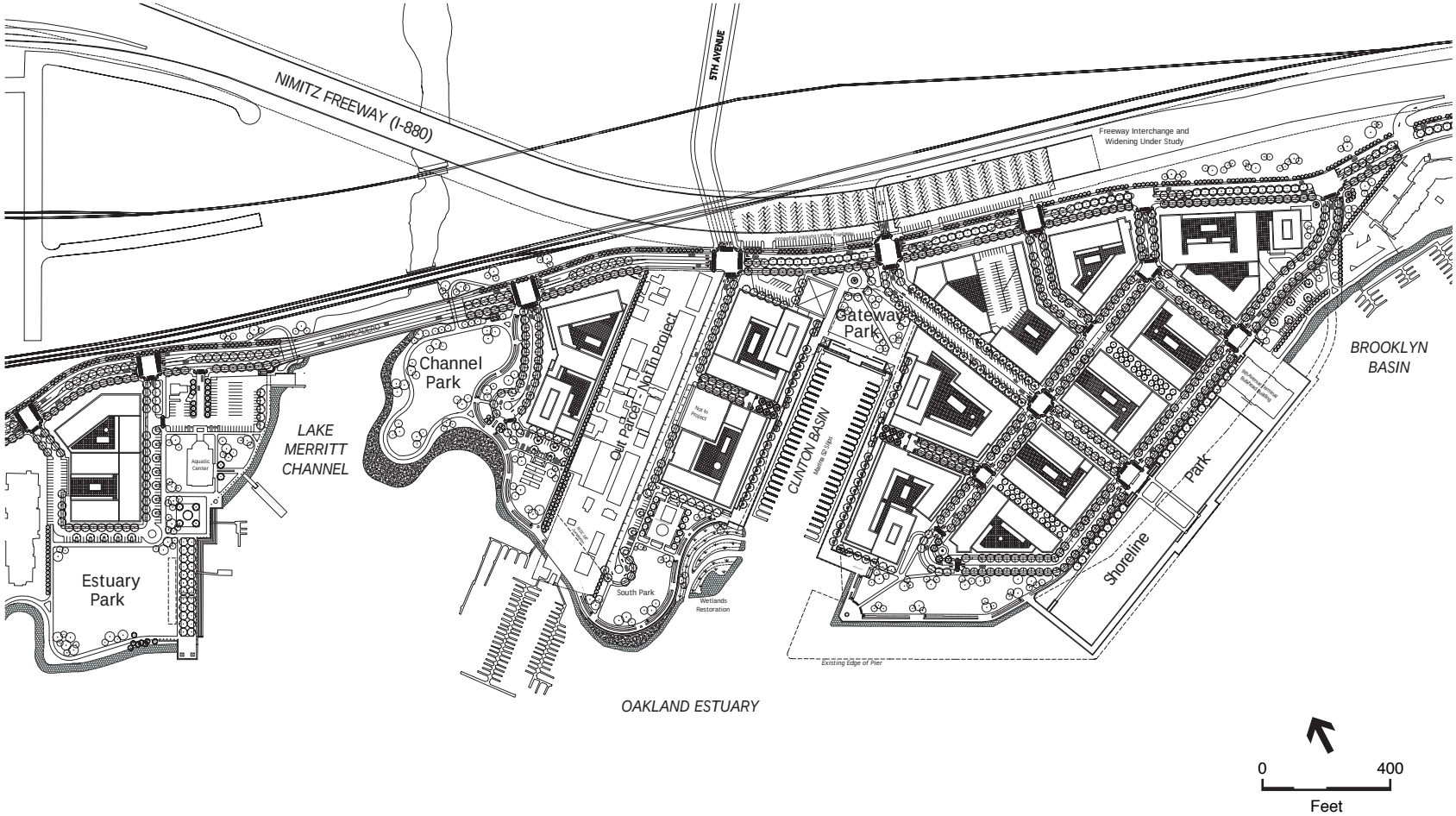
Lake Merritt Channel passes through the project site and connects to the Oakland Estuary at Estuary Park. Navigation along the channel is prohibited and is obstructed by the Embarcadero (which passes over the channel) and the railroad tracks further north. Water in the channel is regulated by a series of gates along the channel and is also subject to tidal flows. Although unauthorized access to the waterfront occurs along the channel and the estuary, there are currently no points of authorized public access along the shores of the channel or the estuary from the project site, except via the boat launch ramp and piers at Estuary Park and the Jack London Aquatic Center.

Two existing marinas are located within the project area: Clinton Basin Marina which is owned by the Port of Oakland but that is currently closed, and the Fifth Avenue Marina at the foot of 5th Avenue and that is owned by the Port of Oakland and leased to a private party. A U-shaped wood and concrete decking and walkway is tucked into Clinton Basin and provides approximately 35 boat slips of varying size. Similarly, approximately 60 boat slips are available at the Fifth Avenue Marina.

Project Characteristics

The project sponsor, Oakland Harbor Partners, LLC,[8] proposes to redevelop the project site from an underused, maritime and industrial area on the Oakland Estuary into a mixed-use neighborhood with residential, retail/commercial, open space, and marina uses. The majority of existing commercial and industrial uses and structures on the project site would be removed or demolished to accommodate the project. Of the approximately 64.2 acres of land that would make up the project site after implementation, about 25.3 acres (or 39 percent) would be developed ,as illustrated in **Figure III-3**, with a mix of residential and commercial uses. Approximately 28.4 acres (or 44 percent) of the project site would be developed with new or

7 Based on the 2005 project site survey prepared by BKF Engineers for Oak to Ninth Project.
8 Oakland Harbor Partners is a joint venture between Signature Properties, Inc., and Reynolds & Brown.



SOURCE: ROMA Design Group

Oak to Ninth Avenue . 202622

Figure III-3

Proposed Illustrative Development Plan

improved parks and open spaces (including pile-supported pier areas), with the remaining 10.5 acres of the site (17 percent) used for new roads and infrastructure.

Proposed Residential and Retail Uses

The project would consist of approximately 3,100 residential dwelling units on 13 development parcels that are designated by letters A through H and J though N (**Figure-III-4** and **Table III-1**). Units would include a mix of flats, townhomes, and lofts, ranging from studios to three bedrooms. Some units would be ground-floor residences with street-level entrances. It is anticipated that the project would provide for-sale units and rental units. The proposed development shown in **Table III-1** would result in an overall average density of approximately 125 dwelling units per net acre and nearly 50 dwelling units per gross acre.[9]

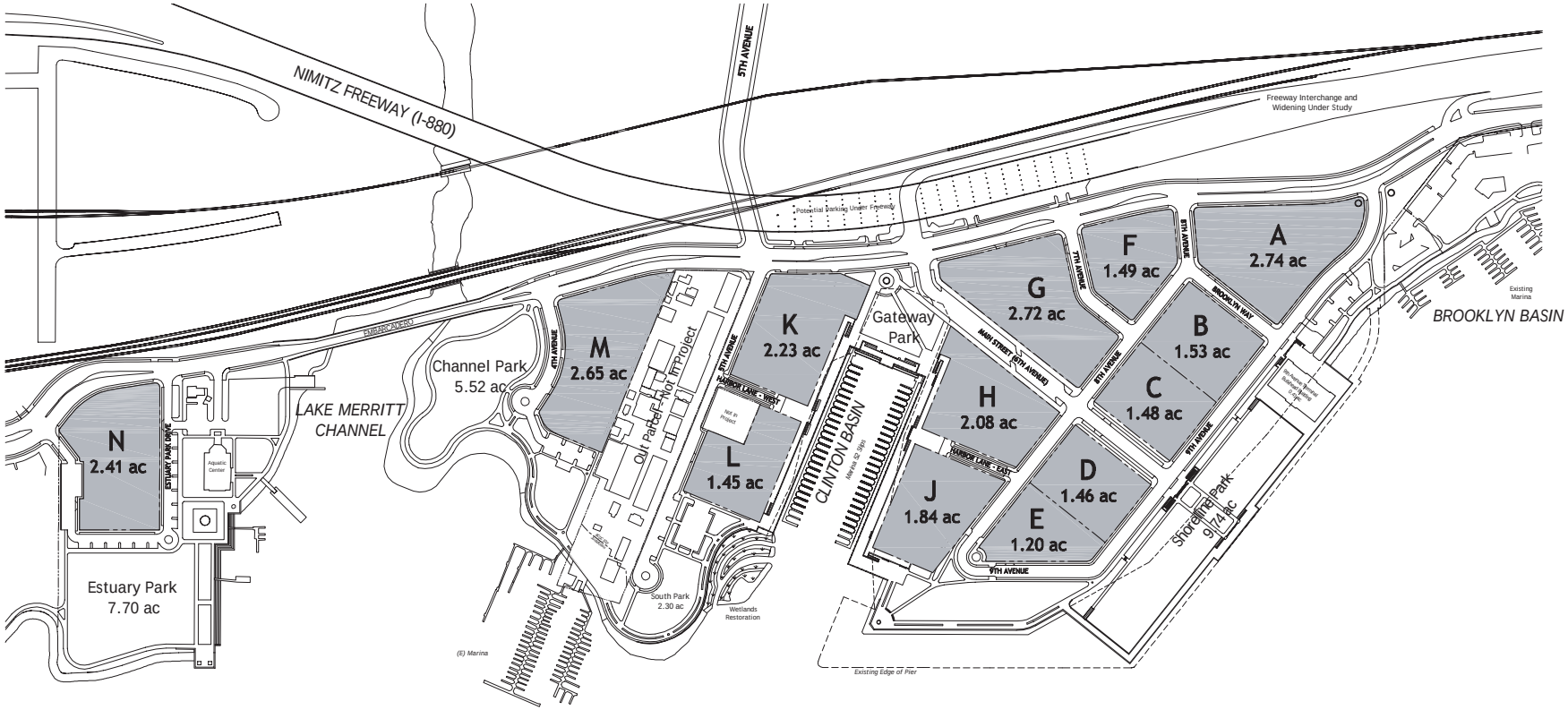
The project would include up to approximately 200,000 square feet of ground-floor retail/commercial space that would be distributed throughout each of the 13 development parcels (**Table III-2** and **Figure III-4**). These spaces would be designed to provide a variety of active retail, restaurant, service, and small office uses to support the new residential neighborhood and serve visitors to the site. These retail uses would generally be focused along the new main road that extends from the Embarcadero at 6th Avenue and the new Gateway Park (the main project entrance east of Lake Merritt Channel), and along Clinton Basin and its improved marina.

Retail spaces along the main street would be designed to accommodate neighborhood-serving uses such as a grocery store, specialty food tenants, and retail shops, among other types of uses. Ground floor uses along other streets could include, among other uses, restaurants, small local-serving retail shops, galleries, and small offices. The ground floor spaces along Clinton Basin would be designed to create an active urban waterfront along the new marina and could include water-oriented retail spaces and restaurant uses, as well as marina-related offices. **Table III-2** shows the distribution of retail uses throughout the project site.

Proposed Building Massing and Height

The proposed building massing throughout the development would be varied to create a distinctive architectural profile when viewed from distant vantage points. The project proposes a mix of medium-height buildings from six to eight stories (up to 86 feet) in height, and five of these medium-height buildings would include highrise tower elements of up to 24 stories (240 feet) Around Clinton Basin, a building stepback would be required at heights above 65 feet (**Table III-3** and in **Figure III-5**). Each of the project buildings would require a pile-supported foundation system.

[9] 3,100 dwelling units divided by 25.3 acres of development area (excluding open space of rights-of-way) equals approximately 125 units per net acre (122.5 du/ac). 3,100 dwelling units divided by 64.2 acres of total site area equals approximately 50 dwelling units per gross acre (49.8 du/ac).



Illustrative Development Program					
Parcel	Acreage (ac)	Ground Level Non-Residential Area	Total Units	Units/ Net Acre	Parking
A	2.74	10,000	375	137	375
B	1.53	6,000	160	105	160
C	1.48	6,000	160	108	160
D	1.46	6,000	160	110	160
E	1.2	8,000	86	72	86
F	1.49	5,000	164	110	164
G	2.72	42,000	280	103	514
H	2.08	35,000	335	161	435
J	1.84	12,000	292	159	392
K	2.23	17,000	310	139	310
L	1.45	15,000	144	99	144
M	2.65	5,000	334	126	334
N	2.41	15,000	300	124	300
9th. Ave Terminal		18,000			0
Total	25.28	200,000	3100	120*	3534

* This represents an average net density

SOURCE: ROMA Design Group

Oak to Ninth Avenue . 202622

Figure III-4
Proposed Development Program
and Parcelization Plan

TABLE III-1

PROPOSED ILLUSTRATIVE RESIDENTIAL DEVELOPMENT PROGRAM

Parcel	Approximate Building Pad Acreage	# of Units[a]	Minimum Onsite Residential Parking Spaces[b]
A	2.7	375	375
B	1.5	160	160
C	1.5	160	160
D	1.5	160	160
E	1.2	86	86
F	1.5	164	164
G	2.7	280	280
H	2.1	335	335
J	1.8	292	292
K	2.2	310	310
L	1.5	144	144
M	2.7	334	334
N	2.4	300	300
TOTAL:	**25.3**	**3,100**	**3,100**

[a] The proposed Planned Waterfront Development Zoning District (PWD-1) (discussed below) would allow flexibility in the maximum number of dwelling units that could be developed on a particular building pad or parcel, however, the total maximum number of dwelling units (or net density) in the project could not be exceeded.

[b] Minimum 1.0 space per dwelling unit.

SOURCE: Oakland Harbor Partners, 2005.

Project Variant with Increased Building Height

An Increased Building Height Variant to the project allows consideration of increased maximum building heights on Parcels B, C, D, E, and H, as shown in **Table III-4** and **Figure III-6**. The variant would increase only the building podium heights by 34 feet (from 86 feet to 120 feet maximum). The maximum height of the overall structure (including the highrise towers) would remain 240 feet). All other project characteristics described in this chapter and throughout the EIR also would remain unchanged, including the total number of dwelling units on the project site. The potential view and shadow impacts of the project variant are analyzed in this EIR.

Proposed Parking

The project would provide a total of approximately 3,534 onsite parking spaces to meet City Code parking requirements and parking demand. As shown in **Table III-5**, about 3,500 of the total spaces would be provided in enclosed parking structures to serve residential and retail/commercial uses, and an additional 34 spaces would serve marina uses. Each parcel would

TABLE III-2

PROPOSED ILLUSTRATIVE RETAIL DEVELOPMENT PROGRAM

Parcel	Retail Square Footage / Marina Slips	Required Minimum Parking Spaces[a]
A	10,000	
B	6,000	
C	6,000	
D	6,000	
E	8,000	
F	5,000	
G	42,000	
H	35,000	
J	12,000	
K	17,000	
L	15,000	
M	5,000	
N	15,000	
Terminal Bulkhead Building[b]	18,000[c]	
Marinas	170 slips	
TOTAL RETAIL:	**200,000 sq. ft.**	**400 spaces**
TOTAL MARINAS:	**170 slips**	**34 spaces**

[a] Minimum 1.0 space per 500 square feet of retail/commercial space required per the proposed Planned Waterfront Zoning District (PWD-1). The required 434 parking spaces for retail/commercial and marina uses would be concentrated on Parcels G, H, and K.
[b] Uses consistent with the Tidelands Trust.
[c] Approximately 18,000 square feet of Tidelands Trust uses are assumed for purposes of this EIR analysis. However, the project would retain a minimum of 15,000 square feet of the Terminal Bulkhead Building.

SOURCE: Oakland Harbor Partners, 2005.

contain the parking required to serve its residential uses. Retail/commercial parking for the entire project would be concentrated on Parcels G, H, and K.

The proposed number of parking spaces is based on minimum parking ratios of 1.0 covered space per residential dwelling unit, 1.0 space per 1,000 square feet of retail/commercial use, and 1.0 space per five marina slips.

In addition, approximately 450 spaces would be available primarily for use by park and marina users: approximately 75 spaces in surface parking lots in the proposed open space areas, and approximately 375 on-street parking spaces. However, as discussed in detail in Section IV.B,

TABLE III-3

PROPOSED APPROXIMATE HEIGHT RANGE DISTRIBUTION

Parcel	Building Height Range	High-Rise Tower Component
A	65 to 86 ft.	240 ft.
B	65 to 86 ft.	-
C	65 to 86 ft.	-
D	65 to 86 ft.	-
E	65 to 86 ft.	-
F	65 to 86 ft.	-
G	65 to 86 ft.	100 ft.
H	65 to 86 ft.	240 ft.
J	65 to 86 ft. [a]	240 ft.
K	65 to 86 ft. [a]	240 ft.
L	65 to 86 ft. [a]	-
M	65 to 86 ft.	240 ft.
N	65 to 86 ft.	-

[a] 65-foot height stepback is proposed around Clinton Basin for all or part of the Basin-fronting facades.

SOURCE: Oakland Harbor Partners, 2005.

Transportation, Circulation, and Parking, these spaces are not considered when evaluating how the project satisfies City Code-required parking or parking demand.

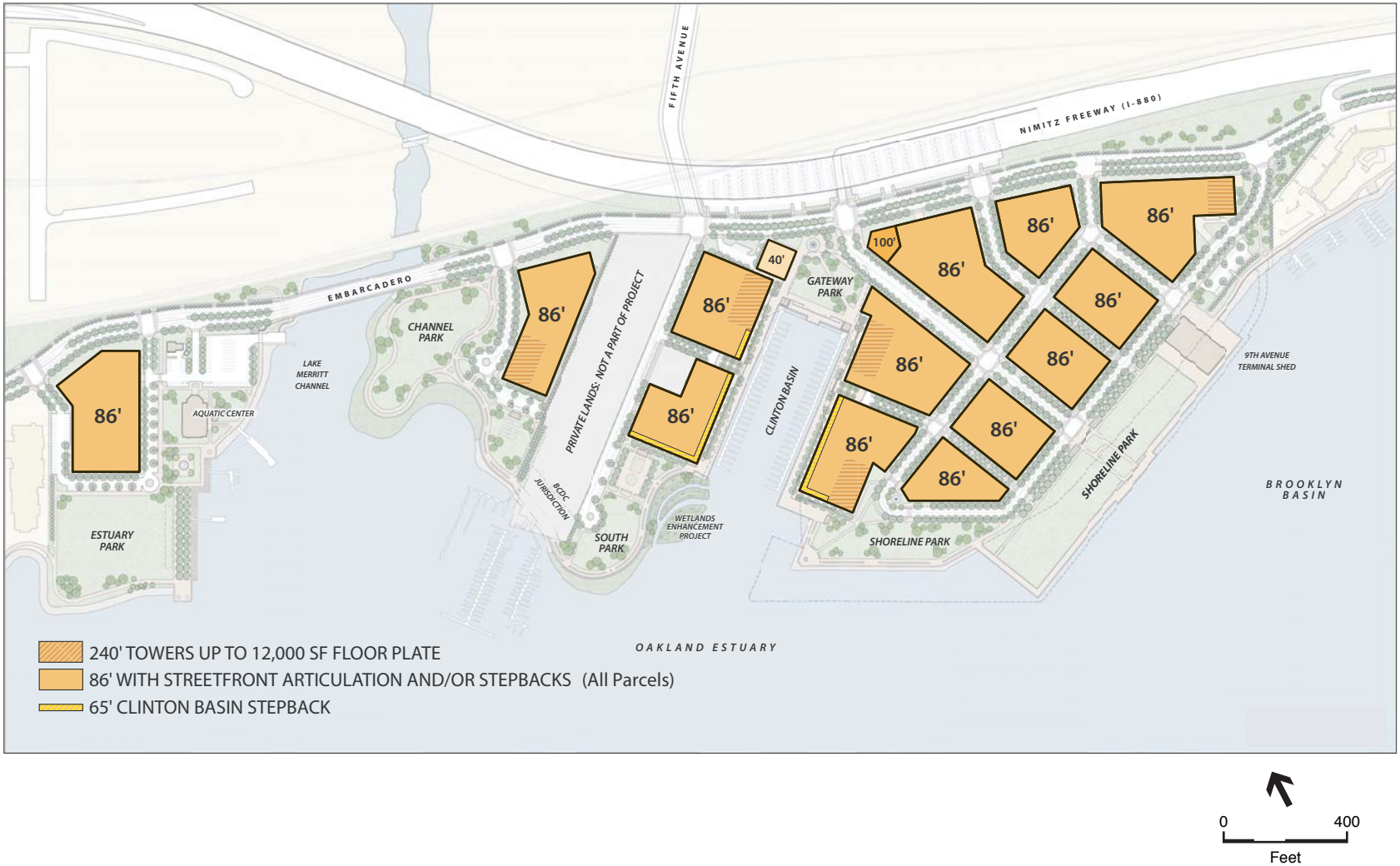
A number of parking control and management techniques would be incorporated into the project site plan and operations with a goal to preserve parking spaces for retail uses and ensure that there is adequate parking for all commercial uses. The project would also provide onsite bicycle parking spaces at a level determined by the City and in a manner consistent with City practices (or updated, adopted standards) at the time of project construction.

Proposed Parks, Open Space and Trails

A mix of active and passive parks and open spaces[10] covering approximately 44 percent[11] of the project site would be integrated into the project. This includes approximately 20.7 acres of new and permanent public open space (not including existing Estuary Park and Jack London Aquatic

[10] Consistent with the Open Space, Conservation, and Recreation Element (OSCAR) of the General Plan, "parks and open space" shall include the defined unpaved areas, as well as associated facilities, trails, and parking areas, as with Estuary Park and Jack London Aquatic Center.

[11] 44 percent includes the existing 7.7-acre Estuary Park and Jack London Aquatic Center. With these existing facilities and associated site area included, a total of 28.4 acres of open space would exist on the project site, which would result in approximately 37 percent of the project site as open space.



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Feet

SOURCE: ROMA Design Group

Oak to Ninth Avenue . 202622

Figure III-5
Proposed Maximum Height Distribution

TABLE III-4

PROPOSED APPROXIMATE HEIGHT RANGE DISTRIBUTION

INCREASED BUILDING HEIGHT VARIANT

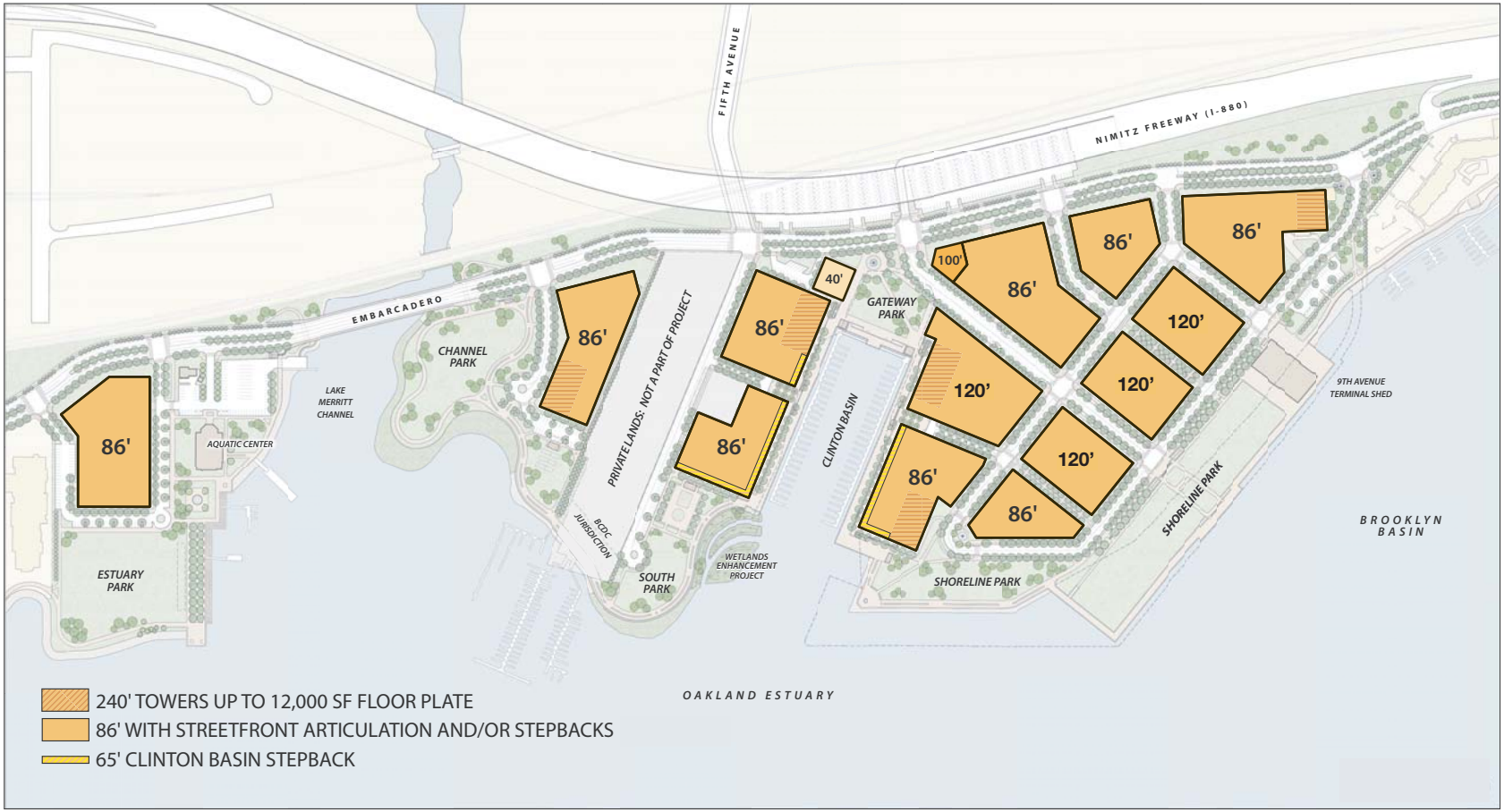
Parcel	Building Height Range	High-Rise Tower Component
A	65 to 86 ft.	240 ft.
B	65 to 120 ft.	-
C	65 to 120 ft.	-
D	65 to 120 ft.	-
E	65 to 120 ft.	-
F	65 to 86 ft.	-
G	65 to 86 ft.	100 ft.
H	65 to 120 ft.	240 ft.
J	65 to 86 ft. [a]	240 ft.
K	65 to 86 ft. [a]	240 ft.
L	65 to 86 ft. [a b]	-
M	65 to 86 ft.	240 ft.
N	65 to 86 ft.	-

[a] 65-foot height stepback is proposed around Clinton Basin for all or part of the Basin-fronting facades.

SOURCE: Oakland Harbor Partners, 2005.

Center) that would be designed as a series of interconnected parks and waterfront spaces to provide a variety of recreational opportunities. Potential uses include informal green spaces for passive recreation, playgrounds, picnic areas, and gardens. These improvements would include the continuous public pedestrian trail and Class I bicycle facility along the entirety of the project's waterfront, linking an existing Bay Trail segment that currently ends at Estuary Park to Brooklyn Basin (**Figure III-7**) where the trail currently continues east to the Martin Luther King Regional Shoreline and beyond. The trail would also follow both sides of Lake Merritt Channel, crossing east-west over Lake Merritt Channel Bridge (over the Embarcadero), allow for extension for future City projects aimed at improved connections between Lake Merritt and the estuary. The trail would accommodate pedestrians and bicycles and a variety of users within a maximum 40-foot-wide right-of-way along the waterfront of the project site..

Project landscaping is shown in **Figure III-3** and **Figure III-7** for illustrative purposes only. The project sponsor would be required to prepare and submit to the City a detailed landscape plan indicating specific type, size, and location of vegetation proposed throughout the project site and particularly within open spaces, public streets, and near the water's edge.



* Building height range of 65 to 120 feet proposed on Parcels B, C, D, and H under the Increased Height project variant.

0 400
Feet

SOURCE: ROMA Design Group

Oak to Ninth Avenue . 202622

Figure III-6
Increased Height Project Variant–
Proposed Maximum Height Distribution

TABLE III-5

PROPOSED ONSITE PARKING SUPPLY

Parking	Ratio	Minimum Parking Spaces
Covered Residential Parking	1 space per unit	3,100
Covered Parking for Retail/Commercial Use	1 space per 500 sq.ft. of floor area	400
Covered Parking for Marina Use	1 space per five marina slips	34
TOTAL		**3,534**

SOURCE: Oakland Harbor Partners, 2005.

The project would demolish a maximum of approximately 165,000 square feet of the existing Ninth Avenue Terminal building and a portion of its existing wharf. In its place, Shoreline Park would be constructed, a new 9.7-acre open space along the waterfront. Approximately 90,000 square feet (about 50 percent) of the Terminal building (located closest to the Embarcadero) was built in the late 1920s, and the remainder (located closest to the estuary) was built in the 1950s. The project would retain a minimum of 15,000 square feetof the 1920s portion of the Terminal's original Bulkhead Building (the northern part of the Terminal used for front-of-house operations).

Shoreline Park / Ninth Avenue Terminal Bulkhead Building

The retained Bulkhead Building would sit at the northernmost end of Shoreline Park, which would extend south of the Bulkhead Building. New uses in the Bulkhead Building would include uses consistent with the Tidelands Trust.

In addition, a portion of the pile-supported wharf south and west of the Terminal building would be removed, and the remaining wharf area (and footprint of the demolished part of the Terminal) would be used as open space and a landscaped waterfront plaza for public enjoyment. Shoreline Park would include an open green lawn approximately 600 feet along the shoreline (measured north-south from the Bulkhead Building to the new south pier edge), and approximately 150 to 225 feet wide (measured from the new east pier edge on the south to the new public street (9th Avenue). Shoreline Park would also include the new waterfront bicycle path and jogging trail that would be part of the Bay Trail.

Gateway Park and Quay / Clinton Basin

Gateway Park would be sited at the main entry to the project, immediately north of Clinton Basin. This 3.1-acre open space lawn area would provide a more urbanized, park-like experience adjacent to marina activity and new retail space. The quay, a retaining wall-like edge treatment

Total Parks and Open Space:
28.38 ac (44 percent of Project Site)

Proposed Trails

Existing/Planned Trails

0 400
Feet

SOURCE: Oakland Harbor Partners

Oak to Ninth Avenue . 202622

Figure III-7
Proposed Shoreline Parks Network

and a 55-foot wide hardscape promenade around Clinton Basin, would be located around the rebuilt marina and connect to the Bay Trail.

Channel Park and South Park

Channel Park and South Park would provide a total of approximately eight acres of new open space. Channel Park (approximately 5.5 acres) would be located on the east side of Lake Merritt Channel, and South Park (approximately 2.3 acres) would be located west of the improved Clinton Basin and marina and adjacent to the Port of Oakland wetland restoration project (discussed below). Channel Park would have a maximum depth of approximately 600 feet from the shoreline, and South Park would have a depth of approximately 400 feet from the shoreline.

Estuary Park and Jack London Aquatic Center

The project would improve the existing Estuary Park through re-vegetation of the approximately 3.5-acre lawn/play field, shoreline protection (discussed below), and extending the waterfront Bay Trail that would edge the park and Lake Merritt Channel. The project would not change the existing picnic table/seating area pavilion and waterfront access facilities adjacent to the park and the Aquatic Center (boating and fishing docks and boat launch), and no new structures are proposed..

Clinton Basin Wetland Restoration and Enhancement Project

In addition to new and permanent open space areas, the project would maintain the existing Clinton Basin Wetland Restoration and Enhancement Project wetland restoration area at the west shore at the mouth of Clinton Basin (**Figure III-6**). No changes are proposed to this resource as part of the project.

Ownership, Maintenance, and Operations

The Port or the City would own the open spaces proposed by the project. The City would be responsible for 1) approving the improvements installed in the project open space, 2) programming the allowable uses within the project open space, and 3) granting/permitting activities within the open spaces, however, all uses within open spaces would be limited to uses that are consistent with the Tidelands Trust.

The project sponsor will be responsible for installing the improvements within the project open space and providing for the maintenance of the project open space in a manner that meets or exceeds minimum standards provided by the City. Maintenance by the project sponsor may be accomplished through the establishment of 1) a project homeowners' association, 2) (in conjunction with the City) a Community Facilities District or Community Services District, or 3) other mechanism approved by the City.

The project sponsor is not proposing to hold events (such as concerts or festivals) at the project site. However, it is possible that in the future, upon further review and approval by the City of

Oakland, entities could sponsor such organized events at the new public open spaces created by the project.

Proposed Marinas, Shoreline Improvements, and Water-Orientation

The project would rebuild the existing Clinton Basin Marina, increasing the number of boat slips from 35 to approximately 52 slips that would line the new sheet pile (retaining wall-like) edge of the Basin, which would be straighten and protected compared to its existing undulating and unprotected condition. The Quay, the 55-foot wide hardscape promenade around Clinton Basin, would be developed and lined with marine-related retail/restaurant uses and marina support facilities. The Fifth Avenue Marina would be expanded from the existing estimated 60 boat slips for a total of approximately 118 slips on a series of walkways and berths away from the shoreline, and accessed from the southernmost area of Channel Park.[12] Both marinas would make available short-term, transient, and long-term slips to accommodate a range of boat types and sizes. No fueling stations would be included in the marina operations.

The project would also improve the existing shoreline along the project site.[13] Shoreline improvements and specific treatments would vary along the project site and include the removal of existing debris, re-grading of banks, creation and improvement of marsh habitats, and varying types of slope protection with rocks (riprap) and bulkhead walls. The proposed improvements would enhance water-oriented activities in this area by facilitating greater and improved public access to the estuary with enhanced parks, open spaces, trails along the waterfront. There would especially be improved public opportunities for recreational sailing, rowing, canoeing, and kayaking.

Proposed Streets and Public Access

Internal Circulation

As depicted in the project's illustrative site plan (**Figure III-3**), existing streets within the project site would be removed, and new internal streets would be created. New streets would be constructed to City roadway standards and offered for dedication to the City of Oakland, except for 5th Avenue which would be accessible to the public with approval of a public access easement but may not be constructed to City roadway standards. The proposed street layout would complement the open space system by providing convenient vehicular access and providing continuous public pedestrian and bicycle linkages to the waterfront. The layout of the streets would lead to the water and open space areas, and each street would be landscaped and provide on-street parking for convenient use by the public.

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[13] See Footnote 3.

Access to the Project Site

The Embarcadero along the project site would be improved and widened into a parkway that would be significantly landscaped to provide a distinctive northern edge to the project and provide some level of screening of the adjacent above-grade portion of I-880. The project proposes up to eight intersections along the Embarcadero to improve access to the waterfront and to allow for safe and efficient circulation to and from the project site. The continuation of 5th Avenue, currently the only through connection from north of the Embarcadero (due to the existence of the Union Pacific railroad tracks and I-880) would be improved to become one of the main entrances to the central portion of the development. The improvements and new intersections to the project would be coordinated with Caltrans' criteria for future I-880 improvements and upgrades that may affect the Embarcadero near the project site.

The site would also be accessed from its estuary frontage, and based on currently-adopted City plans and projects that will create new waterway and pedestrian connections between Lake Merritt and the estuary, the project site would be accessible from the north via Lake Merritt Channel once such future projects are implemented. Existing waterfront pedestrian paths are available from the west (from Jack London Square, east to Estuary Park) and the east (from Embarcadero Cove, west to Brooklyn Basin).

Site Remediation, Utility Improvements, and Dredging

The soils and groundwater of the project site have varying levels of contamination due to previous onsite and offsite manufacturing and industrial activities. Existing contaminants include volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), metals, and petroleum hydrocarbons and gasoline, diesel, and motor oil. The project sponsor would prepare and implement a phased remediation process for cleanup of the site to appropriate levels, pursuant to the review, approval, and oversight of various regulatory agencies (identified below) and a single lead oversight agency, the California Department of Toxic Substances Control (DTSC).

The California Department of Toxic Substances Control (DTSC) is anticipated to serve as the lead oversight agency pursuant to California Health & Safety Code 25395.60 *et seq*., the California Land Reuse and Revitalization Act (CLRRA). Under CLRRA, the project sponsor would enter into a contractual agreement with DTSC to complete an environmental assessment of the property and to clean up the site in accordance with all applicable laws and regulations. Cleanup at the site is likely to include closure or removal of existing subsurface structures, such as tanks; excavation and disposal of contaminated materials; natural or enhanced bioremediation of soil and groundwater; restoration and improvement of shoreline structures; dredging of sediments; and institutional and engineering controls to prevent exposure to and migration of contaminated materials.

Under CLRRA, the environmental assessment must include: 1) characterization of the hazardous materials released or threatened to be released at or from the site; 2) available information about the site; 3) a risk assessment, if appropriate, that evaluates the risk posed by any hazardous

materials released or threatened to be released at or from the site; 4) information regarding "reasonably anticipated foreseeable uses of the site based on current and projected land use and zoning designations"; and 5) if the release has impacted groundwater, "reasonable characterization of underlying groundwater," including present and anticipated beneficial uses of the water.

For cleanup, CLRRA requires that the project proponent submit to the lead agency and agree to implement a response plan to clean up the property. The response plan must include: 1) identification of the releases or threatened releases at the site; 2) documentation that the plan is based on adequate characterization of the site; 3) identification of the response plan's objectives and the proposed remedy; 4) identification of the current and reasonably anticipated future land use of the site, including confirmation regarding such projections city or county in which the site is located; 5) a description of activities that will be used to control any endangerment that may occur during the response action; 6) a description of any land use control that is part of the response action; 7) a description of wastes other than hazardous materials at the site and how such wastes will be managed during the response action; 8) provisions for the removal of containment vessels and other sources of contamination, including soil and free product, that cause an unreasonable risk; 9) provisions for the agency to require further response actions based on the discovery of hazardous materials that pose an unreasonable risk to human health or the environment during the response action or subsequent development of the site; and 10) any other information required by the lead agency. Prior to approval by the lead agency or implementation by the project proponent, CLRRA further requires that, the response plan be subject to meaningful public notice and comment to permit the community and other state and local agencies to obtain information about and express their views regarding the proposed cleanup.

Public utility easements and infrastructure for water, sanitary sewer, stormwater drainage, gas, and electricity exist on or near the project site. The project would upgrade onsite utilities and utilities along the project frontage on the Embarcadero to current design standards. Specifically, the existing “looped” system of EBMUD water line that serves the project is expected to accommodate the project’s anticipated water demand. Water mains (designed and supplied by EBMUD) would be installed to serve the development and, each project building would have service connections for residential water service, commercial water service, fire service, and irrigation. The project may be required to construct sanitary sewer facilities offsite as to not exceed the capacity of the local sub-basin during wet weather conditions. The project would install new storm drains throughout the project area to allow discharge to the Oakland Estuary. New storm drains would connect to the existing storm drain mains on the Embarcadero (east of 5th Avenue) and on the southern extension of Fallon Street, and would be designed to accommodate drainage from the Embarcadero.

In addition, the project would require dredging to provide adequate water depth for the marina berthing area in Clinton Basin and for shoreline improvements around Clinton Basin. Dredging would occur at a design water depth of -8 feet mean lower low water (MLLW) and involve about 20,000 cubic yards of dredged material.

Proposed Planned Waterfront Zoning District Standards and Regulations

The project sponsor proposes a new zoning district and associated standards: the "Planned Waterfront Zoning District" (PWD-1). The intent of the proposed PWD-1 District would be to establish specific regulations to facilitate the development of an integrated mixed-use, residential, public and private open space, and commercial community on the project site. The PWD-1 District regulations would establish 1) land use regulations, such as allowable and prohibited activities; 2) development standards, such as maximum density levels, height restrictions, requirements for building frontage, public open space and the Bay Trail, parking/loading, and signage; and 3) design guidelines defining parameters for architectural character, building massing and articulation, exterior features, lighting, materials and colors, and landscape areas. The proposed rezoning of the project site to the PWD-1 District would not apply to portions of the Oak-to-Ninth District[14] (defined in the Estuary Policy Plan) north of the Embarcadero or within the outparcels not included as part of the project site, Fifth Avenue Point). (The proposed PWD-1 District and associated draft standards, are discussed in detail in Section IV.A, Land Use, Plans, and Policies.)

Project Phasing

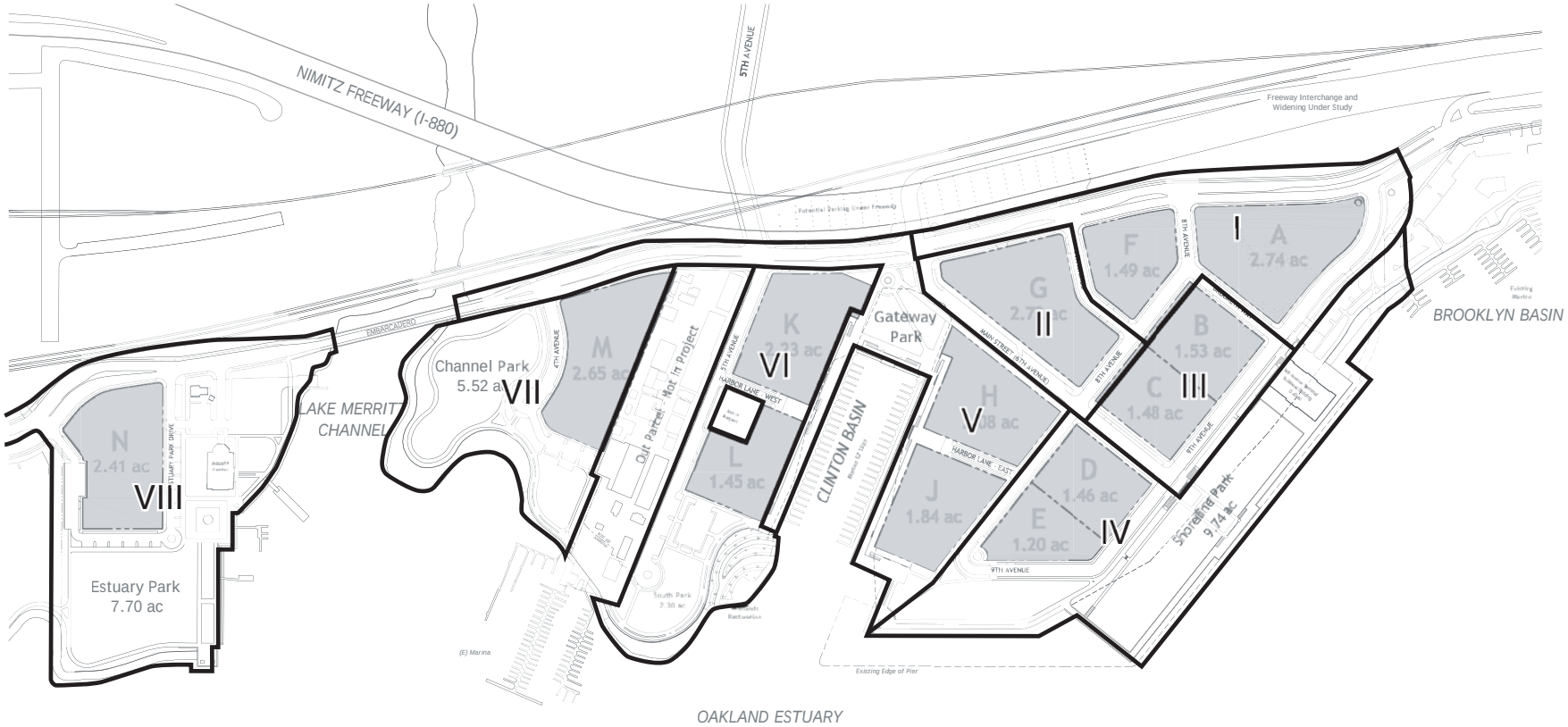
The project would be remediated and developed in phases over a period of approximately 11 years. It is anticipated that construction activities would occur in four major phases with one to two sub-phases each, for a total of eight total phases. It is anticipated that the project would start construction in 2007 and be completed in approximately 2018. Approximately one-third of the project in terms of land area (and 37 percent in terms of dwelling units) would be completed at 2010 (Phases I through III), with the remaining two-thirds (or 63 percent of the dwelling units) completed after 2010.

Generally, the project site would be developed from east to west (as depicted in **Figure III-8**) as follows (years shown generally encompass site preparation to building occupancy):

- **Phases I through III** (2007 to 2010) - Approximately 1,139 units and 69,000 square feet of retail/commercial: Parcels A, B, C, F, and G; and project street rights-of-way. Estimated demolition: Approximately 88,000 sq. ft. of manufacturing, storage, retail, and service uses.

- **Phases IV and V** (2008 to 2014) - Approximately 1,473 units and 79,000 square feet of retail/commercial: Parcels D, E, H, and J; Clinton Basin and Quay; and project street rights-of-way. Shoreline Park would be developed by 2012, and Gateway Park would be developed by 2014, as would the Bay Trail segment from Brooklyn Basin to Clinton Basin.

[14] The Oak-to-Ninth District is defined in the Estuary Policy Plan as approximately 120 acres south of I-880, generally from Oak Street to the Ninth Avenue Terminal. The land area of the Oak to Ninth Project site after implementation of the project would be approximately 64.2 acres located south of the Embarcadero only.



	Development Areas (ac.)	Retail Areas (sq. ft.)	Total Units
I	4.2	15,000	539
II	2.7	42,000	280
III	3.0	12,000	320
IV	2.7	14,000	244
V	3.9	47,000	627
VI	3.7	32,000	454
VII	2.7	5,000	334
VIII	2.4	15,000	300
Total	**25.3**	**200,000**	**3,100**

0 400
Feet

SOURCE: ROMA Design Group

Oak to Ninth Avenue . 202622

Figure III-8
Proposed Phasing Plan

Estimated demolition: Approximately 165,000 square feet of the Ninth Avenue Terminal building (minimum 15,000 sq. ft. Bulkhead Building retained) and removal of storage, marine construction, and training uses.

- **Phases VI and VII** (2009 to 2017) - Approximately 798 units and 37,000 square feet of retail: Parcels K, L, and M; and project street rights-of-way. South Park would be developed by 2015, and Channel Park would be developed by 2017, as would the Bay Trail segment east of Clinton Basin. Estimated demolition: Approximately 46,000 square feet of marine, storage, service, manufacturing, and industrial uses.

- **Phase VIII** (2011 to 2018) - Approximately 300 units and 15,000 square feet of retail/commercial: Parcel N and project street rights-of-way. Improvements (re-vegetation) of Estuary Park and the adjacent Bay Trail segment would occur by 2018. Estimated demolition: Approximately 78,400 square feet of wholesale grocery use.

B. Project Objectives

The primary Project Objectives include providing to the Bay Area and the city of Oakland a revitalized accessible waterfront with open spaces for public use and a range of needed housing opportunities.

Supporting Project Objectives include the following:

- Redevelop the project site into a mixed-use development that provides the public greater access to the Oakland Estuary shoreline.

- Provide a mixture of dwelling sizes and types, including rental and for-sale units, to accommodate a range of potential residents.

- Provide a range of commercial uses that meet both visitor- and neighborhood-serving goals by providing goods and services to the region, the city, and the local community.

- Ensure an active street frontage by developing a combination of street-level townhouses, ground-floor retail, and a continuous theme of public walkways and open space throughout the project site.

- Provide additional housing, particularly on existing underutilized land as encouraged by Housing Element policies of the General Plan, to help meet existing housing needs and help alleviate the current jobs/housing imbalance for the region.

- Develop housing in close proximity to abundant transit opportunities, including BART, Amtrak, the San Francisco Bay Regional Ferry, and AC Transit.

- Remediate existing contamination in soil and groundwater at the site, in accordance with applicable regulator standards and consistent with the proposed future uses.

- Redevelop and remediate an underutilized and environmentally challenged site to allow it to be used for its highest and best use for the community.
- Enhance the appearance of an existing urban infill property to improve the streetscape and visual quality of this important site and redevelop a currently underutilized site.
- Provide a significant amount of open space and water-oriented activities accessible to the general public to encourage the public to interact with the Oakland Estuary both visually and recreationally.
- Provide a vital connection to local and regional waterfront trail systems, as well as both physical and visual linkages between the waterfront and inland communities.
- Develop a project that is economically feasible in terms of residential density, building massing, parking, public open space, infrastructure, and other amenities.
- Design and develop public facilities (streets, sidewalks, lighting, parks, open space, etc.) that can be maintained and operated in a sustainable and cost-effective manner.
- Accomplish project objectives in a manner that maximizes the use of private funding sources and minimizes the use of public funds.
- Provide an economically feasible, integrated, and cohesive redevelopment project that includes timely phasing and construction of infrastructure improvements.
- Generate significant, new permanent and construction jobs and the ability to attract capital investment into Oakland.
- Provide infill development in furtherance of Smart Growth principles.
- Provide new permanent and accessible open space areas and extend pedestrian walkways along the estuary in order to meet the passive recreational needs of local residents and visitors, and to complement the existing and proposed surrounding urban fabric while enhancing the waterfront access experience for visitors and employees to the area.
- Develop a project that will generate significant property tax increment to be used in the Central City East Redevelopment Plan Area and Central District Urban Redevelopment Plan Area, and additional tax revenues to the City of Oakland.

C. Discretionary Actions and Other Planning Considerations

As discussed in Chapter I, the City of Oakland is the Lead Agency responsible for preparation of this EIR (pursuant to CEQA Guidelines Section 15051). This EIR is intended to be used for all required discretionary actions for the project. The project requires discretionary actions by both

the Planning Commission and the City Council. In addition, the project will require review and approval by a number of other public and quasi-public agencies and jurisdictions that have authority over specific aspects of the project. These other agencies may also consider this EIR in their review and decision-making processes. The discretionary actions and other considerations and approvals anticipated to be required for the project include the following, without limitation (A detailed description and discussion of each action is included in EIR Section IV.A, Land Use, Plans and Policies):

City of Oakland

- **General Plan Amendment** (Oakland Planning Code Chapter 17.01) - The project would require a General Plan Amendment to the *Estuary Policy Plan*, a component of the Oakland General Plan. An amendment would modify the existing Planned Waterfront Development-1 (PWD-1) land use classification (which is unique to the Oak-to-Ninth District and the project site) to allow the residential land uses and densities proposed by the project. An amendment may also change the Parks, Open Space and Promenades land use classification on Estuary Park and part of the Jack London Aquatic Center to allow a single land use classification over the entire project site. Additional amendments to the *Estuary Policy Plan* may address the intended treatment of the Ninth Avenue Terminal. The Planning Commission would be required to review the General Plan Amendment and forward its recommendation to the City Council for final decision.

- **Redevelopment Plan Amendments -** The project would require amendments to the *Central City East Redevelopment Plan* and possibly the *Central District Urban Renewal Plan* to incorporate the proposed land use changes and maintain the consistency of these Redevelopment Plans with the Oakland General Plan. The Redevelopment Plan Amendments would require approval by the Oakland Redevelopment Agency and City Council.

- **Rezoning and Zoning Code Amendment** (Oakland Planning Code Chapter 17.144) - To allow the proposed land uses and densities, the project would require a Rezoning of the project site to change the existing M-40 Heavy Industrial Zone the channel and S-2 Civic Center/S-4 Design Review Combining Zone (Estuary Park and Jack London Aquatic Center) to a new Planned Waterfront Zoning District (PWD-1) (discussed above and in Section IV.A). The Oakland Planning Code would be amended to add the new PWD-1 District and its associated regulations), and the Oakland General Plan and Zoning Map would be amended to apply the PWD-1 District to the geographic area of the project site.

- **Preliminary Development Plan and Final Development Plan** (Proposed Planned Waterfront Zoning District Regulations, generally consistent with existing Oakland Planning Code Chapter 17.140) - The large scale of the project and its need for phased development and public improvements require that the project prepare and obtain approval of an overall Preliminary Development Plan (PDP) for the entire project, in addition to one or more Final Development Plans (FDP) / Final Design Reviews, that together would cover

all of the new development within the project area. The PDP and the FDP / Final Design Review would require approval by the City Planning Commission.

- **Vesting Tentative and Final Maps** (Oakland Municipal Code Title 16) - The project sponsor is requesting approval of a Vesting Tentative Map and Final Map, which would include consideration of the dedication of public lands (new public streets) to the City. The Vesting Tentative Map would require approval by the City Planning Commission, and the Final Vesting Map would require approval by the City Council

- **Development Agreement** (Oakland Planning Code Chapter 17.138) - The project sponsor and the City would enter into a Development Agreement (DA) that would 1) provide for a vested entitlement period, 2) specify requirements for phasing of project development, 3) stipulate what City regulations will apply throughout the term of the DA with respect to the project, and 4) establish other commitments**.** The City Planning Commission would review the DA and forward its recommendation to the City Council for a final decision.

- **Tree Removal Permit** (Oakland Municipal Code Chapter 12.36) - Pursuant to the City's Protected Trees Ordinance, the project sponsor would be required to obtain an approved Tree Removal Permit prior to removal of (or construction activity in close proximity to) a Protected Tree, as defined in Oakland Municipal Code Section 12.36.020. Tree permits would require approval by the Oakland Public Works Agency. All tree planting plans would require approval by the Tree Services Section of the Office of Parks and Recreation.

- **Creek Protection Permit** (Oakland Municipal Code Chapter 13.16) - The project would require City approval of a Creek Protection Permit for work proposed adjacent to the Oakland Estuary and/or along the Lake Merritt Channel.

- **Encroachment Permits** (Oakland Municipal Code Chapter 12.08) – The project would required City approval of encroachment permits (non-discretionary) to work within various public rights of way for accommodate the development of improvements, etc.).

- **Demolition Permits** (Oakland Municipal Code Chapter 15.36) – The project would require City approval of demolition permits to demolish exiting buildings and structures on the project site, including the majority of the Ninth Avenue Terminal (subject to required findings).

- **Other Various Building Permits** (Oakland Municipal Code Title 15) - The project would require City approval of all other permits required for project construction on the project site.

Other Agencies and Considerations

A detailed description and discussion of each action and agency/jurisdiction is included in EIR Section IV.A, Land Use, Plans and Policies, as well as within the relevant topical analysis sections in Chapter IV. Environmental Setting, Impacts, and Mitigation Measures.

- **Port of Oakland** (Oakland City Charter, Article VII) **-** The project would be subject to approval by the Port of Oakland for various real estate transaction components of the project.

- **California State Lands Commission (Tidelands Trust)** – The property comprising the project site is subject to the Tidelands Trust. Portions of the Tidelands Trust lands are granted lands granted to the City pursuant to legislative grants from the State of California. Other portions of the Tidelands Trust lands have been acquired by the Port with public trust funds derived from Port operations. The Port manages the Tidelands Trust lands by virtue of the Charter of the City of Oakland. The State Lands Commission has oversight of all Tidelands Trust property in California.

  The project proposes development of portions of the Project Lands for residential housing. Among other matters, the Commission asserts that residential housing is not a use to which the Project Granted Lands may be put. The Oak to 9th avenue District Exchange Act, SB 1622, authorizes sale of certain Project After-Acquired Lands. SB 1622 also authorizes the Commission and the Port to enter into an exchange agreement meeting the requirements of the legislation to effectuate the exchange and sale. The City's approval of the project will be conditioned upon subsequent compliance with the provisions of SB 1622.

- **San Francisco Bay Conservation and Development Commission (BCDC) -** The project would be subject to review by the San Francisco Bay Conservation and Development Commission (BCDC), a state agency. The project would be required to obtain BCDC permits and approvals for all development proposed within the Agency's jurisdiction, including filling, dredging, and shoreline alteration.

- **California Department of Toxic Substances Control (DTSC) -** The California Department of Toxic Substances Control (DTSC) would have lead oversight responsibility for investigation and remediation of hazardous materials at the site, including approval of the proposed remediation plan. DTSC would coordinate with the California State Water Resources Control Board (discussed below) on site clean-up requirements and processes. In coordination with the U.S. Army Corps of Engineers (discussed below), DTSC would also provide oversight of dredging activities.

- **California State Water Resources Control Board – San Francisco Region (RWQCB) -** The project would require various San Francisco Regional Water Quality Control Board (RWQCB) reviews and approvals regarding storm water discharge, and in coordination with BCDC and the Army Corps (discussed below), the dredging of Clinton Basin. The RWQCB would also participate in the process for investigation and remediation of hazardous materials at the site.

- **Alameda County Environmental Health Department -** The Alameda County Department of Environmental Health would participate in the process for investigation and remediation of hazardous materials at the site.

- **The United States Army Corp of Engineers (Corps) -** The project would involve navigable U.S. waters and therefore would require U.S. Army Corps of Engineers' review and approval of permits for all proposed shoreline work and the dredging of Clinton Basin.

- **The United States Fish and Wildlife Service (USFWS) -** The project would be subject to U.S. Fish and Wildlife review and permitting related to potential impacts of the project (proposed shoreline activities and alterations) on federally listed threatened or endangered species protected under the Federal Endangered Species Act (FESA).

- **California Department of Fish and Game (CDFG) -** The project would be subject to Department of Fish and Game review and permitting related to potential impacts of the project (proposed shoreline activities and alterations) on species protected under the California Endangered Species Act (CESA).

- **Bay Area Air Quality Management District (BAAQMD) -** The project would be subject to applicable regulations of the BAAQMD, such as construction emission reduction measures that are imposed by the City.

- **East Bay Municipal Utility District (EBMUD) -** The project would require EBMUD review and approvals regarding water and sewer service, capacities, and facilities.

- **Alameda County Airport Land Use Commission (ALUC) and Federal Aviation Administration (FAA) –** The project could involve construction of new structures over 200 feet in height and require approval of a General Plan Amendment. Therefore, the project may be subject to review by the Alameda County Airport Land Use Commission and the Federal Aviation Administrative.

- **California Department of Transportation (Caltrans) –** Any improvements or work that would occur within Caltrans right-of-way would require review and approval by Caltrans.

CHAPTER IV

Environmental Setting, Impacts, and Mitigation Measures

Introduction to the Environmental Analysis

The analysis provided in this EIR has been prepared in accordance with CEQA, as amended (Public Resources Code Section 210000, et seq.), and the State CEQA Guidelines.

This chapter contains a discussion of 1) setting (existing baseline conditions and regulatory background), 2) environmental impacts (direct, indirect or secondary, short-term, and cumulative) that could result from the proposed project, and 3) mitigation measures that would reduce or eliminate the adverse impacts that are identified. Throughout the EIR, the analysis addresses the potential impacts of all activities that would result from development of on the entire project site and during all development phase. The analysis considers impacts that would occur during construction and during operation of the project through cumulative year (Buildout 2025). The significance criteria used to assess the significance of adverse environmental effects are identified, and the significance of the impact, both prior to and after implementation of mitigation, is reported.

Significance Thresholds and Classification of Impacts

In accordance with Section 15022(a) of the CEQA Guidelines, the City of Oakland has drafted local CEQA thresholds and criteria of significance guidelines that are consistent with CEQA and the State CEQA Guidelines (City of Oakland, 2004c). The City's thresholds are intended to supplement provisions in the CEQA Guidelines for determining the significance of environmental effects, including Appendix G. As appropriate, state and federal regulations supplement the City's local thresholds and guidelines.

The following level of significance classifications are used throughout this EIR:

- **Significant (S)** – The impact of the project reaches or exceeds the defined threshold of significance. Feasible mitigation measures are identified to reduce the significant impact to a less-than-significant level.

- **Potentially Significant (PS)** – The impact of the project may reach or exceed the defined threshold of significance, however it is not evident that, even in the theoretic worst-case

conditions, a significant impact would occur. Feasible mitigation measures are identified to reduce the potentially significant impact to a less-than-significant level.

- **Significant and Unavoidable (SU)** – The impact of the project reaches or exceeds the defined threshold of significance. No feasible mitigation measure is available to reduce the significant impact to a less-than-significant level; *or* implementation of a feasible mitigation measure by the Lead Agency (City of Oakland) can not occur without approval of another jurisdiction, such as the City of Alameda or Caltrans. In the latter case, feasible mitigation measures are identified to reduce the significant impact to a less-than-significant level, and the significant unavoidable classification is noted.

- **Less than Significant (LTS) –** The effects of the project do not reach or exceed the defined threshold of significance. Generally, no mitigation measures are required or identified.

- **Beneficial Impact (B)** – The impact of the project would improve the environment, regardless of the defined threshold of significance. Generally, no mitigation measures are required or identified.

- **No Impact (N) –** No noticeable adverse effect on the environmental would occur.

Designation of Impacts and Mitigation Measures

All impacts in this chapter of the EIR are identified using an alpha-numeric designation that corresponds to the letter of the EIR section assigned to the environmental topic (as denoted in the Table of Contents for this EIR), followed by a number that indicates the sequence in which the impact statement occurs within the section. For example, "Impact G.2" is the second impact identified in Section IV.G, Noise. All impact statements are in bold text.

Mitigation measures are numbered to correspond with the impact that it addresses. Where there are multiple measures to address the same impact, each is indicated by a lower-case letter. For example "Mitigation Measure G.2c" is the third component (c) of the second mitigation (2) identified to address noise (Section G). Generally, all mitigation measure statements are in bold text, although in cases where there is extensive detailed text that is part of the mitigation measure, all text may not be bolded (for example, mitigation measures related to traffic impacts, permitting requirements for water quality and biological resources impacts).

2010 Interim Project

A 2010 interim year project has been established specifically to assess the traffic, air quality, and noise impacts for the portion of the project that would be completed by 2010. Where appropriate and relevant within these sections of the EIR, potential impacts are specifically identified for the 2010 project, and mitigation measures are identified accordingly. Otherwise, impacts and mitigations are identified as of 2025 Buildout. **Table IV-1** shows the development program of the

2010 interim year project, and the most conservative analysis is used and assumes that site preparation of parcels not indicated in **Table IV-1** would likely be underway by 2010:

TABLE IV-1

ILLUSTRATIVE 2010 INTERIM YEAR PROGRAM

Parcel	Approximate Building Pad Acreage	# of Units[a]	Minimum Onsite Residential Parking Spaces[b]	Retail Square Footage	Minimum Retail Parking Spaces[c]
A	2.7	375	375	10,000	
B	1.5	160	160	6,000	
C	1.5	160	160	6,000	
F	1.5	164	164	5,000	
G	2.7	280	280	42,000	
TOTAL	**9.9**	**1,139**	**1,139**	**69,000**	**138**

[a] The proposed Planned Waterfront Development Zoning District (PWD-1) (discussed below) would allow flexibility in the maximum number of dwelling units that could be developed on a particular parcel, such that the total maximum number of dwelling units (or net density) in the project could not be exceeded.
[b] Minimum 1.0 space per dwelling unit.
[c] Minimum 1.0 space per 500 square feet of retail/commercial space required per the proposed Planned Waterfront Zoning District. Retail/commercial parking for the project would be concentrated on Parcels G in the 2010 interim year, Phase 1.
.

SOURCE: Oakland Harbor Partners, 2005.

Cumulative Analysis Context

Pursuant to the requirements of CEQA, this EIR evaluates potential cumulative impacts as well as of project-level impacts (see also Chapter VI). To establish a cumulative context for this analysis, the City of Oakland has developed a detailed update of the Oakland Cumulative Growth Scenario to ensure that those impacts are appropriately considered as part of the cumulative context of future citywide and regional growth and development. The City's updated growth scenario incorporates newly released 2000 Census data, new projections series from the Association of Bay Area Governments (ABAG), and considers foreseeable, future development projects in the area. As detailed in **Appendix D.4**, Hausrath Economics Group (HEG) has compiled a list of proposed, approved, and reasonably foreseeable development projects expected to be completed in Oakland by 2025, the cumulative analysis year. Considering this list, in addition to the projected growth that would occur on the project site as part of the project, HEG developed population, housing, and employment forecasts for 2025 that are used for the cumulative analysis in this EIR.

The numbers in Oakland's updated growth scenario are relatively similar to the ABAG projections currently incorporated into the Alameda County Congestion Management Agency's

(CMA) Travel Model. However, Oakland's updated growth scenario used in the analysis in this EIR provides more specificity about growth and development. (**Table D.4-2** in **Appendix D.4** compares the updated Oakland Cumulative Growth Scenario with the ABAG *Projections 2002*[1] for Oakland and the ABAG projections as incorporated into the Alameda County CMA Travel Model for use in transportation analyses.)

[1] ABAG Projections 2002 series provides the basis for the numbers in the CMA model at the time of the analysis for this EIR.

A. Land Use, Plans and Policies

This section describes the existing land uses, adopted General Plan land use classifications, and zoning classifications on and around the project site. This section also describes the applicable plans and policies that guide development in the project area and evaluates the project's consistency with these plans and policies and other existing land use regulations. Following the discussion of the project's relationship to various plans and policies, the section identifies potentially significant land use impacts and, if necessary, appropriate mitigation measures. Pursuant to the City's recent amendment to the Oakland General Plan (City of Oakland, 2005a), as well as Section 15358(b) of the CEQA Guidelines, mitigation measures are proposed only to address *physical* impacts (emphasis added). As clarified by the recent amendment, "the fact that a specific project does not meet all General Plan goals, policies, and objectives does not inherently result in a significant effect on the environment within the context of [CEQA]."

Introduction

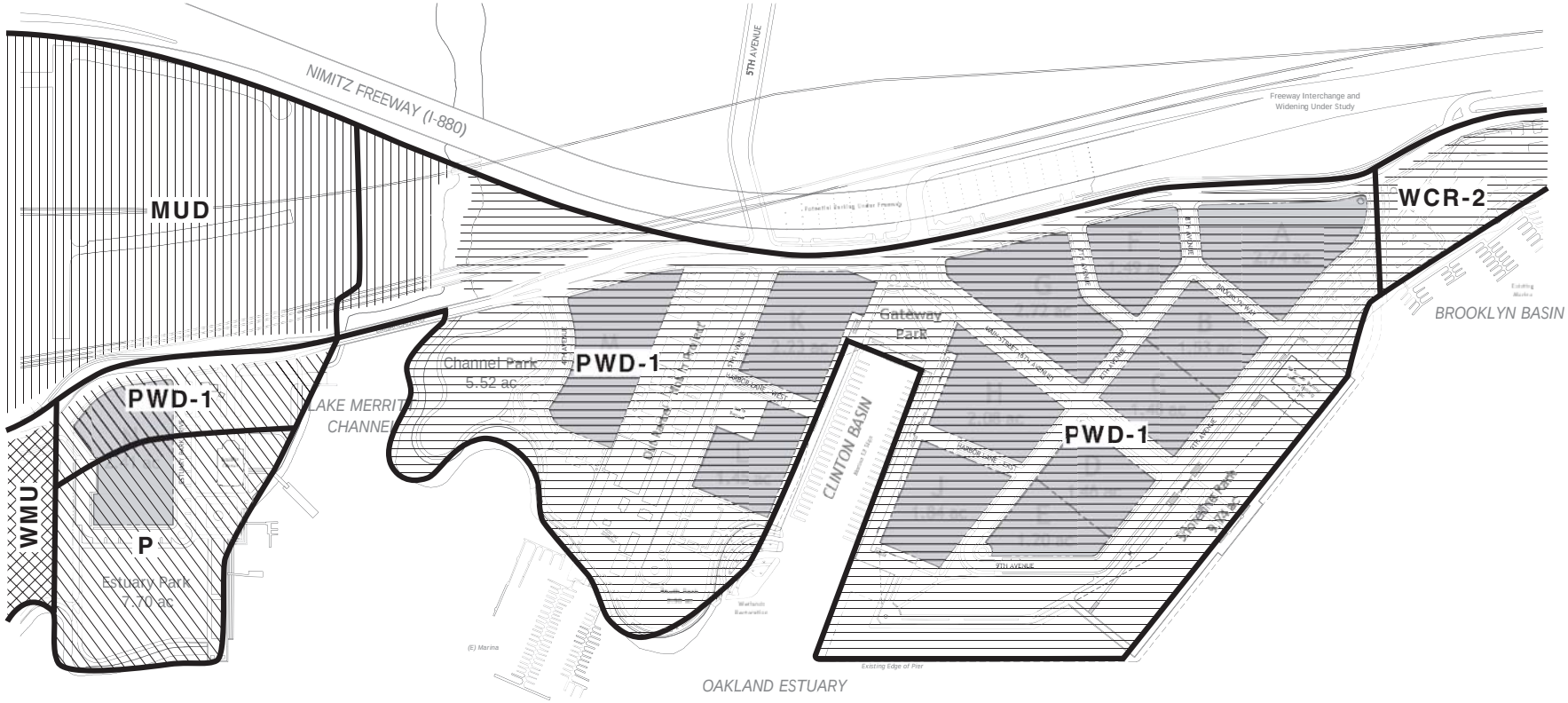
The project site is in the city of Oakland along the Oakland Estuary. According to the City of Oakland's General Plan Land Use and Transportation Element (LUTE), the project site lies within the City's Chinatown/Central Planning Area. The LUTE also indicates that the project site is within the Mixed Use Waterfront/Estuary Plan Area land use classification, with areas along the shoreline[2] designated as Urban Open Space.

The City adopted the *Estuary Policy Plan* (Estuary Plan) as an element of the General Plan to provide additional detail and guidance for development within the Oakland Estuary. The Estuary Plan includes land use classifications and standards for the Oak to Ninth Project area that complement those identified in the LUTE. Generally, the majority of the project site is within the Planned Waterfront Development-1 (PWD-1) Estuary Policy Plan land use classification. Estuary Park and a portion of the Jack London Aquatic Center is designated as Parks, Open Space and Promenades (P).

Under the City's Zoning Regulations, the area east of Lake Merritt Channel is within the M-40 Heavy Industrial Zone, and the area west of the channel is within the S-2 Civic Center Zone / S-4 Design Review Combining Zone.

Figure IV.A-1 delineates the existing Estuary Plan land use classifications and zoning classifications for the Oak-to-Ninth District and surrounding areas.

[2] Except where noted in reference to a regulatory agency's definition (e.g., BCDC, Army Corp of Engineers), "shoreline" is considered generally the area between the top of bank (or pier) to mean low tide, which would be established as part of the project development.



Existing Zoning

- S-2 Civic Center/S-4 Design Review Combining Zone
- M-40 Heavy Industrial Zone
- R-80 High Rise Apartment Zone
- M-20 Light Industrial/S-4 Design Review Combining Zone

Existing Estuary Policy Plan Land Use Classification

PWD-1	Planned Waterfront Development 1
P	Parks
WCR-2	Waterfront Commercial Recreation 2
WMU	Waterfront Mixed Use
MUD	Mixed Use District

0 400
Feet

SOURCE: City of Oakland General Plan and Zoning Map, 2005

Oak to Ninth Avenue . 202622

Figure IV.A-1
Existing Estuary Policy Plan
Land Use Classifications and
Zoning Districts for the Project Area

Portions of the project site are governed by the *Central City East Redevelopment Plan* (east of Lake Merritt Channel) and the *Central District Urban Renewal Plan* (west of Lake Merritt Channel). The project site also includes Oakland Estuary waterfront areas covered by the *San Francisco Bay Trail Plan*.

The Port of Oakland currently owns the project site property: approximately 68.1 acres, including 5.9 acres of pile-supported pier adjacent to the Ninth Avenue Terminal building. After implementation of the Oak to Ninth Project, the site would consist of approximately 64.2 acres of land area, resulting from demolishing part of the existing pile-supported pier structure associated with the Ninth Avenue Terminal and changes in land area resulting from shoreline alterations in Clinton Basin. There is also approximately 11.4 acres of water surface (existing marina facilities) that is part of the project site, but that is not considered in the 64.2 acres of land area.

The City of Oakland maintains land use jurisdiction of the project site. Certain areas of the site are currently designated "public trust lands" pursuant to the Tidelands Trust doctrine of the State of California, and are therefore managed "in trust" by the Port of Oakland. Portions of the site along the shoreline are within the jurisdiction of the San Francisco Bay Conservation and Development Commission (BCDC), which is an agency of the state and has review and permit authority for activities within a shoreline band that consists of all territory located between the shoreline of the Bay and a line 100 feet landward of and parallel with that line.... (BCDC, 2003)[3]
.

As discussed in Chapter III, the City land use approvals that the project sponsor is seeking for the project by the project sponsor include the following, without limitation:

- General Plan Amendment
- Redevelopment Plan Amendments
- Rezoning and Zoning Code Amendment
- Preliminary Development Plan (PDP) and Final Development Plan (FDP) and Final Design Review
- Vesting Tentative and Final Maps
- Development Agreement (DA)
- Tree Removal Permit
- Creek Protection Permit

[3] Generally includes tidelands, which are lands lying between mean high tide and mean low tide, and marshlands lying between mean high tide and five feet above mean sea level.

- Encroachment, Demolition Permits, and other Building Permits

Setting

Site Vicinity Land Uses

As introduced in the previous chapter and depicted in **Figure III-2**, the Oak to Ninth Avenue Project site sits within an historically industrial portion of the Oakland Estuary, wedged between the waterfront and the Embarcadero. In general, the project site is located among major transportation corridors, marine-based recreation, and commercial activities, public parks, offices, a community college, warehouses, restaurants, apartments and lofts, and retail uses. The project site is physically separated from surrounding areas of Oakland by Interstate I-880) I-880, rail lines, and railroad property to the north, and by the waters of the estuary to the east and south. Beyond those separations, surrounding areas include the other parts of the estuary to the west (the Jack London District) and to the east (the San Antonio/Fruitvale Waterfront District), and the San Antonio mixed-use neighborhoods to the north and northeast (above I-880, between Lake Merritt and the channel and Fruitvale and 28th Avenues).

In the immediate project vicinity, to the west are high-density residential condominium uses (Portobello and The Landing) and a television broadcasting facility. To the northwest is a mix of commercial warehouses and storage uses, a neighborhood of industrial buildings converted to live-work and residential lofts, along with new loft housing development. Immediately east is a 132-room hotel and marine-related retail. Further east along the Embarcadero are marina facilities along Brooklyn Basin, a 226-room hotel, a restaurant, and other marine-related retail and services. Major uses to the north, beyond the freeway, the Amtrak and Union Pacific Railroad, and rail yards, are the Peralta Community College District facilities and Laney College Campus, Bay Area Rapid Transit (BART) maintenance shop facilities, and the San Antonio District mixed-use neighborhood. The San Antonio District contains various residential types and densities and a range of commercial uses along the major east-west corridors of International Boulevard and East 12th Street. Downtown Oakland and Oakland Chinatown are approximately two miles northwest of the project area. The Oakland Estuary is currently used by the Port of Oakland, the Coast Guard, recreational boat owners, several college and high school rowing teams, and commercial vessels.

The project site comprises a portion of the Oak-to-Ninth District, which is defined in the Estuary Policy Plan as approximately 120 acres south of I-880, generally from Oak Street to the Ninth Avenue Terminal. After implementation, the Oak to Ninth Project site would be comprised of 64.2 acres south of the Embarcadero.[4] There are privately-owned parcels within the Estuary Policy Plan's Oak-to-Ninth District that are not included in the project site. These include the

[4] The existing land area within the project site boundaries (Embarcadero, Oakland Estuary, Brooklyn Basin, and Fallon Street) is approximately 68.1 acres, including 5.9 acres of pile-supported pier structure adjacent to the Ninth Avenue Terminal building. After implementation, the Oak to Ninth Project site land area would total 64.2 acres, resulting from demolishing part of the existing pile-supported pier structure and changes in land area resulting from shoreline alterations primarily in Clinton Basin.

approximately six-acre Fifth Avenue Point area located generally along and west of 5th Avenue, which is surrounded by the project site. The area includes a mix of work-live uses, industrial uses, artisan workshops, and small businesses occupying older industrial buildings. An approximately 28,000 square-foot mixed-use service building on the east side of 5th Avenue is also excluded from the project site and considered part of Fifth Avenue Point.

Project Site Land Use

The project site and surrounding area developed historically as an industrial and warehousing district oriented to and served by the mainline railroad and the cargo-handling facilities at the Ninth Avenue Terminal. That area of the project site still consists primarily of industrial uses, although the cargo-handling uses have declined.

Specific uses and businesses on the project site include warehouse and wholesale sales (Cash & Carry wholesale grocery); boat building and repair (Golden State Diesel Marine, Thunderbird Properties, Ship Shape Marine, Philbrick Boat Works); equipment and container storage (Telemedia Communications Systems, Inc., KTVU, Oakland Marine Service, Air-Sea Containers, Pacific Rim Transportation), cotton storage (Transmeridian Warehouses, Inc./Ninth Avenue Terminal), a ready-mix concrete plant (Berkeley-Oakland Ready Mix), construction storage (Vortex Marine Construction), metal recycling (Lakeside Non-Ferrous Metals, Inc.), glass fabrication (East Bay Glass Company), longshore personnel training (Pacific Maritime Association), and retail sales (National Furniture Liquidators, Inc.). There is also a small office and storage area for the Oakland Police Department. Overall, the majority of uses on the site are industrial with some related support activities, storage, and marine-related repair and service uses.

Most of the project site is an expansive, paved area used by many of the industrial and storage-related uses east of Clinton Basin that involve trucking. The only substantially unpaved areas are along Lake Merritt Channel (east shore and Estuary Park) and an area west of Clinton Basin that is undeveloped and partially a wetlands restoration project at the mouth of the Basin, which is discussed in greater detail in Section IV.I, Biological Resources. The Clinton Basin Marina, which is currently not in operation, and the Fifth Avenue Marina at the foot of 5th Avenue are also uses within the project site.

City Plans, Policies, and Regulations

Applicable plans and major policies and regulations that pertain to the Oak to Ninth Avenue Project are presented below, followed by a discussion of the project's overall consistency (or inconsistency) with each plan. Several land use plans, policies, and regulations apply to the project site. Consistent with CEQA, every Oakland General Plan policy that *could* apply to the project is not included here, but numerous policies that apply to the project are considered and included in **Appendix F** to this EIR. The policies listed below are General Plan policies that most directly pertain to the project and that emerged as points of controversy during the environmental review and public input process. The discussions of General Plan consistency that follow the list

of key policies refer to the specific policies being addressed in italics and references any additional relevant policies that would be listed in **Appendix F.**

The General Plan necessarily contains competing policies. City decision-makers must determine whether, "on balance, the project is consistent (i.e., in general harmony) with the General Plan." As stated in the introduction to this EIR section, the "the fact that a specific project does not meet all General Plan goals, policies, and objectives does not inherently result in a significant effect on the environment within the context of [CEQA]." (City of Oakland, 2005a).

To the extent that a General Plan policy is also a significance criteria or contains a regulatory threshold which the project must meet (such as park service ratios and certain Historic Preservation Element policies), the project's consistency with such a policy is addressed in detail in this EIR within the relevant impact discussion in Chapter IV and is summarized here.

City of Oakland General Plan

The Oakland General Plan ("General Plan") establishes comprehensive, long-term land use policies for the City. Consistent with state law, the General Plan includes the Land Use and Transportation Element (adopted March 24, 1998 and amended June 21, 2005); the *Estuary Policy Plan* (adopted June 8, 1999 as an element of the General Plan); the Historic Preservation Element (adopted March 8, 1994 and amended July 21, 1998); the Open Space, Conservation, and Recreation Element (adopted June 11, 1996); the Safety Element (adopted November 2004); the Housing Element (adopted June 14, 2004); the Noise Element (adopted June 21, 2005); the *Bicycle Master Plan* (adopted July 1999); the *Pedestrian Master Plan* (adopted November 2002 as part of the Land Use and Transportation Element); and the Scenic Highways Element (adopted September 3, 1974).

Land Use and Transportation Element

The City adopted the Land Use and Transportation Element (LUTE) of the General Plan on March 24, 1998. The LUTE identifies policies for utilizing Oakland's land as change takes place, and sets forth an action program to implement the land use policy through development controls and other strategies. According to the LUTE, the project site lies within the Chinatown/Central Planning Area. The LUTE also identifies three distinct regions of the waterfront: Jack London Square area, Embarcadero Cove area, and the Fruitvale Waterfront, and the project site is within the Embarcadero Cove area (as defined in the LUTE).[5]

As previously mentioned, the LUTE shows the project site within the Mixed Use Waterfront/Estuary Plan Area land use classification, which is intended to "encourage, support, and enhance the transformation of the land adjacent to the shoreline into a vibrant use of mixed use waterfront." The Estuary Plan was adopted after the LUTE and assigns a different land use classification that is overall consistent with the land use classification assigned by the LUTE.

[5] The Embarcadero Cove area defined in the LUTE (p.91) spans from Estuary Park to Dennison Street, which includes the project site. The Embarcadero Cove area defined in the Estuary Policy Plan (p.106) spans from the Ninth Avenue Terminal to Con-Agra (approx. 29th Avenue), which does not include the project site.

The LUTE includes objectives and policies that pertain to five policy areas: Industry and Commerce (I/C), Transportation and Transit-Oriented Development (T), Downtown (D), Waterfront (W), and Neighborhoods (N). Objectives and policies in the LUTE that apply to the project are listed in **Appendix F**, and the major applicable LUTE policies are listed and discussed below:

Key LUTE Transportation and Transit-Oriented Development Policies (T)

"A key challenge for Oakland is to encourage commuters to carpool or use alternative modes of transportation, including bicycling or walking. The Policy Framework proposes that congestion be lessened by promoting alternative means of transportation, such as transit, biking, and walking, providing facilities that support alternative modes, and implementing street improvements. The city will continue to work closely with local and regional transit providers to increase accessibility to transit and improve intermodal transportation connections and facilities. Additionally, policies support the introduction of light rail and trolley buses along appropriate arterials in heavily traveled corridors, and expanded use of ferries in the bay and estuary." *(LUTE Policy Framework: Encouraging Alternative Means of Transportation)*

Key LUTE Waterfront Policies (W)

- Buildings and facilities should respect scenic viewsheds and enhance opportunities for visual access of the waterfront and its activities. *(Policy W3.4, Preserving Views and Vistas*)

- Develop and encourage mixed use areas along the estuary shoreline, while enhancing and promoting economic opportunities in Oakland which take advantage of the waterfront's unique character to attract public uses and activities. *(Objective W9)*

- Mixed use and residential developments should be sensitive to adjacent properties and designed to enhance the existing and unique characteristics of the waterfront and immediate surroundings. Individual properties should be designed to encourage and provide sufficient public access to the waterfront and designed to avoid the feeling of "gated" or private communities. *(Policy W9.3, Defining Development Characteristics Along the Estuary*)

- Development along the estuary shore should reflect higher intensity mixed use activities and areas at Jack London Square. The balance of development along the estuary should be of lower intensity than at Jack London Square; however, higher density nodes of development may be appropriate at key locations. Access to transportation corridors and transit should be provided. The development intensity should significantly decrease adjacent to Martin Luther King Jr. Regional Shoreline. *(Policy W9.5, Defining Development Intensity Along the Estuary)*

- Public access along the estuary should be facilitated by commercial and active recreational uses. It is important to have physical access to and between uses and activities along the waterfront, particularly along the shoreline. Opportunities for landscaped and signed linkages along Broadway, Webster, Harrison, and Oak Streets, as well as the Lake Merritt Channel, should be developed for (land and water) auto, bicycle, pedestrian, and public transportation. *(Policy W10.6, Specifying Public Access and Linkages*)

- The development intensity of the area should be moderate with lower use intensity and density than Jack London Square; however, nodes of higher intensity development may be appropriate. Access to transportation corridors and transit should be provided. Development intensity should be sensitive to the open feeling of the marina and view opportunities. Overall development of the area must be sensitive to the close proximity of the water's edge. Properties along the shoreline should be planned, developed, and operated with particular sensitivity to public access. *(LUTE Policy W11.3, Defining Embarcadero Cove Development Intensity and Characteristics)*

- Development in this area should be designed to enhance direct access to and along the water's edge, to maximize the waterfront views and vistas, and to make the public pedestrian access and spaces inviting. Development and amenities must be sensitive to immediate surroundings. *(LUTE Policy W11.6, Defining Embarcadero Cove Design Criteria)*

Key LUTE Neighborhood Policies (N)

- Residential developments should be encouraged to face the street, and orient their units to desirable sunlight and views, while avoiding unreasonably blocking sunlight and views for neighboring buildings, respecting the privacy needs of residents of the development and surrounding properties, providing for sufficient conveniently located on-site open space, and avoiding undue noise exposure. *(LUTE Policy N3.9, Orienting Residential Development*)

- The City will generally be supportive of a mix of projects that provide a variety of housing types, unit sizes, and lot sizes which are available to households with a range of incomes. *(LUTE Policy N6.1, Mixing Housing Types)*

- Direct urban density and mixed use housing development to locate near transit or commercial corridors, transit stations, the Downtown, waterfront, underutilized properties where residential uses do not presently exist but may be appropriate, areas where this type of development already exists and is compatible with desired neighborhood character, and other suitable locations. *(LUTE Objective N8)*

- The height of development in urban residential and other higher density residential areas should step down as it nears lower density residential areas to minimize conflicts at the interface between the different types of development. *(LUTE Policy N8.2, Making Compatible Interfaces between Densities)*

Project Consistency with LUTE Policies

Land Use and Compatibility with Adjacent Uses. The project would transform a currently underutilized industrial site into a mixed-use neighborhood with residential, retail/commercial, open space, and marina uses, promoting most of the applicable LUTE policies. The proposed urban densities and mixed use development would occur on a site that is in proximity to downtown, transit, major transportation corridors, and along the waterfront (O*bjectives N8 and W9).* Approximately 3,100 residential units ranging from studios to three-bedroom multifamily units would be developed to offer new market-range housing opportunities in Oakland *(Policies*

N6.1 and *N3.1*). With approximately 4.7 million[6] new gross square feet (gsf) of development in buildings up to 86 feet tall with five 240-feet highrise elements, the project would be "larger" than Jack London Square[7] with respect to overall development square footage and building mass and heights *(Policies W9.5* and *W11.3)*. In terms of actual intensity of proposed land uses, however, the Oak to Ninth Project would be a mixed-use residential neighborhood with supporting retail/commercial uses, significant parks, open space, and marina activities; Jack London Square would be a mixed-use development with primarily office and water-oriented retail uses, with an approximately 250-room conference hotel and 1,700 new theatre seats. Therefore, while the Oak to Ninth Project would likely be more prominent in terms of physical development, overall use activity, approved development at Jack London Square would likely include more-intensive use activity, particularly for daytime office and evening entertainment uses. The City would evaluate the appropriateness of the "node of higher intensity" proposed by the Oak to Ninth Project, which the LUTE recognizes may be appropriate outside of Jack London Square, and would assess the extent to which the project satisfies LUTE objectives for providing an "open feeling" at the marina, view opportunities, and public access along the shoreline *(Policy W9.5)*.

The design and layout of the project would consider potential effects on adjacent uses. Existing views of the Estuary from public vantage points, as well as from points inside the project site, are nonexistent or limited due to the location of existing buildings, including the Ninth Avenue Terminal. The proposed street alignments coupled with the siting of new buildings of varied heights, would allow for additional and expanded views of open spaces and the Estuary from onsite and offsite locations *(Policy W3.4)*. In particular, buildings around Fifth Avenue Point , which has existing low-rise buildings that include work-live uses, would be relatively lower in height and incorporate design guidelines to specifically address the interface of the project with this outparcel and The Landing condominiums to the west *(Policy N8.2*). Also, where feasible, the proposed site locations and building configurations of the new (taller) buildings and proposed highrise towers are designed to minimize potential adverse effects on solar access and privacy of existing, adjacent residential uses and Fifth Avenue Point(*Policy N3.9).* Highrise towers are not proposed adjacent to these existing areas where people may reside, and proposed development standards and design guidelines would address minimum setbacks, buffering, and architectural treatments where these adjacencies would occur. Overall, new development would not be detrimental to adjacent residential communities (The Landing, Warehouse District, San Antonio), and would in fact remove incompatible trucking-related uses (wholesale grocery) adjacent to The Landing. Although not a residential area, the project also would also enhance Fifth Avenue Point with the new *usable* public open spaces that would occur on its waterfront side and removal of the adjacent sand and gravel manufacturing operation *(Policy W9).* To the extent that the project would pose any adverse environmental impacts on adjacent or nearby communities, these

6 Gross square footage is estimated based on a 70 percent gross-to-net efficiency ratio. Therefore the proposed 3.1 million net square feet (nsf) of residential area totals 4.4 million gross square feet (gsf), and the proposed 0.2 million nsf of retail use totals 0.3 million gsf.

7 As approved in 2004, the Jack London Square Redevelopment Project Phase II would develop approximately 1.2 million net new gross square feet (gsf) of office, retail and restaurant space, hotel, conference/banquet space, theatre, and supermarket uses as well as associated parking. Building heights would range from 58 to 175 feet tall.

physical impacts and mitigation measures to reduce these impacts are identified in the various environmental topic sections in this EIR.

Proposed buildings would be oriented toward the street, with active ground-floor retail/commercial spaces along new public neighborhood streets and active water-related retail/commercial uses near Clinton Basin. Design guidelines would ensure that non-active ground level activities (e.g., parking) are minimized, attractive, and safe (*Policy N3.10).*

Open Space and Access. The project would include a series of interconnected parks and open spaces along the waterfront, and a continuous shoreline public trail within a maximum 40-foot-wide right-of-way. Facilities for pedestrian and bicycles would be developed as a section of the Bay Trail *(Policy W2.*1in **Appendix F***)* that would connect to other areas along the Estuary. (See also *San Francisco Bay Trail Plan*, below.) Proposed as a new neighborhood on a grid of new public streets intersecting with the Embarcadero, the project would encourage public access through the area and toward the waterfront where major new public open spaces would exist. *(Policies W9.3* and *W9.5).* Continuous sidewalks and pedestrian and bicycle linkages from the Embarcadero and throughout the site would also lead to the water and open space areas *(Policies T3.5, T6.3,* and *N7.4* in **Appendix F***).* As a result, opportunities for public access to the waterfront would be increased, and proposed amenities (landscaping lighting, furniture, signage, etc.) and associated commercial/retail uses would increase the appeal and safety of the public outdoor areas for a variety of new users *(Policies W2.10* and *W11.5) (Policies W10.6* and *W11.6* in **Appendix F***)*.

Transit. The project is in an area of the Oakland Estuary that currently has limited direct access to modes of transportation other than the automobile. Most of the nearby transit services are concentrated along the Broadway corridor and in Jack London Square. (See also Oakland "Transit First" Policy, below.) The new mixed-use neighborhood of approximately 3,100 residential units, 200,000 square feet of new retail uses, and new public open spaces and marinas would create demand for transit service by project residents, employees, and visitors that does not currently exist. The project would align with the City's strong preference for encouraging the use of alternative transportation modes *(LUTE Policy Framework) (Policy T4.1* in **Appendix F***)*. In addition to the new pedestrian and bicycle access facilities mentioned above, a public shuttle service between the project site and nearby transit hubs, rideshare and transit incentive measures, and bus turnouts/bus bulbs, benches, shelters (in coordination with AC Transit) would be incorporated into the development (Transit and Air Quality mitigation measures). Possible future transit services that the project sponsor is continuing to pursue include an expansion of AC Transit service

Sensitive Habitats. (Discussed under Consistency with Estuary Policy Plan policies, below.)

Estuary Policy Plan (EPP)

The City Council formally adopted the *Estuary Policy Plan* (Estuary Plan) on June 8, 1999, as part of the Oakland General Plan. The Estuary Plan provides objectives and policies for the specific area along the Oakland Estuary, between Adeline Street, I-880, and 66th Avenue. It also provides more specific guidance regarding the three distinct regions of the waterfront that are identified in the LUTE (discussed above) and further delineates the Oakland Estuary into three districts (that generally correspond to the regions identified in the LUTE): the Jack London District, the Oak-to-Ninth Avenue District, and the San Antonio/Fruitvale District.

As shown in **Figure IV.A-1** the majority of the project site (excluding generally Estuary Park and the Jack London Aquatic Center) is within the Planned Waterfront Development (PWD-1) Estuary Plan land use classification. The intent of the PWD-1 is to

> provide for the transformation of maritime and marine industrial uses into a public-oriented waterfront district that encourages significant public access and open space opportunities. Encourage a unique mix of light industrial, manufacturing, artist lofts and workshops, hotel, commercial-recreation, cultural uses, and water-oriented uses that complement the recreational and open space character of the waterfront.

The desired character of the PWD-1 is that

> future development in the area should be primarily public recreational uses…; with primary uses including light industrial, manufacturing, assembly, artists workshops, cultural, work/live studios, offices, neighborhood commercial, and restaurants; and including hotel, conference, restaurants, commercial-recreation, and cultural. Water uses also included.

The PWD-1 permits a maximum floor area ratio (FAR)[8] of 1.0 per private parcel, with a maximum average FAR of 1.0 on all remaining parcels over the entire project site. Maximum density is 30 units per *gross* acre (40 principal units per *net* acre).[9] The PWD-1 also establishes a minimum density of 1,089 square feet of site area per unit. The area of Estuary Park and Jack London Aquatic Center (except within approximately 200 feet of the Embarcadero) is designated within the Parks, Open Space and Promenades classification (P), for which no development standards are provided.

Key Estuary Plan Objectives and Policies

The Estuary Plan provides a set of overall objectives to address Land Use, Shoreline Access and Public Space, and Regional Circulation and Local Street Network. These objectives apply to the 5.5 miles of Oakland Estuary waterfront and align with several LUTE Waterfront policies. All

8 Floor area ratio is the square footage of total building floor area divided by the area of the lot. Floor area means areas of horizontal areas of all floors excluding areas used for parking or loading and related driveways and maneuvering aisles, per Section 17.09.040 of the Oakland Planning Code.

9 Density in gross acres includes all land in the area, including streets and parks. See Guidelines for Determining General Plan Conformity in Oakland, below.

applicable EPP objectives are listed in **Appendix F**, and key objectives that apply to the project are as follows:

- Create greater land use continuity between the Estuary waterfront and adjacent inland districts. *(EPP Land Use Objective 6)*
- Create a clear and continuous system of public access along the estuary shoreline.*(EPP Shoreline Access Objective 1)*
- Punctuate the shoreline promenade with a series of parks and larger open spaces. *(EPP Shoreline Access Objective 2)*
- Emphasize visual corridors and open space links to surrounding inland areas. *(EPP Shoreline Access Objective 3*)
- Enhance natural areas along the shoreline. *(EPP Shoreline Access SA-Objective 5*)
- Establish a continuous waterfront parkway; a safe promenade for pedestrians, bicycles, and slow-moving automobiles. *(EPP Circulation Objective 2)*
- Strengthen local circulation connections between Oakland neighborhoods and the waterfront. *(EPP Circulation Objective 4)*

The Estuary Plan identifies specific policies and implementation measures to guide development within each of the three districts that make up the Oakland Estuary, including the Oak-to-Ninth Avenue District which the Estuary Plan defines as approximately 120 acres south of I-880, generally from Oak Street to the Ninth Avenue Terminal.[10] The 64.2-acre Oak to Ninth Avenue Project site described in this EIR is *within* the Oak-to-Ninth Avenue District and does not include areas north of the Embarcadero or the portions of Fifth Avenue Point generally along 5th Avenue. Estuary Plan policies most pertinent to the project or that are identified as points of controversy are as follows, and the complete Oak-to-Ninth District chapter (including OAK policies), excerpted from the Estuary Plan, is included in **Appendix F**.

- Encourage the preservation and enhancement of wetland areas. *(EPP Policy OAK-1.1)*
- Expand Estuary Park. Encourage aquatic sports within the mouth of Lake Merritt Channel. *(EPP Policy OAK-2.1)*
  - Expand and Rehabilitate Estuary Park.
  - Develop the mouth of Lake Merritt Channel as a protected water space for aquatic sports.
- Create a major new park on the east side of the mouth of the Lake Merritt Channel, at the Estuary. *(EPP Policy OAK-2.2)*

[10] Various maps and text descriptions throughout the Estuary Plan depict varying and generalized boundaries for the "Oak-to-Ninth Avenue" District, however the Oak Street-to-Ninth Avenue Terminal description that is initially stated in Section 1, Background (*Plan Organization*) of the Estuary Plan is used for purposes of this EIR.

- Clinton Basin: Enhance Clinton Basin. *(EPP Policy OAK-2.3)*
- Ninth Avenue Terminal: Establish a large park in the area of the existing Ninth Avenue Terminal to establish a location for large civic events and cultural activities. *(EPP Policy OAK-2.4)*
- Create a system of public open spaces that connects Lake Merritt Channel to the Estuary. *(EPP Policy OAK-3.1)*
- Promote the development of commercial-recreational uses in the vicinity of the Crescent Park and Clinton Basin. *(EPP Policy OAK-4.4)*
- Initiate more specific planning of the entire Oak-to-Ninth District. *(EPP Policy OAK-5)*
- Enhance the Fifth Avenue as the principal pedestrian and vehicular linkage to the public open space surrounding the mouth of the Lake Merritt Channel. *(EPP Policy OAK-8)*
- Improve the Embarcadero east of Oak Street as a multimodal landscaped parkway with bicycle, pedestrian and vehicular facilities. *(EPP Policy OAK-9)*
- Design parking to be convenient and complementary to the public orientation of uses within the area. *(EPP Policy OAK-11)*

Project Consistency with Estuary Plan Policies

Many objectives and policies in the Estuary Plan are addressed by policies in the LUTE and discussed under *Project Consistency with LUTE Policies*, above. Overall, these include the project's consistency with policies that encourage mixed-use development on the waterfront, improved public assess to the shoreline for multiple users (pedestrians, bicycles, etc), expanded parks and large open spaces, opportunities to use alternative modes of transportation (including transit), as well as the preservation and sensitivity of new development to adjacent communities and sensitive environments. As discussed above, the project would be consistent with many LUTE policies, and it would be consistent with most Estuary Plan policies as discussed below.

Open Space and Recreation. The project would provide a total of approximately 20.7 acres of new[11], publicly-accessible open space in the series of new parks and open spaces along the shoreline *(Shoreline Access Objective 2)*. This provision of a "shoreline promenade" is consistent with Estuary Plan policies and involve: 1) the specific creation of a major park on the east side of the mouth of the Lake Merritt Channel *(Policy OAK-2.2)* that will facilitate connections along Lake Merritt Channel *(Policy OAK-3.1);* 2) enhancing Clinton Basin with a rehabilitated marina and perimeter open spaces and improving the Fifth Avenue Marina (*Policies OAK-2.3* and *OAK-4.4)*; and 3) creating a new large open space in the location of Ninth Avenue Terminal (*Policy OAK-2.4)* (discussed below). Also, the project would improve and widen segments of the Embarcadero into a landscaped parkway along the frontage of the project site (*Policy OAK-9).*

[11] Excluding the existing 7.7-acre Estuary Park and Jack London Aquatic Center.

The project proposes public parking along new streets and in proximity to new parks and open space areas *(Policy OAK-11).*

The series of parks that would be created by the project is generally consistent with those envisioned in the Estuary Plan[12] (east shore of Lake Merritt Channel, around and at the entrance of Clinton Basin, Ninth Avenue Terminal area), except that the existing Estuary Park would not be expanded north to the Embarcadero. The Estuary Plan does not prescribe a park and open space program by acreage, however, based on the Estuary Plan illustration (see Footnote 8) and the acreages used to assess parks and recreation impacts in the Estuary Plan EIR, the project would provide less overall open space than was envisioned in the Estuary Plan (or analyzed in its EIR). However, the project is consistent with numerous Estuary Plan objectives and policies that call for new public open space to be created along the Oak-to-Ninth District waterfront.

Wetland and Marsh Habitats. The project would improve shoreline conditions and natural areas for potential habitats along the estuary and the Lake Merritt Channel frontages of the project site *(EPP SA-Objectives 1 and 5*). The Estuary Policy Plan recognizes the opportunity that the project area shoreline presents for wetland and tidelands enhancement and restoration in the effort to improve habitat in Lake Merritt, Lake Merritt Channel, and the estuary. These aims are echoed in the goals, objectives, and policies in the General Plan LUTE and Open Space, Conservation and Recreation (OSCAR) Element, the BCDC *San Francisco Bay Plan* (discussed below), and recommendations identified in the *Baylands Ecosystem Habitat Goals* report (Goals Project, 1999). Natural characteristics and native vegetation along the waterfront of the project site occur in small patches due to abandonment, bay fill, human-induced disturbance, and historical uses. The existing shoreline ranges from unprotected, eroding banks, to banks characterized by concrete blocks, slabs, and debris (Moffatt & Nichol, 2002). These conditions result in reduced tidal ebb and flow along the project site, and the shoreline improvements proposed by the project would improve the habitat value. The proposed shoreline improvements (discussed in detail in EIR Section IV.D, Hydrology and Water Quality) would create or restore shoreline marsh and revegetate the length of shoreline from the existing sandy beach at the existing wetlands restoration project (Clinton Basin) and along Lake Merritt Channel where it fronts the project site. The existing unprotected banks along Clinton Basin would be improved with new bulkhead walls for proposed marina facilities.

Regarding wetlands, mitigation measures (identified in this EIR) are aimed at reducing and preventing disruption of existing wetlands that exist on the west shore at the mouth of Clinton Basin (Port of Oakland Wetlands Restoration and Enhancement Project, discussed below) and potentially jurisdictional wetlands that have been identified on the project site (currently under review by the U.S. Corps of Engineers). Disruption could result from construction activities increased population and water-activities introduced to the project site. Mitigation measures contained in this EIR may include onsite and/or offsite wetland creation or enhancement as well as a mitigation and monitoring plan that specifies proposed mitigation wetlands (see EIR Section I. Biological Resources). *(EPP Policy OAK-1.1)*

[12] Estuary Policy Plan EIR, Table III.D-1, also provided as **Figure V-1** and in **Appendix F** of this EIR.

Ninth Avenue Terminal. The project would demolish the majority of the historic Ninth Avenue Terminal to accommodate the approximately 9.7-acre Shoreline Park and would retain a minimum of approximately 15,000 square feet of the Terminal's original Bulkhead Building (the northernmost 1920s section). The Bulkhead Building would be reused for Tidelands Trust uses such as community, cultural, or recreational uses (i.e., public meeting rooms, banquet/festival space, or museum space focused on the cultural and maritime history of the Oak to Ninth Avenue area and the Ninth Avenue Terminal) (*Policy OAK-2.4).* The discussion of this policy in the Estuary Plan recognizes that all or portions of the Terminal may be suitable for rehabilitation and adaptive reuse and that the structure currently impedes public access to and views of a key area of the estuary. The project aims to balance the value of retaining the historic resources with the value of maximizing public access and views of the estuary from the Oak to Ninth Project site and beyond. Project alternatives that consider full or partial preservation of the Terminal (with regard to impacts on the physical environmental only) are evaluated in this EIR.

Land Use Continuity, Access, and Circulation Connections. Several Estuary Plan policies encourage land use continuity and stronger circulation connections between the estuary waterfront and adjacent inland districts *(Land Use Objective 6* and *Circulation Objective 4).* As described in the Estuary Plan, the project area is "isolated from the surrounding urban community," separated from neighborhoods to the north by I-880 and rail tracks and rail yards. Direct accessways to nearby areas are the Embarcadero (to Jack London Square, Embarcadero Cove, the city of Alameda, and access to I-880) and nearby north-south streets that connect to the Embarcadero (Oak Street, 5th Avenue, 16th Street overpass). Without removal of I-880 and rail yards, which is not foreseeable, stronger physical circulation connections to nearby areas are not likely to occur. However, incorporating transit services to and from the site would improve access between nearby areas *(Circulation Objective 5,* listed in **Appendix F**). As described in detail in the above discussion of LUTE goals and policies related to transit, the project would create a new mixed-use neighborhood with new demand for transit service. Several measures to facilitate transit use in the area would be implemented with the project, including a public shuttle service, rideshare and transit incentive measures. Bus turnouts/bus bulbs, benches, and shelters would accommodate the possible future expansion of AC Transit service.

As for "land use continuity between the Estuary waterfront and adjacent inland districts" (as encouraged by *Land Use Objective 6* and *Circulation Objective 4*), the mix of residential, retail/commercial, open space, and marina uses that would occur are the same or similar to those in adjacent and nearby neighborhoods. However, the project would intensify the project site by introducing greater residential densities than those on adjacent properties, in nearby in-land neighborhoods, or permitted by the Estuary Policy Plan. The project sponsor has therefore requested a General Plan Amendment (discussed in *Land Use Impacts*, below) and the City decision-makers will be required to make a determination prior to approval of the project as to whether the new land uses and densities proposed by the General Plan Amendment are appropriate for the project site and its surroundings.

As discussed in detail in Section IV.J, Population, Housing, and Employment, housing on the project site would have a strong appeal to workers because of its central location and its proximity to places of employment and major transportation connections to other major employment centers (e.g., downtown San Francisco and other closer-in parts of the region). The open space and other neighborhood services and amenities that would be developed could also enhance the desirability of existing housing in adjacent and nearby areas to some extent. Furthermore, retail development in the project is not anticipated to compete with retailing in this area, but rather the project residents could contribute additional spending in nearby established areas, such as the Eastlake and San Antonio/Fruitvale Districts, and other neighborhood retail corridors in surrounding parts of Oakland.

Fifth Avenue Point. Fifth Avenue Point exists in the middle of the Oak to Ninth Avenue Project site and is an integral part of the existing district of primarily industrial, manufacturing, and service uses that spans from the Ninth Avenue Terminal to Lake Merritt Channel. Fifth Avenue Point is made up of about six light industrial and commercial buildings and marina uses along and west of 5th Avenue, south of the Embarcadero. Most of the buildings are the physical remains of the Hurley Marine Works shipyard (from the early 1900s) and uses include work-live, artisan studios, and industrial, manufacturing, commercial, and marina uses. The project would develop the area east of 5th Avenue (except for the 28,000 square-foot outparcel east of 5th Avenue), the main corridor of Fifth Avenue Point, and would remove two of three buildings within what would be considered its eastern edge and that are currently owned by the Port of Oakland. As a result, the project would not *expand* the area as envisioned in the Estuary Plan, and the concentrated area of uses within the area would remain intact west of 5th Avenue (*Policy OAK-4.1*). The project would, however, separate the area from the industrial/manufacturing district that currently surrounds it. The project would improve the currently unpaved 5th Avenue south of the Embarcadero (incorporating paving, curbs, and sidewalks to City standards), to provide access to new marina-related uses, residential buildings, and the newly-created South Park, which would be its terminus near Clinton Basin (*Policy OAK-8).*

Specific Planning. The City and Port of Oakland have not elected to prepare a Specific Plan for the Oak-to-Ninth District as called for in the Estuary Plan. Both agencies determined that 1) the Oak to Ninth Project application (with the modifications proposed in this EIR), 2) the analysis provided in this EIR, and 3) the public review process required pursuant to CEQA and the City of Oakland, fulfill, and may in certain cases exceed, the objectives of detailed planning and analysis envisioned in the Estuary Plan (*Policy OAK-5).* Thus together, these elements (project application, environmental analysis, and public review process) are considered functionally equivalent to the preparation and review of a Specific Plan.

A Specific Plan allows a City to adopt a special set of development standards that would apply to a specific geographic area. Statutory requirements mandate that a Specific Plan must specify (in text and/or diagram) the following in detail:

1. Distribution, location, and extent of the uses of land, including open space, within the area covered by the plan;

2. Proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan;

3. Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable;

4. A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out items (1), (2), and (3); and

5. A statement of the relationship of the Specific Plan to the General Plan. (Government Code Section 65451).

Additionally, the process to prepare a Specific Plan is the same as that required for a General Plan (or amendments thereto) and would required opportunities for broad community and public agency involvement through public hearings (Government Code Section 65453 and 65351).

Each of the applicable Specific Plan requirements listed above is described in detail in this EIR. As called for in Estuary Plan Policy OAK-5, the Oak to Ninth Avenue Project described in this EIR (and in other City staff reports that evaluate non-EIR aspects of the project) incorporates a "realistic development program and site plan" and includes a comprehensive *physical* analysis of the project area. Additionally, the project designates specific land use and development standards for the project site as part of the proposed PWD-1 District, and the project sponsor has crafted the project based on the basic principles of the Estuary Plan, incorporating most of the overall and specific policies that were developed through a focused planning effort of community and public partnership.

Historic Preservation Element (HPE)

The City adopted the Historic Preservation Element (Preservation Element) on March 8, 1994, and amended it on July 21, 1998. The Preservation Element provides a strategy for preserving historically significant resources throughout the city. The strategy is framed through a number of goals, policies, objectives, and actions that include preservation incentives and regulations. Those most pertinent and/or identified as points of controversy are as follows:

- To preserve, protect, enhance, perpetuate, use, and prevent the unnecessary destruction or impairment of properties or physical features of special character or special historic, cultural, educational, architectural or aesthetic interest or value. Such properties or physical features include buildings, building components, structures, objects, districts, sites, natural features related to human presence, and activities taking place on or within such properties or physical features. *(HPE Goal 2)*

- *Avoid or Minimize Adverse Historic Preservation Impacts Related to Discretionary City Actions.* The City will make all reasonable efforts to avoid or minimize adverse effects on the Character-Defining Elements of existing or Potential Designated Historic Properties which could result from private or public projects requiring discretionary City actions. *(HPE Policy 3.1)*

- For any project involving complete demolition of Heritage Properties or Potential Designated Historic Properties requiring discretionary City permits, the City will make a finding that: (1) the design quality of the proposed project is at least equal to that of the original structure and is compatible with the character of the neighborhood; or (2) the public benefits of the proposed project outweigh the benefit of retaining the original structure; or (3) the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood. *(HPE Policy 3.5)*

- *Property Relocation Rather than Demolition*. As a condition of approval for all discretionary projects involving demolition of existing or Potential Designated Historic Properties, the City will normally require that reasonable efforts be made to relocate the properties to an acceptable site. *(HPE Policy 3.7)*

Project Consistency with HPE Policies

The above policies generally encourage, but do not mandate, the preservation of Oakland's historic resources, within the context of, and consistent with, other General Plan goals, objectives, and policies. For example, the admonition in HPE Goal 2 against "the unnecessary destruction" of historic buildings and the direction in HPE Policy 3.1 to employ "all reasonable efforts to avoid or minimize adverse effects" on historic resources are reviewed against LUTE Policy N3.1 that supports the provision of substantial new housing in Oakland and LUTE Policy W11.6 to maximize waterfront views and vistas.

The project would substantially demolish the Ninth Avenue Terminal, an A-rated Potential Designated Historic Property (PDHP) (which the Landmark Preservation Advisory Board has recommended for City Landmark designation). Therefore, the project would not avoid adverse historic preservation impacts related to discretionary City actions *(HPE Policy 3.1).*

Some of the Preservation Element policies are treated as significance criteria and are integral to evaluating the environmental impacts to cultural resources. HPE Policy 3.8 defines the City's "Local Register of Historical Resources" for CEQA purposes and identifies the changes that constitute significant effects under CEQA. This policy forms part of the basis for the cultural resources impact analysis in this EIR, and to summarize from that analysis (EIR Section IV.E, Cultural Resources), substantial demolition of the historic Ninth Avenue Terminal and its related wharf (consistent with Policy 3.8 discussed in Section IV.E and listed in **Appendix F**) would constitute a significant effect that cannot be mitigated to a less-than-significant level (Impacts E.3 and E.4).

Also, the Planning Commission and City Council's determination of consistency with the above policies must precede a finding that the project satisfies the findings required by HPE Policy 3.5, enumerated above. The City will assess the project's ability to meet one or more of these findings, which are not physical environmental considerations to be considered in the EIR.

Open Space, Conservation and Recreation Element (OSCAR)

The City adopted the Open Space, Conservation and Recreation Element (OSCAR) on June 11, 1996. The OSCAR addresses the management of open land, natural resources, and parks in Oakland. Many OSCAR policies address issues addressed by policies in the Estuary Plan (discussed above) and the *San Francisco Bay Plan* and *San Francisco Bay Area Seaport Plan* (discussed below). Objectives and policies in the OSCAR address recreation (REC), open space (OS), and conservation (CO). Many of the policies in particular directly relate to significance criteria, and where applicable, the project's consistency with those policies are summarized here and referenced to the appropriate impact analysis section in this EIR. All OSCAR polices that pertain to the project are included in **Appendix F**, and those most relevant to the project are as follows:

- Use level of service standards of 10 acres of total parkland and four acres of local-serving parkland per 1,000 residents as a means of determining where unmet needs exist and prioritizing future capital investments. *(OSCAR Policy REC-3.1)*

- To develop a system of linear parks and tails which (a) links existing parks together; (b) provides safe, convenient access to open space from residential areas and employment centers; (c) provides places to hike, bike, and experience Oakland's scenery; and (d) provides a means of moving from one place to another without an automobile. *(OSCAR Objective OS-5)*

- Improve trail connections within Oakland, emphasizing connections between the flatlands and the hill and shoreline parks; lateral trail connections between the hill area parks; and trails along the waterfront. *(OSCAR Policy OS-5.1)*

- Support the BCDC requirements which mandate that all new shoreline development designate the water's edge as publicly accessible open space where safety and security are not compromised, and where access can be achieved without interfering with waterfront industrial and maritime uses. Where such conflicts or hazards would result, support the provision of off-site access improvements in lieu of on-site improvements. In such cases, the extent of off-site improvements should be related to the scale of the development being proposed. *(OSCAR Policy OS-7.2)*

- Improve lateral access along the Oakland shoreline and linkages between the shoreline and nearby neighborhoods by creating a "Bay Trail" along the length of the Oakland waterfront. Where an alignment immediately along the waterfront is not possible, site the trail as close to the water as possible, with spur trails leading to the water's edge. In the transitional areas between Jack London Square and High Street, interim alignments may be designated along local streets but the ultimate goal should be an unbroken trail along the water's edge between Jack London Square and Martin Luther King, Jr. Regional Shoreline. *(OSCAR Policy OS-7.5)*

- Particular attention should be paid to (a) views of the Oakland Hills from the flatlands; (b) views of downtown and Lake Merritt; (c) views of the shoreline; and (d) panoramic views from Skyline Boulevard. *(OSCAR Policy OS-10.1)*

- New development should minimize adverse visual impacts and take advantage of opportunities for new vistas and scenic enhancement. *(OSCAR Policy OS-10.2)*

- Oakland's underutilized visual resources, including the waterfront, creeks, San Leandro Bay, architecturally significant buildings or landmarks, and major thoroughfares should be enhanced. *(OSCAR Policy OS-10.3*)

- Promote land use patterns and densities which help improve regional air quality conditions by: a) minimizing dependence on single passenger autos; (b) promoting projects which minimize quick auto starts and stops, such as live-work development, and office development with ground-floor retail space; (c) separating land uses which are sensitive to pollution from the sources of air pollution; and (d) supporting telecommuting, flexible work hours, and behavioral changes which reduce the percentage of people in Oakland who must drive to work on a daily basis. *(OSCAR Policy CO-12.1)*

Project Consistency with OSCAR Policies

The project would not conflict with OSCAR policies. The project would provide a total of approximately 20.7 acres of *new*[13] publicly-accessible open space in the series of new and improved parks and open spaces along the shoreline, and would create a continuous public trail along the shoreline, except for the waterfront along the Fifth Avenue Point outparcel *(Objective OS-5, Policies OS-5.1* and *OS-7.2)*. As described previously, the proposed trail would allow dedicated paths for pedestrians and bicycles within a maximum 40-foot-wide right-of-way and would be located as close to the waterfront as possible. The trail would complete a segment of the Bay Trail and connect to other areas along the estuary *(Policy OS-7.5)*. (See also *San Francisco Bay Trail Plan*, below.) The project would also include housing uses and water-oriented services and activities, balanced with the series of public parks and open spaces along the water's edge *(Policies OS-7.1* and *7.2)*. As discussed in EIR Section IV.L, Public Services and Facilities, the 20.7 acres of new open space would equate to 4.1 acres of new local-serving[14] parkland per 1,000[15] residents on the project site, which would exceed the City's level of service standard of 4.0 acres of local-serving parkland per 1,000 residents *(Policy REC-3.1)*. (See also the discussion of open space and recreation under Estuary Plan policies, above.)

As discussed in EIR Section IV.K, Visual Quality and Shadows, the project would not substantially block views of the Oakland Hills, the shoreline, or other scenic resources compared to the existing views of and across the site *(Policies OS-10.1* and *10.2)*. Furthermore, the project would create new waterfront views and access where none currently exist *(Policy OS-10.3)*. As discussed throughout Chapter IV of this EIR, the project would result in a number of significant and potentially significant impacts for topics addressed by OSCAR policies. These include water quality, geologic and seismic hazards, soil constraints, toxic substances, biological resources,

[13] Excluding the existing 7.7-acre Estuary Park and Jack London Aquatic Center.

[14] The series of connected parks and open space proposed by the project would be region-serving, as well as local-serving, given its proximity to nearby residential and mixed use neighborhoods near downtown and Lake Merritt. The analysis in this EIR uses the General Plan (OSCAR) service standard for local-serving parks (4 acres per 1,000 residents); the General Plan does not prescribe a service standard for region-serving parks. See EIR Section IV.L, Public Services and Recreation.

[15] The project would result in approximately 5,061 new residents. See EIR Section IV.J, Population, Housing, and Employment.

regional air quality, and dust emissions. Each of these adverse effects would be reduced to less-than-significant levels (after mitigation), except for regional air emissions (under cumulative conditions) which would remain significant even with implementation of trip reduction/transit incentive measures (including a public shuttle) and other project characteristics prescribed in specific OSCAR policies *(Policies CO-12.1,* and *CO-12.3* and *CO-12.4* in **Appendix F**).

Oakland Safety Element

The City adopted the Safety Element of the Oakland General Plan in November 2004 (previously the Environmental Hazards Element, adopted in 1974). The Safety Element includes goals that address the effects that safety hazards can pose to the health and safety of Oakland's populations, Oakland's economic welfare, and Oakland's natural resources. Specific policies and detailed actions are identified to address public safety, geologic hazards, fire hazards, hazardous materials, and flooding hazards.

Given the topics that are addressed in the Safety Element, most of its policies generally apply citywide. However the following policies address conditions particularly associated with the project site (also listed in **Appendix F**):

- Continue, enhance or develop regulations and programs designed to minimize seismically related structural hazards from new and existing buildings. (*Safety Policy GE-3*)
- Maintain and enhance the city's capacity to prepare for, mitigate, respond to, and recover from disasters and emergencies. *(Safety Policy PS-1)*
- Minimize the potential risk to human and environmental health and safety associated with the past and present use, handling, storage and disposal of hazardous materials. (*Safety Policy HM-1*)
- Continue to strengthen city programs that seek to minimize the storm-induced flooding hazards. *(Safety Policy FL-2)*
- Minimize further the relatively low risks from non storm-related forms of flooding. *(Safety Policy FL-4)*

Project Consistency with Safety Element Policies

The project would not conflict with any of the above Safety Element policies, and this EIR addresses the project's specific effects on emergency access and routes (Section IV.B, Transportation, Circulation, and Parking), flooding hazards (Section IV.D, Hydrology and Water Quality), seismic hazards (Section IV.F, Geology, Soils, and Seismicity), and hazardous materials (Section IV.H, Hazardous Materials), all of which are less than significant or reduced to less than significant (after mitigation).

Housing Element

In June 2004, the City adopted an update to the Housing Element of the Oakland General Plan, as required by state law. As also required by state law, the Housing Element includes "a review and assessment of the City's performance in implementing the previous Housing Element (adopted in 1992), an assessment of current and future housing needs, an inventory of resources (including sites suitable for development of housing for all economic levels), governmental and non-governmental constraints to meeting those needs, and a statement of the City's goals, policies and quantified objectives for meeting its housing needs for the period 1999-2006." (Oakland, 2004) The Housing Element contains a number of policies that address the provision of housing throughout the city and that focus on actions to be conducted by the City. However the following policies particularly apply to the project (also listed in **Appendix F**):

- The City of Oakland will strive to meet its fair share of housing needed in the region. (*Housing Element Policy 1.7*)
- Seek voluntary agreements with private developers of market rate housing to include units affordable to lower-income households, especially those projects involving Redevelopment Agency support or requiring major planning approvals. (*Housing Element Policy 2.4*)
- The City will undertake a number of efforts to distribute assisted housing widely throughout the community and avoid the over-concentration of assisted housing in any particular neighborhood, in order to provide a more equitable distribution of households by income and by race and ethnicity. (*Housing Element Policy 2.11*)
- Develop and promote programs to foster the incorporation of sustainable design principles, energy efficiency and Smart Growth principles into residential developments. *Housing Element Policy 7.1*)
- Continue to direct development toward existing communities and encourage infill development at densities consistent with the surrounding communities. (*Housing Element Policy 7.3*)
- Work with developers to construct new housing that reduces the footprint of new construction, preserves green spaces, and supports the use of public transit. (*Housing Element Policy 7.4*)
- Encourage a mix of land uses in the same zoning district or on the same site in certain zoning districts. (*Housing Element Policy 7.5*)

Project Consistency with Housing Element Policies

As describe in the discussion of policies in several of the other General Plan elements, the project would not conflict with the applicable Housing Element policies listed above. Approximately 3,100 new, market-rate housing units would be introduced as part of a new mixed-use neighborhood located in central Oakland, in proximity to the downtown employment center, major transportation corridors and transit connections, new "green spaces" (*Policy 7.4* and *Policy 7.5*). In addition to creating new housing stock and homeownership opportunities in Oakland, the

project would support Smart Growth principals by virtue of it occurring on a site that is central to the region and in proximity to transit and a mix of jobs and housing *(Policy 7.1*). As discussed above under the project's consistency with LUTE transit policies (and below under Oakland's "Transit First" Policy), the project would increase the demand for transit service in the area and would provide a series of transit-supporting measures, (public shuttle service, rideshare and transit incentive measures, and bus turnouts/bus bulbs, benches, shelters) *(Policy 7.4)*. (See *Redevelopment Plans*, below, for discussion of affordable housing.)

Noise Element

The City adopted Oakland's Noise Element on June 21, 2005. The Noise Element analyzes and quantifies current and projected noise levels from various sources that contribute to the community noise environment. These noise levels are depicted on noise contour maps that are used to guide land use decisions to reduce noise impacts, especially on sensitive receptors. The Noise Element also includes a land use-noise compatibility matrix that illustrates the degree of acceptability of exposing various sensitive land uses to noise.

The Noise Element contains policies and actions that direct the City's (or other appropriate agencies) efforts it will undertake to carry out the noise policies. The following policies address conditions related to the project most directly (also listed in **Appendix F**):

- Ensure the compatibility of existing and, especially, of proposed development projects not only with neighboring land uses but also with their surrounding noise environment. *(Noise Element Policy 1)*
- Use the noise-land use compatibility matrix (Figure 6) in conjunction with the noise contour maps (especially for roadway traffic) to evaluate the acceptability of residential and other proposed land uses and also the need for any mitigation or abatement measures to achieve the desired degree of acceptability. *(Noise Element Action 1.1)*
- Reduce the community's exposure to noise by minimizing the noise levels that are received by Oakland residents and others in the City. *(Noise Element Policy 3)*
- Demand that Caltrans implement sound barriers, building retrofit programs and other measures to mitigate to the maximum extent feasible noise impacts on residential and other sensitive land uses from any new, widened or upgraded roadways; any new sound barrier must conform with City policies and standards regarding visual and aesthetic resources and quality. *(Noise Element Action 3.3)*

Project Consistency with the Noise Element Policies

As described above in the discussions of the project's consistency with LUTE policies and Estuary Plan policies, the project would introduce greater residential densities than those found in the adjacent properties or nearby in-land neighborhoods. The mixed-use project would be located in a noise environment (in proximity to I-880) and the noise analysis in EIR Section IV.G assesses the Noise Element's noise-land use compatibility matrix, in which is used to assess

project noise impacts. Although, the proposed uses would be the same and/or compatible with the land uses in these neighborhoods, the project would introduce residential and park uses in noise environments considered "normally unacceptable" to "clearly unacceptable" for such uses *(Policy 1, Action 1.1)*. Mitigation measures to reduce indoor noise exposure impacts, to the extent feasible, are also identified in EIR Section IV.G, Noise.

Bicycle Master Plan

In July 1999, the City Council adopted the Oakland Bicycle Master Plan. Among other standards, the Bicycle Master Plan contains a series of recommendations, including spaces for short-term and long-term parking for bicycles. However the City has not adopted the recommended bicycle parking ratios into its Zoning Regulations but is considering adopting requirements that would be lower than the current recommended ratios. An update of the 1999 Bicycle Master Plan is underway.

The 1999 Bicycle Master Plan includes the following policy-supporting actions that specifically apply to the project:

- Seize opportunities to improve bicycle access to the Oakland waterfront through completion and implementation f 1) the Estuary Policy Plan, 2) the Bay Trail alignment, and 3) joint City, Port, and BCDC's Public Access Plan. (BMP Action 4.4, *The Waterfront*)

- Upgrade the existing path along the Lake Merritt Channel from Lake Merritt to the Bay Trail… (BMP Action 4.6, *Channel Pathway*)

Project Consistency with the Bicycle Master Plan Policies

The project would not conflict with these applicable Bicycle Plan policies. As previously mentioned, the project would create a new waterfront trail that would include bicycle facilities and complete a segment of the Bay Trail. This would include segments that could lead to future extensions northward along Lake Merritt Channel to Lake Merritt. Also, the Embarcadero (east of Oak Street) is designated as a Class II bicycle facility along the project frontage and would remain so with development of the project, which would improve and widen sections of the Embarcadero. A total of 350 short-term and 25 long-term bicycle parking spaces is recommended for the project based on the current recommended (and unadopted) standards in the Bicycle Master Plan. However the project would provide bicycle parking at onsite locations at a level determined by the City and in a manner consistent with the City's practices or adopted, updated standards and regulations at the time of project construction.

Pedestrian Master Plan

In November 2002, the City Council adopted the Pedestrian Master Plan as part of the LUTE. The Pedestrian Master Plan identifies policies and implementation measures for achieving LUTE policies that promote a walkable city. The Plan designates a Pedestrian Route Network throughout Oakland and identifies a primary pedestrian route (essentially the Bay Trail) along the

Embarcadero, from Martin Luther King Jr. Way through Brooklyn Basin. A Neighborhood Route is indicated along 5th Avenue, extending north from the Embarcadero to generally the area of East 12th Street. The Plan does not identify any Priority Projects (to be completed by approximately 2022) in the immediate vicinity of the project site, except completion of "gap" in the Bay Trail around Brooklyn Basin, east of the project site. The Plan refers to the Estuary Plan for proposed improvements for pedestrian routes along the waterfront. The following Pedestrian Master Plan policies are most relevant to the project (and all that are applicable are included in **Appendix F**):

- Improve pedestrian crossings in areas of high pedestrian activity where safety is an issue (PMP Policy 1.1, *Crossing Safety*).
- Implement pedestrian improvements along major AC Transit lines and at BART stations to strengthen connections to transit (PMP Policy 2.3, *Safe Routes to Transit).*
- Encourage the inclusion of street furniture, landscaping, and art in pedestrian improvement projects (PMP Policy 3.1, *Streetscaping*).

Project Consistency with Pedestrian Master Plan Policies

The project would not conflict with policies in the Pedestrian Master Plan as it would provide safe, improved pedestrian facilities (sidewalks, recreational paths, seating, signage, lighting, etc.) as well as opportunities for public art around and throughout the project and in proximity to and serving the waterfront.

Scenic Highways Element

In September 1974, the City adopted the Scenic Highways Element, which sets a framework for designated and potential scenic routes throughout the City and policies for establishing and preserving such routes. The Element identifies the Embarcadero as a potential scenic route. However, its specific policies address the two designated scenic routes (not in proximity to the project site[16]).General policies that would apply to the project include the following (also listed in **Appendix F**):

- Urban development should be related sensitively to the natural setting. *(Scenic Highways Element Policy 2)*
- Overhead utilities should be undergrounded along all freeways, scenic routes, and major streets…*(Scenic Highways Element Policy 6)*

[16] MacArthur Freeway (I-580) and Skyline Boulevard/Grizzly Peak Boulevard/Tunnel Road.

Project Consistency with Scenic Highways Policies

The City has not designated the Embarcadero as a scenic route since adoption of the Scenic Highways Element in 1974, nor has it established "a procedure for the nomination, designation, and protection of scenic routes," as stated in the Element's Action Plan. The project would improve and widen portions of the Embarcadero along the project site to create a landscaped parkway. There are currently very limited direct views of the Oakland Estuary from points along the Embarcadero at the project site due to existing buildings on the project site, including the Ninth Avenue Terminal. As previously described (under the discussion of the project's compliance with LUTE Waterfront policies), the project would align streets and site buildings of varied heights in an effort to create new and expanded views of the Estuary where none currently exist. Where feasible, utilities on the project site and its related public rights-of-way would be located underground.

Oakland "Transit First" Policy

The "Transit First" resolution, passed by the City Council on October 29, 1996, recognizes the importance of striking a balance between economic development opportunities and the mobility needs of those who travel by means other than the private automobile. The policy favors modes that have the potential to provide the greatest mobility for people, rather than vehicles. The support for a Transit First policy is an indication of the importance of public transit to the City and the need for cooperative efforts to improve local transit. This policy is reflected in the previous discussions of overall framework and policies within the LUTE and Estuary Plan, as described in the previous discussion of the project's consistency with LUTE Transportation policies regarding transit and access. As discussed there, the project is in an area that currently has limited direct access to transit. The San Francisco/Oakland Ferry is at the terminus of Clay Street, about 1.5 miles west of the project site, and the Jack London Square Amtrak station is approximately 0.75 mile west of the project site. There is currently no AC Transit bus service to the project site, and the bus stops nearest to the site are at the Lake Merritt BART station (about 1.0 mile away) and the Jack London Square Amtrak station. These lines provide service to downtown Oakland for direct connections to other bus lines and the 12th Street/City Center BART.

The new residents, visitors, and employees of the new mixed use neighborhood created by the project would increase the demand for transit service in the area. In addition to the proposed pedestrian and bicycle access facilities, the project would include (as Transit and Air Quality mitigation measures) a public shuttle service between the project site and nearby transit hubs, rideshare and transit incentive measures, and bus turnouts/bus bulbs, benches, shelters (in coordination with AC Transit). The project sponsor is continuing to pursue an expansion of AC Transit service.

Zoning Regulations

As shown on **Figure IV.A-1**, the area of the project site east of Lake Merritt Channel is within the M-40 Heavy Industrial Zone, and the area west of the Channel is within the S-2 Civic Center Zone / S-4 Design Review Combining Zone.

M-40 Zone is intended to "to create, preserve, and enhance areas containing manufacturing or related establishments which are potentially incompatible with most other establishments, and is typically appropriate to areas which are distant from residential areas and which have extensive rail or shipping facilities" (Section 17.72.010). Regarding residential uses, the M-40 Zone prohibits involving the transfer and/or storage of hazardous waste management to be located within 2,000 feet of residential dwellings (Section 17.72.040C). A wide range of commercial activities are permitted (or conditionally permitted) within the M-40 Zone, including General Food Sales (e.g., restaurant, grocery store) and General Retail Sales activity classifications (Section 17.72.050, and 17.72.060).

The S-2 Civic Center Zone is intended to "to create, preserve, and enhance areas devoted primarily to major public and quasi-public facilities and auxiliary uses, and is typically appropriate to portions of the Oakland Central District and to outlying areas of public facilities." These regulations shall apply in the S-2 Zone (Section 17.76.010). The S-2 Zone applies to the area of the project site that currently contains Estuary Park and the Jack London Aquatic Center, public facilities. Most commercial uses are limited in the S-2 Zone and require approval of a conditional use permit with special findings to ensure that the proposed commercial use 1) is intended for use by employees and patrons of the civic use within the S-2 Zone, 2) would not result or worsen traffic conditions, and 3) is subordinate to the civic use that the commercial use would serve (Section 17.102.210).

The intent of the S-4 Design Review Combining Zone is "to create, preserve, and enhance the visual harmony and attractiveness of areas which require special treatment and the consideration of relationships between facilities, and is typically appropriate to areas of special community, historical or visual significance" (Section 17.80.010). The regulations of the S-4 Zone are "supplementary to the regulations applying in the zones with which the S-4 Zone is combined," in this case, the S-2 Zone (Section 17.80.010).

The current zoning on the project site would not accommodate the project. The project sponsor proposes a new zoning district and associated regulations: the "Planned Waterfront Zoning District" (PWD-1). The proposed PWD-1 Zone would be intended to establish specific regulations to facilitate the development of an integrated mixed-use, residential, public and private open space, and commercial community on the project site. A description of the proposed PWD-1 District standards that would apply specifically to the Oak to Ninth Project site is discussion below in the *Land Use Impacts* discussion.

Guidelines for Determining General Plan Conformity in Oakland

Because the General Plan was updated more recently than the Zoning Regulations, the two may conflict in some cases. Overall, the current zoning on the project site is not consistent with the current Estuary Policy Plan land use classifications on the site. As a general rule, whenever there is an express conflict between the General Plan and the Zoning Regulations, a project must conform with the General Plan (Oakland Planning Code Section 17.01.030), and the City has adopted *Guidelines for Determining General Plan Conformity* (General Plan Guidelines) (amended through July 15, 2003) to provide direction to the City whenever there is an express conflict between the General Plan and the Zoning Regulations.

The General Plan Guidelines provide tables of maximum permitted densities for residential and non-residential development in each of the General Plan land use classifications. Density in "principal units per *gross* acre" are established, as is an assumed "net-to-gross ratio" to attain a maximum density in "principal units per *net* acre." FAR and a minimum square feet of site area per principal unit is established.

In certain zones, FAR can apply to projects that include residential and nonresidential uses (such as ground floor commercial uses) or nonresidential uses only Section , and density would apply to those buildings that contain primarily residential uses only. Density in gross acres includes all land in the area, including streets and parks. As stated in the General Plan Guidelines, to calculate permitted density on a particular development parcel, the gross density figure must be translated to net density using the prescribed net-to-gross ratio, except in cases where the ratio seems significantly different than that prescribed by the Guidelines. This could be the case, for example, in an area with a large amount of open space or expansive streets or public rights-of-way, such as landscaped boulevards.

Redevelopment Plans

Portions of the project site are located within areas governed by the *Central City East Redevelopment Plan* (adopted July 29, 2003) and the *Central District Urban Renewal Plan* (adopted June 12, 1969 and amended through July 24, 2001).

Central City East Redevelopment Plan

In July 2003, the City adopted the *Central City East Redevelopment Plan* (CCERP) to be implemented by the Oakland Redevelopment Agency in accordance with the California Community Redevelopment Law (state law). The CCERP Project Area is a linear area (3,340 acres) that extends through the east and central portion of the City, mid way between Interstate 580 (I-580) and I-880, and that includes a relatively small portion south of the I-880 along the Oakland Estuary (from Lake Merritt Channel to approximately 29th Avenue). The Project Area is divided into Subareas, and the area of the project site east of Lake Merritt Channel is within the Eastlake/San Antonio Subarea, which is generally bound by Jackson Street (west), 20th Street (north), 28th Avenue (east), and the Oakland Estuary (south).

As stated in its introduction, the CCERP "presents a process and a basic framework within which specific plans will be presented, specific projects and programs will be established and specific solutions will be propose, and by which tools are provided to the [Redevelopment] Agency to fashion, develop and proceed with such specific plans, projects and solutions." The CCERP identifies a series of redevelopment programs that address property improvement, public infrastructure improvements, property redevelopment assistance, and the provision of affordable housing.

Two aspects of the CCERP that are directly applicable to the project include the provision of affordable housing and the generation of tax increment monies. Consistent with state law, the CCERP requires that at least 15 percent of all housing developed in the CCERP Project Area by non-Agency entities be affordable to very-low-/low- and moderate-income households. Of these affordable units, at least 40 percent must be affordable to very-low-income households. The Redevelopment Agency is obligated to meet this provision for the CCERP Project Area in the aggregate, over a 10-year period.

Overall, the CCERP incorporates policies from, and is consistent with, the General Plan LUTE. As such, the project's consistency with policies in the CCERP has been discussed previously in this section. Given the approximately 2,800 market-rate units that the project would develop within the CCERP (east of the channel), the Redevelopment Agency would be required to assure that at least 420 low- to moderate- income units within the Redevelopment Project Area would be constructed within 10 years. At least 168 of the affordable units would need to be affordable to very-low-income households (Oakland Redevelopment Agency, 2005).

Central District Urban Renewal Plan

In July 2001**,** the City last amended the *Central District Urban Renewal Plan (CDURP)* to be consistent with the General Plan (CDURP originally adopted June 12, 1969) in accordance with state law. The CDURP Project Area is generally the area of downtown Oakland bounded by the Embarcadero (south), I-980/Brush Street (west), between Telegraph Avenue and Harrison Street north of 20th Street (north), and generally Lake Merritt, Fallon Street, and Lake Merritt Channel (east). The area of the project site that is west of Lake Merritt Channel is within the CDURP Project Area. Consistent with the General Plan Land Use and Transportation Element land use diagram, this area is classified as Estuary Plan Area, and the shoreline is classified as Urban Open Space.

As amended, the CDURP, the CDURP Project Area is guided by the General Plan and applicable zoning regulations. Unlike the CCERP adopted in 2003 (discussed above), there is no affordable housing requirement under the CDURP since it was adopted in 1969, and the affordable housing production requirements apply only to project areas adopted after January 1, 1976 (Health & Safety Code Section 33413(d)(1)).

Other Applicable Plans and Policies

In addition to the City of Oakland's adopted plans, policies, and regulations discussed above, all or parts of the project site and surrounding vicinity are also guided by the *San Francisco Bay Plan*, the *San Francisco Bay Area Seaport Pl*an, the California State Lands Commission under Tidelands Trust, and a number other plans pertinent to the project area.

San Francisco Bay Plan and *San Francisco Bay Area Seaport Plan*

Portions of the project area lie within a 100-foot "shoreline band"[17] that surrounds San Francisco Bay and that is under the jurisdiction of the San Francisco BCDC, a state agency. BCDC ensures that development within the shoreline band is consistent with the *San Francisco Bay Plan* (Bay Plan) and the *San Francisco Bay Area Seaport Plan* (Seaport Plan). The McAteer-Petris Act, established by BCDC, and the Bay Plan are an exercise of authority by the state legislature over public trust lands and establish policies for meeting public trust needs (see California State Lands Commission, Public Trust Doctrine, below).

The Seaport Plan is incorporated into the Bay Plan and is the basis of port policies that promote goals for areas determined to be necessary for future port development and designate areas as "port priority use" areas. The Seaport Plan applies to "port priority use" areas in Oakland, which include the Outer Harbor, Middle Harbor, and Inner Harbor to Clay Street, as well as from the south shore of Clinton Basin to about 10th Avenue, approximately one-third of the project site's waterfront.

The Bay Plan contains policies that guide future uses of the bay and shoreline and encourage new shoreline development to provide public access to the bay, to the maximum extent feasible. It incorporates a series of Bay Plan Maps of specific areas along the shoreline, and these maps are based on, and show how to apply, the Bay Plan policies. The project site in within Bay Plan Map No. Five (Central Estuary), which designates a portion of the site west of Lake Merritt Channel as a Waterfront Park Priority Use Area. BCDC has regulatory authority for all portions of the project site waterside of BCDC's 100-foot shoreline band (including that portion of the priority use area), and the project uses and facilities within the 100-foot shoreline band would be subject to approval by BCDC's Design Review Board to ensure compatibility with policies for public access, appearance, design, and scenic views.

Bay Plan policies are categorized to address bay resources and development of the bay and shoreline. The following policies are particularly relevant to the project, and all applicable Bay Plan policies are included in **Appendix F**:

- New projects should be sited, designed, constructed and maintained to prevent or, if prevention is infeasible, to minimize the discharge of pollutants into the Bay by: (a) controlling pollutant sources at the project site; (b) using construction materials that contain non-polluting materials; and (c) applying appropriate, accepted and effective best

[17] The "shoreline band" consists of all territory located between the shoreline of the Bay and a line 100 feet landward of and parallel with that line...." Generally includes tidelands, which are lands lying between mean high tide and mean low tide, and marshlands lying between mean high tide and five feet above mean sea level (BCDC, 2003).

management practices, especially where water dispersion is poor and near shellfish beds and other significant biotic resources. *(Water Quality*, Policy #3*)*

- Whenever practicable, native vegetation buffer areas should be provided as part of a project to control pollutants from entering the Bay, and vegetation should be substituted for rock riprap, concrete, or other hard surface shoreline and bank erosion control methods where appropriate and practicable. *(Water Quality*, Policy #7*)*

- The following general standards have been used in determining locations for each type of recreational facility (and should be used as a guide in allowing additional ones):

  > Marinas. Marinas should be allowed at any suitable site on the Bay. Unsuitable sites are those that tend to fill up rapidly with sediment; have insufficient upland; contain valuable marsh, mudflat, or other wildlife habitat…At suitable sites, the Commission should encourage new marinas, particularly those… not containing valuable wetlands. (2) Fill should be permitted for marina facilities that must be in or over the Bay, such as breakwaters, shoreline protection, boat berths, ramps, launching facilities, pumpout and fuel docks, and short-term unloading areas. Fill for marina support facilities may be permitted at sites with difficult land configurations provided that the fill in the Bay is the minimum necessary and any unavoidable loss of Bay habitat, surface area, or volume is offset to the maximum amount feasible, preferably at or near the site. (3) No new marina or expansion of any existing marina should be approved unless water quality and circulation will be adequately protected and, if possible, improved, and an adequate number of vessel sewage pumpout facilities that are convenient in location and time of operation to recreational boat users should be provided free of charge or at a reasonable fee, as well as receptacles to dispose of waste oil. (4) In addition, all projects approved should provide public amenities such as viewing areas, restrooms, and public parking; substantial physical and visual access; and maintenance for all facilities. Frequent dredging should be avoided. *(Excerpt from Recreation On and Around the Bay*, Policy #4a*)*

- To assure optimum use of the Bay for recreation, the following facilities should be encouraged in shoreside parks and in or near yacht harbors or commercial ferryboat facilities:

  > In waterfront parks. (2) To capitalize on the attractiveness of their bayfront location, parks should emphasize hiking, bicycling, riding trails, picnic facilities, viewpoints, beaches, and fishing facilities... (4) Public launching facilities for a variety of boats and other water-oriented recreational craft, such as kayaks, canoes and sailboards, should be provided in waterfront parks where feasible…(7) Trails that can be used as components of the San Francisco Bay Trail…should be developed in waterfront parks…(8) Bus stops, kiosks and other facilities to accommodate public transit should be provided in waterfront parks to the maximum extent feasible. Public parking should be provided in a manner that does not diminish the park-like character of the site. Traffic demand management strategies and alternative transportation systems should be developed where appropriate to minimize the need for large parking lots and to ensure parking for recreation uses is sufficient…(9) Interpretive information describing natural, historical and cultural resources should be provided in waterfront parks where feasible. *(Excerpt of Recreation On and Around the Bay* Policy #5a*).*

- In addition to the public access to the Bay provided by waterfront parks, beaches, marinas, and fishing piers, maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline, whether it be for housing, industry, port, airport, public facility, wildlife area, or other use, except in cases where public access would be clearly inconsistent with the project because of public safety considerations or significant use conflicts, including unavoidable, significant adverse effects on Bay natural resources. *(Excerpt from Public Access*, Policy 2*)*.

- Shoreline developments should be buil[t] in clusters, leaving open area around them to permit more frequent views of the Bay…(*Appearance, Design, and Scenic Views*, Policy #2)

- Views of the Bay from vista points and from roads should be maintained by appropriate arrangements and heights of all developments and landscaping between the view areas and the water. In this regard, particular attention should be given to all waterfront locations, areas below vista points, and areas along roads that provide good views of the Bay for travelers, particularly areas below roads coming over ridges and providing a "first view" of the Bay (shown in Bay Plan Maps). (*Appearance, Design, and Scenic Views*, Policy #14)

- Wherever waterfront areas are used for housing, whenever feasible, high densities should be encouraged to provide the advantages of waterfront housing to larger numbers of people. *(Other Bay and Shoreline Uses*, Policy #3)

Project Consistency with Bay Plan Policies

The project does not appear to conflict with policies of the Bay Plan. In April 2005, BCDC's Design Review Board identified three primary focuses of its review of the preliminary project: 1) adequate, usable, and attractive public access, 2) project appearance, design, and scenic views, and 3) the necessity of bay fill (SF BCDC, 2005). As addressed in the above discussions of related policies in the LUTE, Estuary Plan, and the OSCAR, the project generally would not conflict with Bay Plan policies that encourage increased waterfront open space accessible to the public, that encourage new recreational facilities (trails, walkways, etc.) along the shoreline, and that direct the configuring of high-density waterfront housing and new streets to maintain and provide good views to the Bay. Also, the project would incorporate trip reduction measures to address cumulative regional air emissions impacts (though not to less-than-significant level) and a parking control and management program that would ensure available public, street parking for park and open space users as well as visitors of the onsite retail/commercial uses (see EIR Section IV.C, Air Quality and Meteorological Conditions).

The project may require new Bay fill to create new open spaces around Clinton Basin. However, the potential effects that this may pose to biological resources and water quality, or that may result from potential bay fill, dredging, or increased marina uses, have been identified and fully analyzed in EIR Section IV.D, Hydrology and Water Quality, and Section IV.I, Biological Resources, and would be less than significant (after mitigation). The extent to which the potential new bay fill is "necessary" would be considered by BCDC and City decisionmakers prior to approval of the project.

California State Lands Commission, Public Trust Doctrine

As discussed in Chapter III, Project Description, the property comprising the project site is subject to the Tidelands Trust (Project Lands). Portions of the Project Lands are granted lands granted to the City pursuant to legislative grants from the State of California (Project Granted Lands). Other portions of the Project Lands have been acquired by the Port with public trust funds derived from Port operations (Project After-Acquired Lands). The Port manages the Project Lands by virtue of the Charter of the City of Oakland. The State Lands Commission (Commission) has oversight of all Tidelands Trust property in California, including the Project Lands.

The project proposes development of portions of the Project Lands for residential housing. Among other matters, the Commission asserts that residential housing is not a use to which the Project Granted Lands may be put. The Oak to 9th Avenue District Exchange Act, SB 1622, authorizes sale of certain Project After-Acquired Lands. SB 1622 also authorizes the Commission and the Port to enter into an exchange agreement meeting the requirements of the legislation to effectuate the exchange and sale. The City's approval of the project will be conditioned upon subsequent compliance with the provisions of SB 1622.

San Francisco Bay Trail Plan / Oakland Waterfront Promenade and Bay Trail Alignment Feasibility Study and Design Standards

In July 1989, the Association of Bay Area Governments (ABAG) adopted the *San Francisco Bay Trail Plan* that proposes development of a regional hiking and bicycling trail around the perimeter of San Francisco and San Pablo Bays. The Plan was prepared pursuant to Senate Bill 100, which mandated that the Bay Trail provide connections to existing park and recreation facilities, create links to existing and proposed transportation facilities, and be planned in such a way as to avoid adverse effects on environmentally sensitive areas. The Plan includes a set of policies and strategies for its design, implementation and financing (ABAG, 2005).

Generally consistent with the overall policies and design guidelines in the Bay Trail Plan, the City of Oakland has coordinated a process to develop the *Oakland Waterfront Promenade/Bay Trail Alignment Feasibility Study and Design Guidelines*. The Study explores the creation of a continuous 6.6-mile trail along Oakland's waterfront, extending from Jack London Square to 66th Avenue/Damon Slough. The City has developed draft development standards for various elements along the trail, including treatments at the water's edge, streets, site elements (e.g., lighting, markers, seating), and maintenance guidelines (Oakland, 2004b) (EDAW, undated).

As shown in **Figure III-3** and **Figure III-7** in this EIR, the project would create a continuous shoreline public trail as a segment of the Bay Trail. Facilities for pedestrian and bicycles and a variety of users would be developed within a maximum 40-foot-wide right-of-way along the waterfront. The trail would connect to the existing trail that extends from Jack London District to Estuary Park. It would provide access along both sides of Lake Merritt Channel, crossing Lake Merritt Channel Bridge (via the Embarcadero), and would edge Clinton Basin and the waterfront edge of Shoreline Park to connect further to Brooklyn Basin segment and the Embarcadero.

Land Use Impacts Discussion

Significance Criteria

The project would result in a significant impact related to land use and planning if it would:

- Physically divide an established community;
- Fundamentally conflict with any applicable land use plan, policy *(when considered in balance[18])*, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect and result in a physical change in the environment; or
- Fundamentally conflict with any applicable habitat conservation plan or natural community conservation plan.

Approach to Analysis

The project was evaluated for its compatibility with the applicable plans and policies in order to determine the potential for significant environmental impacts. As discussed in the *Setting* section of this chapter, the General Plan has determined that the "the fact that a specific project does not meet all General Plan goals, policies, and objectives does not inherently result in a significant effect on the environment within the context of [CEQA]" (City of Oakland, 2005a). In addition, the project site and its proposed uses were evaluated in terms of their compatibility with existing land uses surrounding and in close proximity to the project site.

The proposed amendments to the existing General Plan land use classification(s), zoning district and regulations are described. Also the proposed Planned Waterfront Zoning District and associated standards, which the project would be consistent with and subject to, are also described.

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18 Pursuant to the Oakland General Plan, as amended June 2005, the Oakland General Plan recognizes that it contains policies that may in some cases compete with each other, and that decision-makers must determine whether, "on balance, the project is consistent (i.e., in general harmony) with the General Plan." Further, "the fact that a specific project does not meet all General Plan goals, policies, and objectives does not inherently result in a significant effect on the environment within the context of [CEQA]" (City of Oakland, 2005a).

Impacts and Mitigation Measures

Physical Division of an Established Community

Impact A.1: The project would develop new and different uses and buildings immediately adjacent to and surrounding Fifth Avenue Point and may result in the physical division of an existing community. (Potentially Significant)

The project would develop one of the two "distinct subareas" of the Oak-to-Ninth District, as described in the Estuary Plan: the area south of the Embarcadero. The "edges" of the project site are clearly demarcated by its predominantly industrial character, building types, and remnants of rail and port facilities that reflect its historical use. As described in the Estuary Plan, this waterfront District is "isolated from the surrounding urban community," separated from neighborhoods to the north by I-880 and rail tracks. Neighborhoods to the west are clearly established throughout the Jack London District (Waterfront Warehouse, Mixed Use Loft/Industrial, Produce, etc.) and the cohesive Embarcadero Cove area (as defined in the Estuary Policy Plan as east of the Ninth Avenue Terminal) of commercial-recreational and water-dependent uses to the east.

However, to summarize from the discussion of the project's consistency with Estuary Plan policies (see Setting), Fifth Avenue Point is an integral part of the existing industrial, manufacturing, and service-uses district that now surrounds it. One- to three-story warehouses and buildings with a mix of work-live, office, manufacturing, service uses, and unpaved parking areas line both sides of 5th Avenue to some extent. Except for an 18,000 square-foot outparcel (industrial building), the project would develop new residential buildings (with ground-floor waterfront retail/restaurant uses) on the easternmost edge of Fifth Avenue Point, between 5th Avenue and Clinton Basin. This would involve the removal of two of three buildings east of 5th Avenue (containing manufacturing uses), and although this would not divide the concentrated core of uses within Fifth Avenue Point (which would remain intact west of 5th Avenue), it would separate the community from the industrial/manufacturing district that currently surrounds it. Implementation of the following mitigation measure would effectively reduce the potentially significant impact of the project's division of Fifth Avenue Point from its surroundings to less than significant.

Mitigation Measure A.1: The project applicant shall incorporate into the project site plan design elements that 1) address the relationship (setback, height and upper-story stepbacks, etc.) of new buildings located adjacent to Fifth Avenue Point to minimize the physical division of the outparcels from the existing Oak-to-Ninth District; 2) provide safe, direct, and well-designed pedestrian and bicycle access between the outparcels and the new public open spaces, trails, and marina uses on the project site; 3) provide appropriate landscaping and/or other feature(s) to provide appropriate buffering between the outparcels and the project site, where necessary and feasible. The proposed Planned Waterfront Zoning District (PWD-1) standards discussed in Impact A.2 shall incorporate, as appropriate, specific design standards to address the aforementioned elements in areas abutting Fifth Avenue Point.

Significance after Mitigation: Less than Significant.

Consistency with Plans, Policies, and Regulations (Pertaining to Physical Environmental Effects)

Impact A.2: The project would not be consistent with the existing Estuary Policy Plan land use classification and zoning districts for the project site. (Potentially Significant)

Plans and Policies

The detailed discussions of the project's consistency with General Plan policies are provided in the Setting section of this chapter (pursuant to CEQA Guidelines Section 15125(d)).

Conflicts with a General Plan or other relevant plans do not inherently result in a significant effect on the environment within the context of CEQA. Section 15358(b) of the CEQA Guidelines states that "effects analyzed under CEQA must be related to a physical change." Appendix G of the CEQA Guidelines (Environmental Checklist Form) makes explicit the focus on *physical* environmental policies and plans, asking if the project would "conflict with any applicable land use plan, policy, or regulation…*adopted for the purpose of avoiding or mitigating an environmental effect*" (emphasis added). As such, the project's conflict or inconsistency with a policy could indicate that an environmental threshold has been exceeded. To the extent that the project exceeds an environmental threshold and physical impacts may result from a policy conflict or inconsistency, such physical impacts have been identified and fully analyzed in the relevant topical sections of Chapter IV (i.e., cultural resources; air quality; noise; transportation, circulation, and parking, etc.).

The Oakland General Plan contains many policies that in some cases address different or competing goals. The Planning Commission and City Council, in deciding whether to approve the project applications, must assess whether the project is consistent with the overall policies of the General Plan and must balance competing General Plan goals and objectives as part of its consideration. Additionally, the General Plan states that a specific project that does not meet all General Plan goals, policies, and objectives does not inherently result in a significant effect on the environment in the CEQA context (City of Oakland, 2005a).

Project's Consistency with General Plan Policies

The project would be consistent with most of the applicable General Plan policies. However, the project would potentially conflict with Historic Preservation Element (HPE) Policy 3.1 since the project would substantially demolish the Ninth Avenue Terminal, a historic resource. This policy conflict is integral to the assessment of cultural resources impacts and is discussed in EIR Section IV.E, Cultural Resources.

Also, the project would potentially conflict with Noise Element Policy 1 since the project would introduce residential and park uses to a noise environment considered "normally unacceptable" to

"clearly unacceptable" for such uses. This policy conflict is integral to the assessment of outdoor noise impacts and is discussed in EIR Section IV.G, Noise.

General Plan Use and Development Standards

The Planned Waterfront Development-1 (PWD-1) Estuary Plan land use classification does not explicitly identify residential use as encouraged or envisioned for the Oak-to-Ninth District (excluding work-live studios), despite the PWD-1's provision of a maximum density (for residential use) and the Estuary Plan's overall objective to balance "residential [uses] – both traditional and non-traditional *(Objective LU-1)*." Additionally, the project would develop residential use at locations currently within the Parks, Open Space and Promenades (P) land use classification, west of the Channel. Therefore the project's proposal to develop residential use, with regard to location, is not consistent with the Estuary Plan land use classifications.

Although some of the project's buildings would contain residential uses with ground-floor retail/commercial uses, the project is primarily residential. Also, the project sponsor proposes a standard for maximum commercial space that could be developed on each project parcel (restricted to ground-floor of residential buildings) as well as maximum building heights for each project parcel. Together, these standards and limits would delineate the physical limits or "mass" of each building on each project parcel. Therefore, the project sponsor's proposed amendments to the Estuary Plan prescribe maximum and minimum density, instead of FAR, to guide new development throughout the project site. As shown in **Table IV.A-1**[19], the project would result in maximum densities of up to 160 units per net acre (compared to the maximum 40 units per net acre currently permitted by the existing PWD-1 land use classification). A minimum of 273 square feet of site lot area per dwelling unit is proposed (compared to the existing 1,089 square feet of site area per unit established by the existing PWD-1). The proposed maximum and minimum densities exceed those currently allowed by the Estuary Plan and would result in higher density development on the project site (presuming the existing PWD-1 land use classification would be amended to explicitly permit residential use). Therefore, the proposed residential density is not consistent with the existing development standards in the Estuary Plan.

Zoning Regulations

In an effort to provide a comprehensive and internally-consistent set of regulations that support the project and the desired character of the Oak to Ninth Project site, the project sponsor seeks to amend the Oakland Planning Code to add a new zoning district and associated regulations to be known as the "Planned Waterfront Zoning District" (PWD-1). The Oakland General Plan and Zoning Map would also require an amendment to conform to the PWD-1 District within the geographic area of the project site.[20] **Table IV.A-1** summarizes the draft PWD-1 Zone Regulations, which include specific regulations to facilitate the development of an integrated

[19] The project sponsor proposes a new zoning district referred to as "Planned Waterfront Zoning District (PWD-1)" (see Table IV.A-1) and proposes amendments to the existing Planned Waterfront Development Estuary Plan land use classification consistent with the standards prescribed in the proposed zoning district.

[20] The PWD-1 Zoning District would not apply to the Fifth Avenue Point outparcels or the Oak-to-Ninth District north of Embarcadero, neither of which are part of the project site.

mixed-use community with both public and private open space.. The draft PWD-1 Zone Regulations are proposed to establish the following:

(1) Land use regulations (setting forth the allowable and prohibited activities); Development standards (establishing the minimum and maximum density levels, height restrictions, requirements for building frontage, public open space (including extending the bay trail), parking/loading, and signage);

(2) Design guidelines (defining design parameters such as architectural character, building massing and articulation, exterior features, lighting, materials and colors, and landscape areas); and

(3) Submittal and review procedures that must be satisfied (including submittal of preliminary and final development plans and final design review) prior to development of a particular development area.

The identified conflicts with existing land use policies would not in and of themselves directly result in physical change in the environment that is not analyzed in this EIR. However, inconsistencies with the Estuary Plan land use classification, development standards, and the Zoning Regulations would constitute potential environmental change and result in physical effects since these standards guide the type, amount, mass, location, and intensity of development that could occur. Implementation of the following mitigation measures would eliminate these potentially-significant impacts:

Mitigation Measure A.2a: The project sponsor shall apply for and obtain City approval for a General Plan Amendment to the Planned Waterfront Development-1 land use classification in the Estuary Policy Plan to 1) include residential as a permitted land use, 2) incorporate the density, FAR, and the other land use and development standards (as appropriate to include in the General Plan) outlined in the proposed Planned Water Development-1 Zone, and 3) explicitly state the intended treatment of the Ninth Avenue Terminal. If approved, the General Plan Amendment would eliminate the project's inconsistency with the Estuary Policy Plan.

Mitigation Measure A.2b: The project sponsor shall apply for and obtain City approval for an amendment to the Oakland Planning Code to add the "Planned Waterfront Zoning District" (PWD-1) and associated regulations, and to amend the Oakland General Plan and Zoning Map to apply the PWD-1 Zone to the geographic area of the project site. The project would be required to adhere to the PWD-1 Zone district regulations, development standards, design guidelines, and other requirements, including allowable uses, requirements for open space, streets, building heights, maximum densities, maximum commercial space, and parking. If approved, the change in zoning from the existing industrial (M-40 Zone) and special (S-2/S-4 Zone) districts to the PWD-1 Zone district would eliminate the project's inconsistencies with the existing zoning as well as any zoning inconsistency with the General Plan.

Significant after Mitigation: Less than Significant

TABLE IV.A-1

SUMMARY OF DEVELOPMENT STANDARDS
PLANNED WATERFRONT ZONING DISTRICT (PWD-1)

	Development Parcels or Areas														
Standard	**Ninth Avenue Term.**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**	**K**	**L**	**M**	**N**	**Total**
Parcel Area (net acres)		2.74	1.53	1.48	1.46	1.2	1.49	2.72	2.08	1.84	2.23	1.45	2.65	2.41	25.28
Number of dwelling units (1)		375	160	160	160	86	164	280	335	292	310	144	334	300	3100
Number dwelling units/net acre		137	105	108	110	72	110	103	161	159	139	99	126	124	Average 122.5
Non-residential square feet (commercial/civic)	18,000	10,000	6,000	6,000	6,000	8,000	5,000	42,000	35,000	12,000	17,000	15,000	5,000	15,000	200,000
Height Limit (2) Minimum/Maximum	> >	86-240'	86-120'	86-120'	86-120'	86-120'	86-120'	86-120'	65-240'	65-240'	40-240'	65-120'	86-240'	86-240'	
Required off-street parking for residential uses (3) (1 space/unit)		375	160	160	160	86	164	280	335	292	310	144	334	300	3100
Required off-street parking for commercial uses (1 space/ 500 s.f.)															400
Required off-street parking for marinas (1 space / 5 boat slips															34

1) These are the estimated number of dwelling units that are likely to be constructed on each parcel. The number of dwelling units per parcel can increase or decrease provided that the total number of dwelling units does not exceed 3,100 for the entire Oak to 9th Development Project and the average density does not exceed 122.5 dwelling units/net acre.
2) Height Limits may vary within each parcel if there is more than one building constructed per parcel. Also if there is an exchange of density among parcels, the height of structures can be increased as a result of the increased density, but the structures cannot exceed 120 feet. the heights of the 240-foot towers cannot be increased as a result of increased density.
3) A reduction in parking may be permitted for certain types of housing projects, subject to certain requirements, as per sec. 17.116.110

Land Use Compatibility / Change in Environment

Impact A.3: The project would introduce new land uses, residential densities, and large building masses, forms, and significant height to the project site. The project may likely increase noise, light and glare, and traffic, and that may reduce or eliminate existing views from public vantage points. As a result, the project would result in a substantial change in existing environment and existing land uses. (Potentially Significant)

The project would convert the existing mix of industrial, manufacturing, storage and boat-related repair/service, wholesale and retail sales uses into a mixed-use neighborhood with residential, commercial/retail, open space, and marina uses. Nearby land uses that would remain include The Landing and Portobello residential developments, hotel and marina uses, and the manufacturing, work-live, artisan studios, and service uses in Fifth Avenue Point. Although the proposed mixed-neighborhood and other aspects of the project (removal of manufacturing and truck-related uses in proximity to existing residential uses; introduction of new public open space; site remediation, etc.) would likely alleviate certain land use conflicts that currently exist between the project site and the immediately surrounding area, the higher-density development that is proposed would represent a substantial change in environment and physical environmental impacts. To the extent that the project may result in a physical change to the environment and result in significant environmental effects, those effects have been identified and fully analyzed in relevant topical sections of Chapter IV and reduced to less than significant, where feasible. These include increased traffic; increased activity as a result of more population on the site; increased noise (due to increased traffic); increased light and glare from interior and exterior lighting; decreased solar access to adjacent work-live uses and some loss of existing views from public vantage points.

Regarding other aspects of land use compatibility, new land uses and physical development would substantially change the character of the project area from existing conditions and those envisioned in the Estuary Policy Plan. Compared to the Estuary Plan in particular, new buildings would be developed in a more closely-configured pattern; Fifth Avenue Point would not be integrated into the new land uses (notwithstanding Mitigation Measure A.1); new open space areas would be more focused toward the waterfront than toward the Embarcadero (as shown in **Figure V-1** or **Appendix F**); land uses would include high-density residential with local retail/commercial use; and the overall character of the site would be less oriented toward community uses, except for the provision of public open space, marinas, and community uses in the retained Ninth Avenue Terminal Bulkhead Building.

Implementation of the following mitigation measures would effectively reduce the potentially significant impact of the project on land use compatibility on change in environment.

Mitigation Measure A.3a: The project sponsor shall implement all mitigation measures identified throughout this EIR to address the significant physical impacts associated with the environmental changes that would occur as a result of the project, reducing each impact to less than significant, where feasible.

Mitigation Measure A.3b: The project sponsor shall implement the specific regulations and standards of the proposed Planned Waterfront Zoning District (consistent with Mitigation Measures A.1 and A.2b), if approved. To specifically address the physical impacts resulting from the change in land use and environment in proximity to Fifth Avenue Point and adjacent residential development, the project shall adhere to the regulations and standards for allowable uses, open space, streets, setbacks, building heights and upper-story stepbacks, maximum densities, maximum commercial space, pedestrian and bicycle access, and landscaping and buffering.

Implementation of Mitigation Measure A.3b would reduce some existing and future potential land use compatibility impacts by restricting industrial and manufacturing uses; requiring minimum public and private open space; establishing minimum building setbacks, heights, landscaping, and buffering near residential and other sensitive uses; requiring upper-story setbacks around Clinton Basin; limiting the number of residential units and commercial square footage on each development parcel; requiring minimal "active" ground-floor building activities; and limiting surface and visible ground-floor parking.

Significant after Mitigation: Less than Significant

Conflict with Habitat Conservation Plan / Natural Community Conservation Plan

Impact A.4: The project would not conflict with an applicable habitat conservation plan or natural community conservation plan. (Less than Significant)

The Clinton Basin Wetland Restoration and Enhancement Project, previously implemented by the Port of Oakland, exists at the southwest edge of the mouth of Clinton Basin. As discussed in detail in Section IV.I, Biological Resources, construction activities required for the project may adversely affect the restored area, a significant impact (Impact I.2). Mitigation Measure I.2b (Wetland Avoidance) includes specific measures to reduce this potential impact to less than significant. Also, as addressed in the discussion of the project's consistency with Estuary Plan Policies (see Setting), the project proposes shoreline improvements that would create new vegetated shoreline embankments and marsh habitat along the project site, particularly west of Clinton Basin.

Significant after Mitigation: Less than Significant

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B. Transportation, Circulation, and Parking [1]

Setting

Existing Street and Highway System [2]

The project study area is served by regional and local roadways, as described below.[3]

Regional Access

Interstate 880 (I-880) is an eight-lane freeway that runs in the north-south direction between I-80 near the Bay Bridge and San Jose. Given the location of the project site, it is expected that much of the project traffic would access the site from I-880. Residents of this project could use I-880 to travel to/from eastern Alameda and Contra Costa County, San Francisco (via the Bay Bridge), the Tri-Valley (via State Route 238 and I-580), and the South Bay. Interchanges in the project study area include the Broadway / Jackson Street and Oak Street ramps that connect to 5th and 6th Street, and direct connections to the project site near 6th Avenue, 10th Avenue, and 16th Avenue.

Interstate 980 (I-980) is an east-west eight-lane freeway that connects State Route 24 to I-580 and I-880, with several interchanges in the City of Oakland (including at 11th Street and 12th Street).

Interstate 580 (I-580) is an eight-lane freeway that runs both north-south and east-west between I-80 near the Bay Bridge and the Tri-Valley area, and north-south between I-80 and Richmond. The interchange in the study area is at Lakeshore Avenue.

State Route 260 (SR 260) is a six-lane freeway (three lanes in each directional tunnel) that connects the cities of Alameda and Oakland through the Posey & Webster tubes. The Posey-Webster Tubes are linked to the freeway via local surface streets in downtown Oakland, in particular, Webster, Harrison, and 7th Streets.

The Alameda County Congestion Management Agency (ACCMA) conducts periodic monitoring of the freeways and major roadways in Alameda County. Its latest report was released in September 2004. The monitoring assesses existing operating conditions on freeway segments through “floating car” travel time surveys during the PM peak hours, rather than analyzing volume capacity, which is how future operating conditions are assessed. These travel time surveys are also conducted on selected freeway segments during the AM peak hours. Based on the results of these surveys, ACCMA assigns a Level of Service (LOS) grade (from LOS A to LOS F) according to the 1985 *Highway Capacity Manual* (TRB, 1985). Any segment with an average speed less than 30 miles per hour is assigned LOS F.

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1 This EIR section was prepared on the basis of information and analysis findings contained a technical resource document (Fehr & Peers Transportation Consultants, *Oak to Ninth Project Final Traffic Study*, August 26, 2005), which was critically reviewed and amended, as appropriate, by the EIR consultant and City of Oakland staff.

2 For the purposes of this study, Interstate 880, Embarcadero, and other parallel roadways are assumed to be oriented north-south. Other roadways, such as Harrison Street, Broadway, and 5th Avenue are assumed to be oriented east-west.

3 A screening process, described on page IV.B-6, was used to identify a project study area that adequately covers the potential project-generated traffic impacts.

The travel time surveys concluded that 15 freeway segments within Alameda County operated at LOS F during the PM peak hours. Of the 15 deficient freeway segments, the following six were located in the City of Oakland:

- I-80 Westbound: Toll Plaza to San Francisco County Line
- I-80 Westbound: I-580 Split to the Toll Plaza [4]
- I-580 Eastbound: Harrison Street to State Route 13 (SR 13)
- I-880 Southbound: I-980 to 23rd Avenue
- SR 13 Northbound: Moraga Avenue to Hiller Drive
- SR 13/SR 24 Interchange: freeway-to-freeway ramp from SR 13 Northbound to SR 24 Eastbound [4]

The ACCMA also monitors some regional roadways during the AM peak hours (though not to determine CMP conformity findings), and the following three freeway segments in the City of Oakland were identified in the 2004 LOS monitoring study as operating at LOS F during the AM peak hours:

- I-80 Westbound: Toll Plaza to San Francisco County Line
- I-80 Westbound: I-580 Split to the Toll Plaza
- I-880 Northbound: I-980 to I-880/I-80 Merge

Local Access

Key local roadways that provide access to the project site are described below.

Embarcadero, which fronts on the project site, runs in the north-south direction along the Oakland Inner Harbor waterway. It is generally a two-lane surface street, with several four-lane segments. Along the project site frontage, the roadway is currently two lanes. It is the primary access route to Jack London Square and the Oakland/Alameda Ferry, and is a possible access route to downtown Oakland. South of Oak Street, Embarcadero is a signed bike route.

5th Avenue is a roadway that would likely serve as a primary project access route. It is striped for two lanes, but the pavement is wide enough to be a four-lane roadway (vehicles have been observed traveling past other vehicles waiting to make a left turn at an intersection. 5th Avenue intersects 7th Street, 12th Street, International Boulevard, and Foothill Boulevard, and extends eastward from the project site past Embarcadero while extending through the project study area past Foothill Boulevard.

14th Avenue is an east-west four-lane roadway extends from 8th Street, north of I-880 to I-580, and intersects with East 12th Street, International Boulevard, and Foothill Boulevard. *23rd Avenue* parallels 14th Avenue and intersects with East 12th Street north of I-880 and extends to I-580, connecting to East 12th Street, International Boulevard, and Foothill Boulevard.

Lakeshore Avenue runs along the south side of Lake Merritt and extends from International Boulevard to east of I-580. The roadway has four travel lanes (two in each direction). *1st Avenue*

[4] This roadway segment operated at LOS F during the 1991 CMP baseline year, and is therefore "grandfathered" from CMP requirements for preparation of a deficiency plan. See Appendix C for more information.

is an east-west roadway that parallels Lakeshore Avenue east of Lake Merritt. It extends from 12th Street to Foothill Boulevard and connects with Lakeshore Avenue north of Foothill Boulevard.

Grand Avenue/West Grand Avenue is a four-lane roadway extending from I-580 to Lake Merritt and then through downtown to the Oakland Army Base.

Foothill Boulevard begins at the intersection with MacArthur Boulevard at 73rd Avenue and continues north until it intersects with the south bank of Lake Merritt. It is one-way and provides two lanes in the northbound direction from 14th Avenue to Lake Merritt, and is bidirectional with two lanes in each direction between 14th Avenue to MacArthur/73rd..

12th Street is a three-lane one-way street in the northbound direction in the downtown area. Just east of Lake Merritt, it becomes a four-lane bidirectional street. *East 18th Street* begins at Lakeshore Avenue on the southeast bank of Lake Merritt as a bidirectional street with four lanes; it terminates at 14th Avenue.

7th Street is a one-way street with three travel lanes in the southbound direction, north of Oak Street. It joins with 8th Street to become a bidirectional street east of Oak Street. *8th Street* is a discontinuous street; with three one-way travel lanes in the northbound direction north of Oak Street, becoming a bidirectional street as a continuation of 7th Street at 5th Avenue.

Other local streets near the proposed project include 5th Street, 6th Street, Broadway, Webster Street, Harrison Street, Jackson Street, Madison Street, and Oak Street in downtown Oakland.

5th and 6th Streets are a one-way couplet adjacent to I-880, merging onto the freeway near Laney College. *Broadway* begins west of Embarcadero and extends east through the City of Oakland; it also serves as a major transit corridor for AC Transit buses. *Webster Street* runs parallel to Broadway and connects the City of Oakland with the City of Alameda through the Webster Tube. *Harrison Street* parallels Webster Street and connects the City of Alameda to the City of Oakland through the Posey Tube. *Jackson Street* runs between Lake Merritt and the Jack London District through Chinatown, terminating at the Amtrak station platform; the southbound off-ramp from I-980 and northbound on-ramp to I-880 and I-980 meet Jackson Street at 5th and 6th Streets, respectively. *Madison Street* extends eastward from Embarcadero to Lakeside Drive through the eastern downtown area. *Oak Street* is an east-west roadway extending from Embarcadero to Lake Merritt; the intersections of Oak Street at 5th and 6th Streets provide access for I-880 (southbound on-ramp at 5th Street, and northbound off-ramp at 6th Street).

Existing Traffic Conditions

The traffic conditions in urban areas are affected more by the operations at the intersections than by the capacities of the local streets because traffic control devices (signals and stop signs) at intersections control the capacity of the street segments. The operations are measured in terms of a grading system called Level of Service (LOS), which is based on average vehicle delay experienced at the intersections. That delay is a function of the signal timing, intersection lane

widths and configuration, hourly traffic volumes, pedestrian volumes, and parking and bus conflicts. Recent AM and PM peak-hour traffic counts conducted in May and June 2004 were used for the analysis. Data concerning the existing intersection configurations and control were collected in the field. Existing traffic signal timing data was collected for all of the signalized study intersections (44 of the total 52) from the City of Oakland Public Works Agency and other agencies, and then compared against the actual conditions at each study intersection to verify accuracy.

Level of Service Analysis Methodologies

As described above, the operation of a local roadway network is commonly measured and described using an LOS grading system, which qualitatively characterizes traffic conditions associated with varying levels of vehicle traffic, ranging from LOS A (indicating free-flow traffic conditions with little or no delay experienced by motorists) to LOS F (indicating congested conditions where traffic flows exceed design capacity and result in long queues and delays). This LOS grading system applies to both signalized and unsignalized intersections. LOS A, B, and C are generally considered satisfactory service levels, while the influence of congestion becomes more noticeable (though still considered acceptable) at LOS D. LOS E and F are generally considered to be unacceptable, though some jurisdictions (like the City of Oakland) consider LOS E to be acceptable in certain areas (like a downtown central business district) in recognition of the positive effect of traffic congestion in promoting the use of transit or other methods of travel.[5]

Signalized Intersections

At the signalized study intersections, traffic conditions were evaluated using the 2000 *Highway Capacity Manual* operations methodology (TRB, 2000). The operation analysis uses various intersection characteristics (e.g., traffic volumes, lane geometry, and signal phasing/timing) to estimate the average control delay experienced by motorists traveling through an intersection.[6] **Table IV.B-1** summarizes the relationship between control delay and LOS.

Unsignalized Intersections

For the unsignalized (all-way stop-controlled and side-street stop-controlled) study intersections, traffic conditions were evaluated using the 2000 *Highway Capacity Manual* (HCM) operations methodology. With this methodology, the LOS is related to the total delay per vehicle for the intersection as a whole (for all-way stop-controlled intersections), and for each stop-controlled movement or approach only (for side-street stop-controlled intersections). Total delay is defined

5 City of Oakland, General Plan Land Use and Transportation Element, Policy T3.3 (Allowing Congestion Downtown).

6 Control delay, which is the portion of total delay attributed to traffic signal operation for signalized intersections, includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The use of control delay as the basis for defining LOS differs from earlier versions of the *Highway Capacity Manual* methodology, which used “stopped delay” (i.e., a portion of the total control delay) to define LOS.

TABLE IV.B-1

DEFINITIONS FOR INTERSECTION LEVEL OF SERVICE

Unsignalized Intersections		Level of Service Grade	Signalized Intersections	
Description	**Average Total Vehicle Delay (Seconds)**		**Average Control Vehicle Delay (Seconds)**	**Description**
No delay for stop-controlled approaches.	≤10.0	A	≤10.0	Free Flow or Insignificant Delays: Operations with very low delay, when signal progression is extremely favorable and most vehicles arrive during the green light phase. Most vehicles do not stop at all.
Operations with minor delay.	>10.0 and ≤15.0	B	>10.0 and ≤20.0	Stable Operation or Minimal Delays: Generally occurs with good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average delay. An occasional approach phase is fully utilized.
Operations with moderate delays.	>15.0 and ≤25.0	C	>20.0 and ≤35.0	Stable Operation or Acceptable Delays: Higher delays resulting from fair signal progression and/or longer cycle lengths. Drivers begin having to wait through more than one red light. Most drivers feel somewhat restricted.
Operations with increasingly unacceptable delays.	>25.0 and ≤35.0	D	>35.0 and ≤55.0	Approaching Unstable or Tolerable Delays: Influence of congestion becomes more noticeable. Longer delays result from unfavorable signal progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop. Drivers may have to wait through more than one red light. Queues may develop, but dissipate rapidly, without excessive delays.
Operations with high delays, and long queues.	>35.0 and ≤50.0	E	>55.0 and ≤80.0	Unstable Operation or Significant Delays: Considered to be the limit of acceptable delay. High delays indicate poor signal progression, long cycle lengths and high volume to capacity ratios. Individual cycle failures are frequent occurrences. Vehicles may wait through several signal cycles. Long queues form upstream from intersection.
Operations with extreme congestion, and with very high delays and long queues unacceptable to most drivers.	>50.0	F	>80.0	Forced Flow or Excessive Delays: Occurs with oversaturation when flows exceed the intersection capacity. Represents jammed conditions. Many cycle failures. Queues may block upstream intersections.

SOURCE: Transportation Research Board, Special Report 209, *Highway Capacity Manual*, updated 2000.

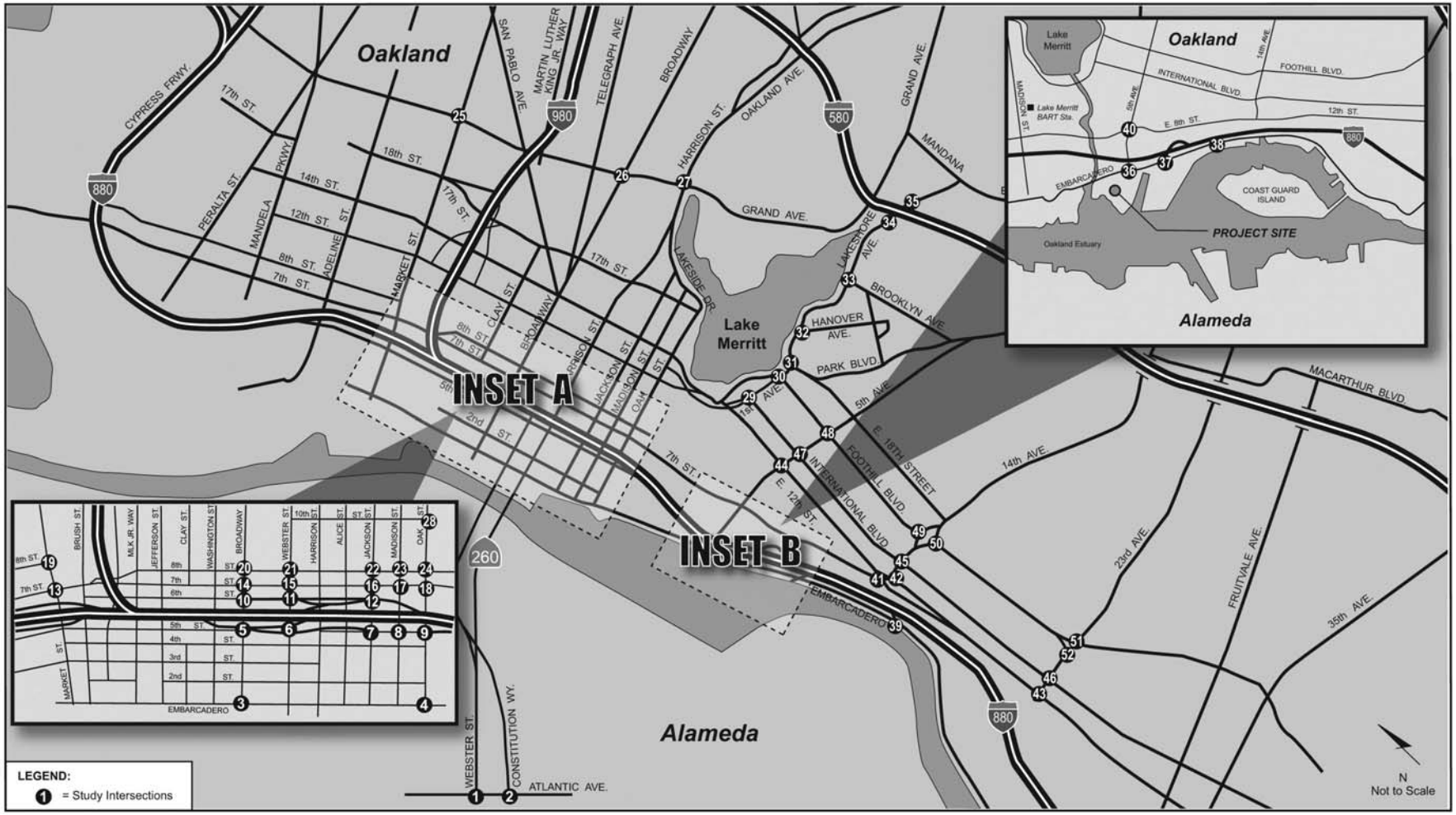
as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. This time includes the time required for a vehicle to travel from the last-in-queue position to the first-in-queue position. **Table IV.B-1** summarizes the relationship between delay and LOS.

Existing Traffic Operating Conditions

Analysis of peak-hour traffic conditions was conducted at 52 intersections in the project vicinity (listed below and shown in **Figure IV.B-1**).

1. Atlantic and Webster Street (Alameda)
2. Atlantic and Constitution Way (Alameda)
3. Embarcadero and Broadway
4. Embarcadero and Oak Street
5. 5th Street and Broadway
6. 5th Street and Webster Street
7. 5th Street and Jackson Street
8. 5th Street and Madison Street
9. 5th Street and Oak Street
10. 6th Street and Broadway
11. 6th Street and Webster Street
12. 6th Street and Jackson Street
13. 7th Street and Market Street
14. 7th Street and Broadway
15. 7th Street and Webster Street
16. 7th Street and Jackson Street
17. 7th Street and Madison Street
18. 7th Street and Oak Street
19. 8th Street and Market Street
20. 8th Street and Broadway
21. 8th Street and Webster Street
22. 8th Street and Jackson Street
23. 8th Street and Madison Street
24. 8th Street and Oak Street
25. West Grand Avenue and Market Street
26. West Grand Avenue and Broadway
27. West Grand Avenue and Harrison Street
28. 10th Street and Oak Street
29. 1st Avenue and International Boulevard
30. Lakeshore Avenue and Foothill Boulevard
31. Lakeshore Avenue and East 18th Street
32. Lakeshore Avenue and Hanover Avenue
33. Lakeshore Avenue and Brooklyn Avenue
34. Lakeshore Avenue and MacArthur Blvd.
35. Lakeshore Avenue and Lake Park Avenue
36. Embarcadero and 5th Avenue
37. Embarcadero and I-880 NB Off-Ramp
38. Embarcadero and I-880 SB On-Ramp
39. Embarcadero and I-880 SB Off-Ramp
40. 5th Avenue and 7th/8th Streets
41. 14th Avenue and 7th St./12th St. (SB)
42. 14th Avenue and East 12th Street (NB)
43. East 12th Street and 23rd Avenue
44. East 12th Street and 5th Avenue
45. International Boulevard and 14th Avenue
46. International Boulevard and 23rd Avenue
47. International Boulevard and 5th Avenue
48. Foothill Boulevard and 5th Avenue
49. Foothill Boulevard and 14th Avenue (WB)
50. Foothill Boulevard and 14th Avenue (EB)
51. Foothill Boulevard and 23rd Avenue
52. 16th Street and 23rd Avenue

These intersections were selected because they represent locations along major routes to and from the project site. A screening process, based on the travel patterns from the regional travel demand model, was used to identify the analysis intersections. The trip distribution patterns used to establish the general flow of project traffic through the surrounding intersections were generated by comparing a “without project” baseline forecast to a project forecast. This screening process was used to identify a project study area that adequately covers the potential project-generated traffic impacts. Travel time surveys were conducted to fine-tune the selection process. Study



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

Figure IV.B-1
Project Study Intersections

intersections #41 and #42, as well as #49 and #50, were analyzed as separate locations because of the intersection configuration at 14th Avenue / East 12th Street, and Foothill Boulevard / 14th Avenue, respectively.

The existing AM and PM peak-hour intersection LOS and delays are summarized in **Table IV.B-2**; the existing peak-hour traffic volumes, and lane configurations are shown in **Appendix C**. Most intersections in the project area operate with minimal average delay (i.e., at LOS C or better). The following intersections, however, operate at LOS E or F during the peak traffic hours:

5. 5th Street & Broadway (and I-880 Eastbound On-Ramp) - LOS F, PM Peak Hour
21. 8th Street & Webster Street – LOS E, PM Peak Hour
34. Lakeshore Avenue & MacArthur Boulevard - LOS E, PM Peak Hour
36. Embarcadero & 5th Avenue - LOS F, AM & PM Peak Hour

Field observations of existing intersection operations support the analysis conclusions that intersections #5, #34, and #36 are performing at unacceptable levels, and that while 8th and Webster Streets is operating acceptably (per City standards for downtown intersections), conditions are constrained (at minimally acceptable LOS E) during the PM peak hour. Field observations and the results of previous studies verified that the LOS F assigned to the 5th Street / Broadway / I-880 Eastbound On-Ramp intersection during the PM peak hour is valid. The traffic analysis for the *Jack London Square Redevelopment EIR* concluded that this intersection was operating at LOS F in the existing conditions analysis (City of Oakland, 2004). Subsequent field visits for this EIR analysis confirmed that the main factor contributing to deficient operations at this location is the volume on 5th Street, which accumulates prior to entering the Webster Tube.

A field visit also validated that the intersection of Lakeshore Avenue / MacArthur Boulevard operates deficiently. The poor conditions at this intersection can be attributed to the proximity of the adjacent intersections and the limitations imposed by the I-580 structure. One main factor that impedes operation of this intersection is the inability of vehicles to turn left from MacArthur onto Lakeshore Avenue traveling eastbound from the City of Oakland. There is only enough storage for four or five vehicles in this eastbound left-turn lane at the Lakeshore Avenue / Lake Park intersection. When this left-turn movement backs up, vehicles are unable to turn left from MacArthur Boulevard onto Lakeshore Avenue. Sometimes, queuing extends back through the intersection and blocks the left-turn lanes on MacArthur Boulevard. These conditions were verified and documented on a videotape of the intersection operation filmed in January 2005.

The Embarcadero/5th Avenue intersection operates under stop sign control on three approaches; vehicles traveling northbound and southbound on Embarcadero are required to stop, while those traveling westbound towards the water along 5th Avenue do not. The heavy eastbound traffic flow (about 500 vehicles during each peak hour) is forced to stop and can often experience long delays.

Under optimum conditions, the intersection of Jackson/6th Streets operates at LOS C or better during the peak traffic hours. However, there are a number of factors that impede the flow of

TABLE IV.B-2

EXISTING INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

No.	Intersection	Traffic Control	Existing AM		Existing PM	
			LOS	Delay	LOS	Delay
#1	Atlantic & Webster (Alameda)	Signal	C	28.2	C	30.2
#2	Atlantic & Constitution (Alameda)	Signal	C	27.9	C	27.0
#3	Embarcadero & Broadway	All-Way Stop	A	8.0	A	9.5
#4	Embarcadero & Oak Street	Side Street Stop	B	13.3	C	16.0
#5	5th Street & Broadway	Signal	C	30.2	F	* [a]
#6	5th Street & Webster Street	Side Street Stop	A	9.4	A	9.3
#7	5th Street & Jackson Street	Signal	B	11.1	B	10.3
#8	5th Street & Madison Street	Signal	A	8.2	B	10.7
#9	5th Street & Oak Street	Signal	B	12.4	B	12.5
#10	6th Street & Broadway	Signal	C	22.2	B	19.8
#11	6th Street & Webster Street	Side Street Stop	A	9.5	A	9.2
#12	6th Street & Jackson Street	Signal	C	* [b]	C	* [b]
#13	7th Street & Market Street	Signal	B	12.0	B	12.3
#14	7th Street & Broadway	Signal	B	12.8	B	16.6
#15	7th Street & Webster Street	Signal	A	8.7	B	11.4
#16	7th Street & Jackson Street	Signal	B	11.0	B	11.9
#17	7th Street & Madison Street	Signal	B	12.9	B	14.3
#18	7th Street & Oak Street	Signal	B	12.5	B	14.0
#19	8th Street & Market Street	Signal	A	9.1	B	10.9
#20	8th Street & Broadway	Signal	B	11.4	B	11.8
#21	8th Street & Webster Street	Signal	C	28.1	E	* [b]
#22	8th Street & Jackson Street	Signal	B	16.5	B	14.2
#23	8th Street & Madison Street	Signal	A	8.9	A	9.4
#24	8th Street & Oak Street	Signal	B	16.6	B	16.0
#25	West Grand Avenue & Market Street	Signal	B	12.9	B	14.7
#26	West Grand Avenue & Broadway	Signal	B	15.5	B	17.4
#27	West Grand Avenue & Harrison Street	Signal	C	31.2	C	29.2
#28	10th Street & Oak Street	Signal	A	9.4	A	9.6
#29	1st Avenue & International Boulevard	Signal	B	16.9	B	13.4
#30	Lakeshore Avenue & Foothill Blvd	Signal	C	25.5	B	12.9
#31	Lakeshore Avenue & East 18th Street	Signal	B	13.5	C	27.5
#32	Lakeshore Avenue & Hanover Ave.	Signal	A	7.0	A	6.1
#33	Lakeshore Avenue & Brooklyn Ave.	Signal	A	7.0	A	5.8
#34	Lakeshore Avenue & MacArthur Blvd	Signal	C	23.6	E	66.9
#35	Lakeshore Avenue & Lake Park Ave.	Signal	D	35.2	D	35.5
#36	Embarcadero & 5th Avenue	Side Street Stop	F	54.0	F	>70
#37	Embarcadero & I-880 NB Off-Ramp	Side Street Stop	B	12.3	B	14.2
#38	Embarcadero & I-880 SB On-Ramp	All-Way Stop	B	10.3	B	13.5
#39	Embarcadero & I-880 SB Off-Ramp	Side Street Stop	B	12.9	B	11.7

(*Continued*)

TABLE IV.B-2 (continued)

EXISTING INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

No.	Intersection	Traffic Control	Existing AM		Existing PM	
			LOS	Delay	LOS	Delay
#40	5th Avenue & 7th/8th Streets	Signal	B	13.0	B	13.1
#41	14th Avenue & 7th St./12th St. (SB)	Signal	C	22.4	C	24.6
#42	14th Avenue & East 12th St. (NB)	Signal	B	12.3	B	10.1
#43	East 12th Street & 23rd Avenue	Signal	B	12.9	B	12.3
#44	East 12th Street & 5th Avenue	Signal	B	12.9	B	13.9
#45	International Boulevard & 14th Ave.	Signal	B	11.3	B	12.9
#46	International Boulevard & 23rd Ave.	Signal	B	12.4	B	11.7
#47	International Boulevard & 5th Ave.	Signal	B	13.4	B	12.8
#48	Foothill Boulevard & 5th Avenue	Signal	B	11.2	B	16.1
#49	Foothill Boulevard & 14th Ave. (WB)	Signal	B	19.7	B	17.0
#50	Foothill Boulevard & 14th Ave. (EB)	Signal	C	23.9	C	22.0
#51	Foothill Boulevard & 23rd Avenue	Signal	B	16.8	B	13.2
#52	16th Street & 23rd Avenue	Signal	B	15.8	C	33.7

[a] See text on page IV.B-8 about how field observations show substantially worse LOS than calculated LOS under existing conditions.
[b] See text below about how field observations show worse LOS than calculated LOS under existing conditions.

Note: The LOS/Delay for Side-Street Stop-Control (SSSC) intersections represent the worst movement or approach; for Signalized and All-Way Stop-Control (AWSC) the LOS/Delay represent overall intersection.

SOURCE: Fehr & Peers Transportation Consultants

traffic through this intersection, most notably backups on the on-ramp caused by congestion on I-880 (which slows drivers from merging onto the freeway), but also congestion at adjacent intersections and inadequate storage for queued vehicles at the signal. Field observations during the peak traffic hours indicate that there are periods when drivers experience appreciable delays getting onto the on-ramp and the freeway. However, over the course of the full analysis hour, the creation and dissipation of delays results in the two-lane on-ramp generally having enough capacity to accommodate vehicles through the intersection at an acceptable level of service. On balance, the intersection of 6th and Jackson Streets is judged to currently operate no better than LOS C during the peak traffic hours.

Field observations of the Webster/8th intersection indicate that drivers experience delays and congestion, which is worse during the weekday PM peak hour. Major factors contributing to this congestion include parking activities on both sides of the roadway, imbalanced lane utilizations, and traffic signal phasing that includes a pedestrian “scramble phase” (during which drivers on all intersection approaches have to stop at a Red traffic light, and pedestrians may cross the streets in any direction without coming into conflict with vehicles), which reduces the Green time available for vehicles. On the basis of these field observations and analysis for the “Revive Chinatown” Community Transportation Plan, the intersection of 8th and Webster Streets is judged to currently operate at LOS E during the PM peak hour.

Transit Services

The transit services in the project vicinity include options such as AC Transit bus service, BART and Amtrak trains, and water transportation. Most of the transit services are concentrated along the Broadway corridor and in Jack London Square. Each of these services is described below.

Bus Service (AC Transit)

Local bus service in the study area is provided by AC Transit. While no routes directly serve the site, many pass in general proximity. The bus stops nearest to the site are located at the Lake Merritt BART station (about one mile away), and the Jack London Square Amtrak station (about 0.75 mile away). *Line 11 - Harrison* runs from 6:00 AM to 7:00 PM on weekdays, and 7:00 AM to 7:00 PM on weekends. The route runs from Fruitvale Avenue/Montana Street to Westlake Junior High School, with a stop at the Lake Merritt BART station. During the week, headways range from 20 to 30 minutes; weekend service headways are one hour. *Line 59 & 59A - Piedmont Avenue* connects the Lake Merritt and Rockridge BART stations. It runs from 6:00 AM to 7:00 PM on weekdays, and 8:00 AM to 7:00 PM on weekends, with one-hour headways every day. *Line 62 - San Antonio* runs between the West Oakland and Fruitvale BART stations. On both weekdays and weekends it runs from 6:00 AM to 12:30 AM on 30-minute headways. *Lines 72 - San Pablo Avenue and 72M - Macdonald* between the Amtrak station and the cities of San Pablo and Richmond, stopping at the El Cerrito Plaza and Richmond BART stations, as well as Contra Costa College. They run 24 hours daily, with 15- to 30-minute headways. *Line 88 - Market* runs between the Lake Merritt and North Berkeley BART stations. It runs daily from 5:30 AM to 12:30 AM, on 20-minute headways.

Rail Service (BART and Amtrak)

No rail transit service directly connects with the project site. Bay Area Rapid Transit (BART) trains provide regional transit connections throughout the East Bay and across the bay to San Francisco and beyond, but do not serve the project site directly. The closest BART station is Lake Merritt, about one mile away, which is served by the Richmond, Fremont, and Dublin/Pleasanton lines.

Amtrak provides passenger rail service at the Jack London Square station. This station is about 0.75 mile west of the project site. Several lines use this station, including the Capital Corridor (to Reno, Nevada, via Sacramento), the San Joaquin (to Bakersfield via Fresno), and the Coast Starlight (between Seattle and Los Angeles).

Ferry Service

Ferry service is available from Jack London Square to Alameda, Angel Island, SBC Park, and San Francisco. The trip time to the San Francisco Ferry Building is 30 minutes; the trip time to San Francisco's Pier 41 is 45 minutes. Weekday service is provided by the City of Alameda/Port of Oakland and the Blue and Gold Fleet from 6:00 AM until 9:00 PM, with headways as low as 25 to 30 minutes during peak hours.

Bicycle / Pedestrian Network

Limited bicycle and pedestrian facilities are provided at the project site. Embarcadero is designated as a Class II facility along the project frontage.[7] Given the current industrial orientation of the project site, no sidewalks are provided on-site.

Within the general project area, some bicycle and pedestrian facilities are provided. These facilities were identified on the City of Oakland's Bicycle Map and verified through a field review, which included a bicycle tour of the project study area. Many of the study area roadways provide sidewalks on both sides. Some of the bicycle facilities include the following:

- The Bay Trail, which currently extends from Jack London Square to the Estuary Park along 2nd Street
- A Class I facility that extends from the Merritt Channel to 10th Street
- Lakeshore Avenue, which is a designated Class III facility
- Grand Avenue from Lake Merritt, which is a designated Class II facility
- Embarcadero, which is a designated Class II facility extending from Oak Street past the Coast Guard Island Bridge
- A Class I facility extending from Alice Street to Estuary Park along the waterfront
- Broadway, which is a designated bicycle route. From West MacArthur to 23rd Street, this is a Class II facility, and from 23rd Street to 2nd Street, it is a Class III facility

Transportation, Circulation, and Parking Impacts Discussion

Approach to Analysis

The transportation analysis was conducted for typical weekday AM and PM peak commute hour conditions at local intersections and on the regional roadway facilities. Those time periods are the most relevant for this analysis because traffic volumes are generally the highest during those periods, and therefore, traffic and circulation conditions during the weekday morning and evening commute hours are considered the most critical to evaluate in determining potentially significant impacts. In addition, standard traffic analytical tools focus on the weekday peak hours or multiple-hour peak periods. Localized peaks may occur during other periods of the day or on the weekends depending upon the adjacent land uses, such as schools or entertainment uses, but those instances do not represent the best overall condition against which to judge potential impacts associated with the proposed project. The same reasoning applies to analysis of transit impacts, which were likewise judged in the context of average weekday peak-hour conditions.

As described in Chapter III (Project Description), the proposed project would be developed in four major phases over a period of approximately 11 years. The first phase (Interim) is assumed to complete construction of parcels A, B, C, F, and G. Based on the construction schedule, only parcels A, F, and G are likely to be constructed by 2010, but this analysis presents a conservative view of the 2010 traffic conditions by assuming that the Interim project would include the first

[7] Class II Bicycle Lanes provide a dedicated area for bicyclists within the paved street width through the use of striping and appropriate signage; these facilities are typically 4 to 6 feet wide. Other bicycle classes are Class I Bicycle Paths (located off-street), and Class III Bicycle Routes (found along streets that do not provide sufficient width for dedicated bicycle lanes, with signs informing drivers to expect bicyclists).

five parcels that could be developed. The construction of the remaining parcels, including the marina, will likely occur prior to 2025. The 2010 horizon year was used for the short-term condition, and 2025 horizon year was used for the cumulative conditions, which is consistent with the horizon years of the ACCMA Countywide Travel Demand Forecasting Model at the time this analysis was prepared. The 2025 cumulative conditions examine both the total project impacts and the cumulative effect of the whole project with other future development. For the intersection analysis, the following conditions were assessed:

- Existing
- 2010 Short-term (Existing plus Approved Developments) without Project
- 2010 Short-term plus Phase 1 (*Interim Project*) project
- 2025 Cumulative without Project
- 2025 Cumulative with Project Buildout

This analysis approach provides a conservative assessment of impacts because as traffic increases year by year (tied to projected development), the baseline conditions (traffic volumes / levels of service) against which project impacts are judged worsen. If project buildout were to occur before 2025, traffic conditions (and project impacts) would be no worse than those presented in the EIR for 2025.

Significance Criteria

Intersection Peak-Hour Level of Service

The project would have a significant effect at analysis intersections if it would cause an increase in traffic that is substantial in relation to the baseline traffic load and capacity of the street system (i.e., result in a substantial increase in either the volume-to-capacity ratio on roads, or delay [congestion] at intersections), or change the condition of an existing street (i.e., street closures, changing direction of travel) in a manner that would have a substantial impact on access or traffic load and capacity of the street system. Specifically, the project would have a significant impact if it would:

- Cause the baseline level of service (LOS)[8] to degrade to worse than LOS D (i.e., LOS E or F) at a signalized intersection that is located *outside* the Downtown[9] area;

- Cause the total intersection average vehicle delay to increase by four or more seconds, or degrade to worse than LOS E (i.e., LOS F) at a signalized intersection *outside* the Downtown area where the baseline level of service is LOS E;

- Cause the baseline LOS to degrade to worse than LOS E (i.e., LOS F) at a signalized intersection that is located *within* the Downtown area;

8 LOS and delay are based on the 2000 *Highway Capacity Manual*, Transportation Research Board, National Research Council, 2000.

9 Downtown is defined in the Land Use Transportation Element of the General Plan (page 67) as the area generally bound by West Grand Avenue to the north, Lake Merritt and Channel Park to the east, the Oakland estuary to the south and I-980/Brush Street to the west. Thus, 29 of the analysis intersections are located outside the Downtown area, and the other 23 analysis intersections are located within the Downtown area.

- Cause an increase in the average vehicle delay for any of the critical movements of six seconds or more, or degrade to worse than LOS E (i.e., LOS F) at a signalized intersection *for all areas* where the baseline level of service is LOS E;

- At a signalized intersection *for all areas* where the baseline level of service is LOS F, cause:

  (a) The total intersection average vehicle delay to increase by two or more seconds,

  (b) An increase in average vehicle delay for any of the critical movements of four seconds or more, or

  (c) An increase in the volume-to-capacity ("v/c") ratio that exceeds three percent (but only if the delay values cannot be measured accurately);

- Add ten or more vehicles, and after project completion satisfy the Caltrans peak-hour volume warrant at an unsignalized intersection *for all areas*;

- Make a considerable contribution to cumulative impacts at intersections *for all areas* (the City of Oakland considers a project's contribution to cumulative impacts to be "considerable" when the project contributes five percent[10] or more of the cumulative traffic increase as measured by the difference between existing and cumulative [with project] conditions).

Roadway Segments

The project would have a significant effect on regional roadways if it would cause a roadway segment on the Metropolitan Transportation System to operate at LOS F or increase the v/c ratio by more than three percent for a roadway segment that would operate at LOS F without the project.[11] The roadway analysis uses the 2010 and 2025 baseline forecasts from the ACCMA Countywide Travel Demand Forecasting Model, which capture the cumulative effects of future growth on the regional roadways.

Transit

The project would have a significant effect on transit services if it would generate added transit ridership that would:

- Increase the average ridership on AC Transit lines by three percent at bus stops where the average load factor with the project in place would exceed 125 percent over a peak 30-minute period;

- Increase the peak-hour average ridership on BART by three percent where the passenger volume would exceed the standing capacity of BART trains; or

- Increase the peak-hour average ridership at a BART station by three percent where average waiting time at fare gates would exceed one minute.

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10 The five-percent threshold is based on the fact that day-to-day traffic volumes can fluctuate by as much as ten percent, and therefore a variation of five percent is unlikely to be perceptible to the average motorist.

11 LOS and delay are based on the *Highway Capacity Manual*, Transportation Research Board, National Research Council, 1985, as required by the Alameda County CMA.

Site Access and Circulation

The project would have a significant effect on the site access and circulation if it would increase traffic hazards to motor vehicles, bicycles, or pedestrians due to a design feature (e.g., sharp curves or dangerous intersections) that does not comply with Caltrans design standards (as defined by the latest edition of the *Caltrans Highway Design Manual*), or due to incompatible uses. For the purposes of this study, when Caltrans design standards were unavailable or unclear, then other documents, such as *A Policy on Geometric Design of Highways and Streets*, the *Manual of Uniform Traffic Control Devices* (MUTCD), and other design manuals, were used (AASHTO, 2001; FHWA, 2000).

In addition, the project would have a significant effect if the design of the project contains fewer than two emergency access routes for streets exceeding 600 feet in length. This criterion identifies roadways that are long cul-de-sacs as difficult for emergency vehicles to access, because if only one access point exists for a roadway, then an emergency vehicle's access to adjacent properties could potentially be obstructed and no alternate routes would be available.

Pedestrian Safety

The project would have a significant effect on pedestrian safety if it would substantially increase traffic hazards to pedestrians due to introduction of incompatible uses or to a design feature (e.g., sharp curves or dangerous intersections) that does not comply with Caltrans design standards.

Other Considerations

The project would have a significant effect on the environment if it would fundamentally conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Construction Period

The project would have a significant, though temporary, effect on the environment if it would result in interim significant impacts based on the criteria above during the construction period. For purposes of this analysis, the potential impacts resulting from phasing and staging of project construction, and cumulative construction, have been assessed.

Local Plans and Policies

Oakland General Plan policies and other applicable plans and policies that pertain to the topics addressed in this section, and that apply to the project, are listed in Appendix F. Key policies are identified and discussed in Section IV.A, Land Use, Plans, and Policies. General Plan policies that are also significance criteria or contain a regulatory threshold, which the project must meet, are addressed in this section.

Planned Roadway Improvements

A review of the available information indicates that numerous improvements are planned for all transportation modes in the study area, as described below. However, few of these improvements have finalized design plans and are fully funded. Improvements lacking final design and full funding are not available to mitigate any deficient conditions in either the No Project or With Project condition.

Freeway Improvements

I-880 Seismic Retrofit

As part of a comprehensive statewide program, the California Department of Transportation (Caltrans) is improving the seismic safety of various transportation facilities to limit damage during a major earthquake. One facility that has been selected for seismic upgrades is the section of I-880 adjacent to the project. This project, known as the I-880 Seismic Retrofit, involves the reconstruction of elevated sections of I-880. Concurrent with this improvement, an auxiliary lane would be added on I-880 in the southbound direction. Several outstanding issues exist relating to the design of the project, including how to address the existing Union Pacific Rail Road (UPRR) railroad tracks that are adjacent to I-880. Several options exist, including (a) Caltrans acquiring these tracks from UPRR, and (b) shifting the tracks and Embarcadero to the south.

I-880 Ramp System

With the completion of the Seismic Retrofit (which is currently expected by 2010), the existing ramp system will be maintained along I-880 adjacent to the project. Several proposals have been presented, each of which would involve modifications to the existing ramp system. A previous study by Korve Engineering for the Port of Oakland proposed moving the northbound off-ramp that currently connects to Embarcadero near 6th Avenue to 5th Avenue. Other proposed ramp improvements include a new northbound on-ramp from 5th Avenue, and the construction of a hook ramp system (for on- and off-ramps) at 10th Avenue. This EIR assumes that none of these ramp changes will be made because design plans have not been finalized, and funding is not available for these improvements.

Broadway/Jackson Interchange at I-880

Considerable efforts have also been made to improve operations at the Broadway/Jackson interchange at I-880. Phase I improvements would involve modifying the intersection at Broadway/5th Street and modifying the ramps at Jackson Street. The preliminary studies for Phase I improvements are complete, and the environmental process is still underway. Partial funding is available for these improvements. Phase II improvements would improve access to the Posey Tube from I-880 and I-980. This phase is being funded by the Alameda County Transportation Improvement Agency and is being managed by the City of Alameda. Funding is not available for the design and construction of Phase II at this time.

In summary, of the many proposed and planned freeway improvements in the project study area, the one that is currently funded and is most likely to be successfully implemented is the I-880 Seismic Retrofit, which would not substantially modify the freeway ramps as currently designed.

This improvement is assumed to be in place by 2010 in the traffic analysis. Other freeway capacity and interchange projects are not included in the analysis because design plans have not been finalized, and they are not fully funded.

Intersection Improvements

The number of funded intersection improvements in the project study area is also limited. One potential source of intersection improvements is the Jack London Square (JLS) Redevelopment project. The JLS EIR identified a number of improvements in the project study area that would be required to mitigate that project's traffic impacts. A list of intersection mitigation measures identified in the JLS Redevelopment EIR includes:

- Install traffic signals at Embarcadero / Oak Street (*Phase 1 mitigation*)
- Install traffic signals at Embarcadero / 5th Avenue (*Phase 1 mitigation*)
- Lane reconfiguration on the eastbound 3rd Street approach at the intersection of Broadway / 3rd Street (*Phase 1 mitigation*)
- Install traffic signals at Oak Street / 3rd Street (*Phase 1 mitigation*)
- Lane reconfiguration on the northbound Broadway approach at the intersection of Broadway / 5th Street (*Phase 1 mitigation*)
- Install traffic signals at Broadway / Embarcadero (*Project buildout mitigation*)
- Install traffic signals at Embarcadero / Webster Street (*Project buildout mitigation*)
- Install traffic signals at 3rd Street / Market Street (*Project buildout mitigation*)
- Optimize traffic signal timings at 5th Street / Market Street (*Project buildout mitigation*)
- Optimize traffic signal timings at 5th Street / Oak Street (*Project buildout mitigation*)
- Optimize traffic signal timings at 3rd Street / Broadway (*Project buildout mitigation*)
- Optimize traffic signal timings at 7th Street / Market Street (*Project buildout mitigation*)

Some of the above-cited improvements would benefit the Oak to Ninth project analyzed in this EIR. However, the exact timing of implementation of these improvements has not been established, and is tied to the timing of development of the JLS project. Therefore, for purposes of this analysis, none of the identified JLS mitigation measures are assumed to be in place. However, the discussion of mitigation measures for any intersection adversely affected by the Oak to Ninth project (under Impacts B.1, B.2, and B.3, below) includes references to the mitigation measures identified in the JLS Redevelopment EIR, and to opportunities for joint funding of improvements by projects in the area.

Transit Improvements

The major transit improvements being considered in the study area is a streetcar or trolley in Jack London Square, and a Bus Rapid Transit (BRT). Since 2003, BART has studied options for improved transit service within Jack London Square under a grant from Caltrans' Community-Based Transportation Planning Grant Program. This study effort has researched concepts such as an additional BART station within Jack London Square, shuttles, distinctive buses, and street cars. A final public meeting was held in December 2004, and the conceptual planning study was completed; no additional studies are anticipated at this time. The preliminary conclusions of the study were to study two possible streetcar routing alternatives. However, no dedicated funding is currently available for improved transit in the Jack London Square area. Because of the lack of

funding and the absence of finalized design plans, this EIR assumes that no additional transit service will be provided in the Jack London Square area.

In 2003, AC Transit published a Notice of Intent (NOI) and Notice of Preparation (NOP) related to an Environmental Impact Report (EIR) and Environmental Impact Statement (EIS) for a proposed transit system expansion along International Boulevard, which would extend from Berkeley to San Leandro. This transit system expansion would be in the form of Bus Rapid Transit (BRT). According to the American Public Transit Association, BRT combines the quality of rail transit and the flexibility of buses, operating on exclusive transit ways, High-Occupancy Vehicle lanes, expressways, or ordinary streets. A BRT system combines Intelligent Transportation Systems technology, priority for transit, rapid and convenient fare collection, and integration with land use policy in order to upgrade bus system performance. At this time, the EIR/EIS documents have not been published. It is anticipated that, should BRT service be funded for the International Boulevard corridor, there would be limited adverse effects on traffic operations at locations studied in this EIR for the following reasons:

- While the NOP notes that one of the alternatives to be studied would include “dedicated transit lanes within existing urban arterials, where practicable”, it has since been determined that such use of roadways in the East Lake area (including this EIR’s study area) is not practical due to the limited available street width. At the four study intersections where there is overlap between the proposed BRT service and this EIR analysis, International Boulevard has only four lanes (without turn lanes), which would further preclude the conversion of existing travel lanes to bus-only lanes.

- The levels of service at the four (of 52 total) study intersections in the BRT corridor are projected to be LOS C or better in 2025 after the addition of project-generated trips.

- International Boulevard would carry about one percent of project-generated trips.

There currently is not sufficient detail about the potential BRT project to analyze any potential impacts of that project within this EIR. Because of the absence of finalized design plans and assurance of full funding, this EIR assumes that the BRT will not be provided in the study area. It is noted that were the BRT to be successfully implemented, there would be a reduction in background traffic volumes along International Boulevard. Because the analysis presented in this EIR does not assume that the BRT is implemented, the results of this analysis are therefore conservative.

Bicycle/Pedestrian Improvements

The City of Oakland Bicycle Master Plan, as adopted in 1999, recommended several improvements to the bicycle and pedestrian facilities within the project study area, including:

- Converting the Class II facilities on Lakeshore Avenue to Class I configuration
- Adding Class II bicycle lanes on 5th Avenue, 14th Avenue, 14th Street, and Foothill Boulevard
- Designating several downtown streets as Class III bicycle routes

These improvements have not been designed, and are not fully funded at this time, and therefore, cannot be assumed to be in place for this EIR.

Vehicle Trip Generation

Project trip generation was estimated on the basis of information published by the Institute of Transportation Engineers (ITE, 2003; ITE, 2004a). The general process employed to estimate the project trip generation is as follows:

1. Categorize the project land uses into appropriate ITE categories
2. Identify trip generation rates and/or trip generation equations
3. Apply trip generation reductions
4. Apply internalization factors
5. Calculate trip generation

Land Use Categories

Various land use categories from ITE's *Trip Generation* were considered for use in estimating trip generation for the residential component of the project (ITE, 2003). The residential condominium / townhouse (Land Use [LU] Code 230) category was selected for use because the project units would be for sale. According to the ITE publication, this land use category should be used for "ownership units that have at least one other owned unit in the same building structure".

Estimation of trip generation for the proposed commercial uses does not fall as cleanly into a specific ITE category. The expected uses would vary between restaurants, convenience retail, neighborhood retail, specialty shops, and other uses. Given the lack of specificity and the expected variety, the most appropriate ITE category for most (170,000 square feet) of commercial uses on the site was judged to be Shopping Center (LU Code 820). The remaining commercial space (about 30,000 square feet) was categorized as Grocery Store (LU Code 850) because it is anticipated that a small grocery store would be constructed as part of the project.

Another component of the project is a marina. Land Use Code 420 (Marina) was applied to estimate the trip generation for this facility because that is the only category that can be applied. Trip generation for a marina is based on the number of berths.

Trip Generation Rates/Equations

Table IV.B-3 provides the trip generation rates and equations used in the analysis. For the condominium units, trip generation was estimated using fitted curve equations based on the number of units, as recommended by the *ITE Trip Generation Handbook* (ITE, 2004a). Trip generation for the commercial portion of the project was estimated using average rates for the AM peak hour and equations for the PM peak hour, again following the ITE recommendations.

TABLE IV.B-3

VEHICLE TRIP GENERATION RATES AND EQUATIONS

Land Use	Daily	AM Peak Hour	PM Peak Hour
Residential (*LU Code 230*)	Ln(T)=0.85*Ln(X) + 2.55	Ln(T)=0.80*Ln(X) + 0.26	Ln(T)=0.82*Ln(X) + 0.32
Commercial (*LU Code 820*)	Ln(T)=0.65*Ln(X) + 5.83	1.03*X	Ln(T)=0.66*Ln(X) + 3.40
Grocery Store (*LU Code 850*)	102.24*X	3.25*X	Ln(T)=0.79*Ln(X) + 3.20
Marina (*LU Code 420*)	T=1.89*X + 410.8	0.08*X	0.19*X

[a] "X" is the independent variable in the trip generation rate and equation and corresponds to dwelling units for Residential use; 1,000 square feet of floor area for commercial uses, and number of berths for marina use. "T" is the dependent variable and is the number of vehicle trips generated by the land use.

SOURCE: Institute of Transportation Engineers, *Trip Generation*, 7th Edition, 2003.

Existing Trip Reduction

A small portion of the project area (west portion of the Fifth Avenue artisans community, south of Embarcadero at the terminus of 5th Avenue) is expected to remain on the site for the foreseeable future through the construction of the project. Other existing uses on the project site would be removed as the project is developed. As documented by Hausrath Economic Group (HEG), approximately 231 employees work on the portion of the project site to be developed. The breakdown of these employees is as follows:

- 76 manufacturing
- 109 other
- 35 service
- 11 retail

That same memo also provides square footage of the existing buildings on the project site. A review of these building and use descriptions indicates that the site includes several unique uses, such as a discount furniture warehouse, a wholesale grocery store, storage areas for KTVU, a police office, various marine storage and repair facilities, a furniture retail operation, and other miscellaneous uses. According to the data provided by HEG, many of these uses operate in a less-intensive fashion, given the range of 600 to 3,000 square-foot area per employee. Spot traffic counts during field visits support this conclusion.

Given these considerations, trip generation for these uses was calculated based on the above-cited employee numbers, rather than building square footage. Employees classified as "other" by HEG were reassigned to two more-specific categories (light industrial and office) based on the employer's business name and the description of use provided by HEG. Generally speaking, storage-associated uses were classified as light industrial and the other uses were classified as office.

Employment was classified into the following four ITE categories:

- Manufacturing – Land Use Code 140
- Light Industrial – Land Use Code 110
- Retail – Land Use Code 820
- Office & Service – Land Use Code 710

Using the rates provided in *Trip Generation*, trip generation was estimated to be 2,036 daily trips, 96 AM peak hour trips, and 123 PM peak hour trips. Because these trips are currently accounted for in the traffic counts collected for the project study, it is appropriate to reduce the project trips to account for these existing trips.

Project Trip Internalization

Internalized trips are those that both begin and end within the site. Given the mix of uses and the size of the project, there could be a sizeable number of internalized trips. For example, a person returning from work might stop at a drycleaners, a drug store, and a restaurant within the project. This type of behavior is known as trip-chaining.

The analytical method available to account for trip chaining, developed by ITE based on a study of a limited number of mixed-use sites, and provided in the *Trip Generation Handbook*, was applied for this analysis. This methodology identifies internal factors that suggest how much trip chaining or internalization might occur between complementary uses such as retail and residential uses, and the maximum trip internalization would be expected to be about 12 percent during the PM peak hour and throughout the day. To not underestimate the potential net new project trip generation, this internalization was reduced to 5 percent and applied throughout the day.

Other Trip Generation Reductions

No current or planned transit service directly connects with the project site; the nearest transit facility is approximately one mile away. Any transit trips associated with the site would likely occur through persons driving to transit stations and either being dropped off or parking at adjacent stations. Therefore, no reduction was applied to account for transit use. Furthermore, no reduction was applied to account for trip reduction activities because a formal Travel Demand Management (TDM) program has not been adopted for the site.

As shown in **Table IV.B-4**, Phase 1 of the project (Interim Project) would generate about 9,120 daily vehicle trips, of which about 440 vehicle trips would occur during the AM peak hour and 900 vehicle trips would occur during the PM peak hour. At buildout, the project would generate about 27,110 daily vehicle trips, of which 1,440 vehicle trips would occur during the AM peak hour and 2,590 vehicle trips would be during the PM peak hour.

TABLE IV.B-4

VEHICLE TRIP GENERATION

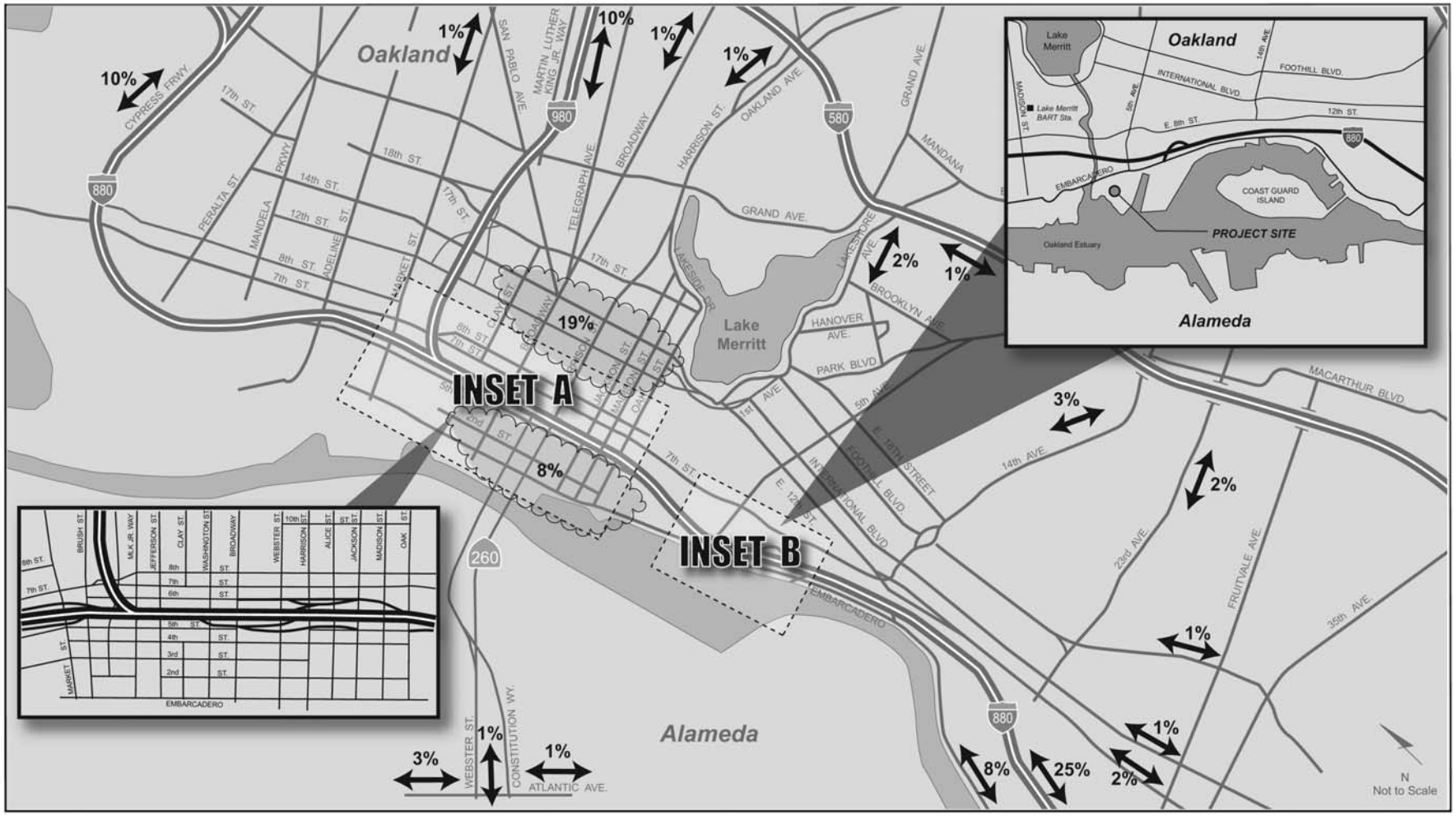
Land Use	Size/Units	Daily Trips	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Interim Project								
Residential Condos [a]	1,139 units	6,406	84	409	493	391	193	584
General Commercial [b]	69 ksf	5,336	43	28	71	235	255	490
Interim Project Subtotal		*11,742*	*127*	*437*	*564*	*626*	*448*	*1,074*
Internalization (5%) [c]		(586)	(6)	(22)	(28)	(31)	(23)	(54)
Existing Trips [d]		(2,036)	(75)	(21)	(96)	(43)	(79)	(122)
Interim Project Total		**9,120**	**46**	**394**	**440**	**552**	**346**	**898**
Project Buildout								
Residential Condos [a]	3,100 units	17,294	227	1,101	1,328	1,055	520	1,575
General Commercial [b]	170 ksf	9,588	107	68	175	427	462	889
Supermarket	30 ksf	3,066	59	38	97	184	176	360
Marina	170 berths	732	4	9	13	19	13	32
Buildout Subtotal		*30,680*	*397*	*1,216*	*1,613*	*1,685*	*1,171*	*2,856*
Internalization (5%) [c]		(1,534)	(20)	(61)	(81)	(84)	(59)	(143)
Existing Trips [d]		(2,036)	(75)	(21)	(96)	(43)	(79)	(122)
Project Buildout Total		**27,110**	**302**	**1,134**	**1,436**	**1,558**	**1,033**	**2,591**

[a] Trip generation estimates for the residential units were calculated on a parcel-by-parcel basis and then summed for the Interim Project and Project Buildout scenarios.
[b] Given the lack of specificity and the expected variety of the expected commercial uses, the most appropriate ITE category was judged to be Shopping Center, and trip generation estimates were calculated for the total gross floor areas for the Interim Project and Project Buildout scenarios.
[c] See text in the body of the report, above, about the basis for internalization reduction.
[d] The Fifth Avenue artisans community, south of Embarcadero at the terminus of 5th Avenue, is expected to remain on the site. Other existing uses on the project site would be removed as the project is developed, and because trips generated by those uses are currently accounted for in the traffic counts collected for the project study, it is appropriate to reduce the project trips to account for these existing trips.

SOURCE: Fehr & Peers Transportation Consultants

Project Trip Distribution/Assignment

Project trips were distributed using output from the regional travel demand model for Alameda County maintained by the ACCMA. The ACCMA model contains land use and roadway network information for 2005, 2010, and 2025. For each year, the project land use was input into the model, and the resulting distribution of project trips was recorded. A review of the distributions for the years 2005, 2010, and 2025 found minimal variations, so a single set of distribution factors was used. Major destinations of the project trips include downtown Oakland, San Francisco, Walnut Creek/Central Costa County, the Tri-Valley area, and other employment areas located to the south of the project site. The project trip distribution percentages are shown on **Figure IV.B-2**.



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

Figure IV.B-2
Project Trip Distribution

Project trips were assigned to the roadway network and study intersections based on the above-described trip distributions. For many of the project trip origins/destinations, trips were assigned along the roadway that provided the most direct route to/from the site. However, there was no single direction route from the project to the downtown Oakland area, which would be a major destination for project trips. Several possible routes exist, including Embarcadero/Broadway; 5th Avenue / 7th Street / 8th Street; and 5th Avenue / 12th Street / 14th Street. Project trips were assigned to each route on the basis of travel time runs conducted to ascertain the relative attractiveness of each route, which indicate that the 5th Avenue / 12th Street / 14th Street path would be the fastest route into the downtown area, and the 5th Avenue / 7th Street / 8th Street route would be the slowest.

Intersection Impacts

The analysis of intersection impacts used the process established by the City to prepare environmental analyses. The future intersection impacts were assessed using the Alameda County Congestion Management Agency's (ACCMA) Countywide Travel Demand Model (Countywide Model), which has been modified with land use, employment and population projections from the Oakland Cumulative Growth Scenario. Updated land use assumptions for the project area with and without the project were prepared. HEG converted the project's square footages and housing units to employment and households for the transportation modeling.

The Countywide Model was used to forecast 2010 and 2025 AM and PM peak-hour traffic volumes at the local intersections for the baseline conditions rather than using a "project list" approach of adding traffic from all cumulative developments to existing counts. The trip generation, distribution, mode split and assignment for baseline future conditions, which includes other approved or proposed developments in the City of Oakland, were conducted using the Countywide Model.

2010 and 2025 Baseline Volumes

The main inputs to the 2010 and 2025 forecasting processes are the model outputs from a modified version of the CMA regional travel demand model (with updated land use) and the existing traffic counts. As applied for the intersection-level forecasts, the base land use data in the CMA model is modified to reflect more accurate land use data and projections in the City of Oakland. HEG maintains a database of land use data for the city, in the CMA zone system and land use categories. HEG periodically updates this land use database for use by consultants preparing various studies for projects in the city.

However, as directed by the City of Oakland, these forecasts are not used directly to yield intersection turning movements. The outputs from this modified version of the CMA model is instead used as an input into the "furnessing", which "grows" existing turning movement volumes

to reflect increases in roadway link volumes determined from the CMA model.[12] In each case (2010 and 2025), two versions of the CMA model were run – 2005 and the analysis year. The 2005 model corresponds to the existing level of development within the project study area. The roadway segment growth between the 2005 and 2010 (and 2025) model runs is then added to the existing turning movements based on the existing proportions between left-turn / through / right-turn movements.

The 2010 and 2025 No Project forecasts assume no growth on the Oak to Ninth project site beyond uses currently there. Because the forecasts are based on existing traffic counts, traffic from the existing uses on the site are represented in the 2010 and 2025 No Project forecasts. Figures showing the 2010 and 2025 No Project intersection traffic forecasts are in **Appendix C**

2010 and 2025 Baseline Roadway/Intersection Improvements

No roadway or intersection improvements were assumed to be in place for the 2010 or 2025 No Project Scenarios, and existing traffic signal timings were maintained.

Analytical Methodology and Tools

The *2000 Highway Capacity Manual* (HCM) methodologies were used for the analysis of traffic operation at intersections. For signalized intersections, the 2000 HCM Operations method was applied, using the Synchro computer software program. For unsignalized intersections, the 2000 HCM Four-Way Stop and Unsignalized methodologies were applied, using the Traffix computer software program.

Near-Term 2010 Conditions – Project Impacts

Traffic generated by the Phase 1 of the project was assigned to the local roadway, and the intersection operations were assessed. As described above, project trips were assigned to the roadway network and study intersections based on trip distributions patterns shown in **Figure IV.B-2**. See **Appendix C** for figures showing the project trip assignment for the Phase 1 Project scenario, and the 2010 With Project intersection traffic volumes. No roadway network-enhancing improvements are assumed to occur in the 2010 With Project scenario except for those improvements constructed by the project along the project site frontage.

Impact B.1: Traffic generated by Phase 1 of the project would affect traffic levels of service at local intersections in the project vicinity in 2010. (Significant Impact at the intersections described below under Impacts B.1a through B.1e)

Table IV.B-5 presents changes in levels of service (and average vehicle delay) due to project-generated traffic at study intersections under short-term (2010) conditions (i.e., year 2010

[12] The furness adjustment (balancing) technique is used to modify projected (future) intersection turning movement volumes based upon a comparison of existing traffic volumes and the computer model calibration results. It uses mathematical formulae to balance roadway volumes approaching, and departing from, the intersection, and thus balances turning volumes that make sense compared to the counts and model calibration turning movements. In this way, the level of confidence of the future turning movement volumes is improved.

TABLE IV.B-5

2010 AM AND PM PEAK HOUR INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

			AM Peak Hour				PM Peak Hour			
		Traffic	Baseline		With Project		Baseline		With Project	
No.	Intersection	Control	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
#1	Atlantic & Webster (Alameda)	Signal	D	52.7	D	54.3	D	49.0	D	50.0
#2	Atlantic & Constitution (Alameda)	Signal	C	34.6	C	34.8	C	31.3	C	32.0
#3	Embarcadero & Broadway	AWSC	A	8.3	A	8.9	B	10.5	B	12.5
#4	Embarcadero & Oak Street	SSSC	C	22.9	**E**	**42.1**	D	25.3	**F**	**>70**
#5	5th Street & Broadway	Signal	D	44.1	D	43.8	F	* [a]	**F**	* [a]
#6	5th Street & Webster Street	SSSC	A	9.8	A	9.8	A	8.6	A	9.8
#7	5th Street & Jackson Street	Signal	B	11.0	B	11.0	B	10.4	B	10.3
#8	5th Street & Madison Street	Signal	A	8.4	A	8.4	B	11.0	B	10.8
#9	5th Street & Oak Street	Signal	B	13.7	B	14.2	C	20.5	C	22.8
#10	6th Street & Broadway	Signal	C	24.2	C	24.8	C	20.7	C	20.4
#11	6th Street & Webster Street	SSSC	A	9.9	A	9.9	A	9.3	A	9.3
#12	6th Street & Jackson Street	Signal	C	* [b]	C	* [b]	E	61.0	**F**	**80.5**
#13	7th Street & Market Street	Signal	B	12.9	B	12.9	B	14.7	B	14.7
#14	7th Street & Broadway	Signal	B	14.2	B	14.2	B	17.3	B	18.8
#15	7th Street & Webster Street	Signal	B	11.0	B	11.1	B	13.0	B	13.2
#16	7th Street & Jackson Street	Signal	B	12.4	B	11.9	B	14.4	B	15.7
#17	7th Street & Madison Street	Signal	B	12.8	B	12.9	B	15.6	B	15.8
#18	7th Street & Oak Street	Signal	B	12.6	B	12.4	B	16.7	B	16.5
#19	8th Street & Market Street	Signal	A	9.4	A	9.4	B	12.2	B	12.2
#20	8th Street & Broadway	Signal	B	11.7	B	11.8	B	12.2	B	12.5
#21	8th Street & Webster Street	Signal	C	29.0	C	29.3	E	* [b]	E	* [b]
#22	8th Street & Jackson Street	Signal	B	17.8	B	18.9	B	14.8	B	15.2
#23	8th Street & Madison Street	Signal	A	9.0	A	9.0	A	9.4	A	9.3
#24	8th Street & Oak Street	Signal	B	16.4	B	16.3	B	15.7	B	15.6
#25	West Grand Ave. & Market Street	Signal	B	13.7	B	13.7	B	18.3	B	18.4
#26	West Grand Ave. & Broadway	Signal	B	19.9	B	19.9	C	19.9	C	27.0
#27	West Grand Ave. & Harrison Street	Signal	D	44.6	D	45.1	D	36.0	D	36.2
#28	10th Street & Oak Street	Signal	A	9.5	A	9.5	A	9.8	A	9.8
#29	1st Ave. & International Blvd	Signal	B	16.7	B	16.9	B	16.1	B	16.2
#30	Lakeshore Ave. & Foothill Blvd	Signal	C	31.7	C	32.9	B	14.7	B	15.1
#31	Lakeshore Ave. & East 18th Street	Signal	B	14.6	B	14.6	C	29.8	C	30.2
#32	Lakeshore Ave. & Hanover Avenue	Signal	A	6.2	A	6.3	A	7.2	A	7.2
#33	Lakeshore Ave. & Brooklyn Ave.	Signal	A	7.1	A	7.1	A	6.1	A	6.1
#34	Lakeshore Ave. & MacArthur Blvd	Signal	C	23.8	C	24.1	F	90.0	F	90.3
#35	Lakeshore Ave. & Lake Park Ave.	Signal	D	39.7	D	39.8	D	48.4	D	48.5

(*Continued*)

TABLE IV.B-5 (continued)

2010 AM AND PM PEAK HOUR INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

			AM Peak Hour				PM Peak Hour			
		Traffic	Baseline		With Project		Baseline		With Project	
No.	Intersection	Control	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
#36	Embarcadero & 5th Avenue	SSSC	F	>70	**F**	**>70**	F	>70	**F**	**>70**
#37	Embarcadero & I-880 Northbound Off-Ramp – 6th Avenue	SSSC	B	12.3	**F**	**>70**	B	14.5	**F**	**>70**
#38	Embarcadero & I-880 Southbound On-Ramp – 10th Avenue	AWSC	B	10.3	B	12.1	B	13.7	B	17.3
#39	Embarcadero & I-880 Southbound Off-Ramp – 16th Avenue	SSSC	B	13.5	B	13.7	B	11.9	B	12.8
#40	5th Avenue & 7th/8th Streets	Signal	B	13.5	B	13.8	B	15.0	B	16.1
#41	14th Avenue & 7th/12th St. (SB)	Signal	C	24.0	C	24.3	D	41.0	D	45.3
#42	14th Avenue & East 12th St. (NB)	Signal	B	13.2	B	13.1	B	11.8	B	11.6
#43	East 12th Street & 23rd Avenue	Signal	B	14.3	B	14.8	B	13.7	B	14.4
#44	East 12th Street & 5th Avenue	Signal	B	13.4	B	13.9	B	15.8	B	17.9
#45	International Blvd & 14th Avenue	Signal	B	11.9	B	11.9	B	14.2	B	14.3
#46	International Blvd & 23rd Avenue	Signal	B	13.2	B	13.3	B	13.1	B	13.5
#47	International Blvd & 5th Avenue	Signal	B	13.9	B	14.2	B	14.2	B	14.5
#48	Foothill Blvd & 5th Avenue	Signal	B	11.2	B	11.4	B	18.3	B	19.8
#49	Foothill Blvd & 14th Ave. (WB)	Signal	C	24.2	C	24.3	B	17.6	B	17.8
#50	Foothill Blvd & 14th Ave. (EB)	Signal	C	24.8	C	24.7	C	22.7	C	22.8
#51	Foothill Blvd & 23rd Avenue	Signal	B	18.0	B	17.8	B	13.4	B	13.5
#52	16th Street & 23rd Avenue	Signal	B	16.0	B	15.7	D	50.1	D	52.2

[a] See text on page IV.B-8 about how field observations show substantially worse LOS than calculated LOS under existing conditions.
[b] See text on page IV.B-10 about how field observations show worse LOS than calculated LOS under existing conditions**.**

Note: The LOS/Delay for Side-Street Stop-Control (SSSC) intersections represent the worst movement or approach; for Signalized and All-Way Stop-Control (AWSC) the LOS/Delay represent overall intersection. Significant impacts are denoted in **Bold** typeface.

SB = Southbound; NB = Northbound; WB = Westbound; EB = Eastbound

Significant impacts are denoted in **Bold** typeface.

SOURCE: Fehr & Peers Transportation Consultants

baseline traffic volumes versus 2010 baseline volumes with Phase 1 of the project). Under the 2010 baseline condition, the following intersections would operate at an unacceptable level of service without the project traffic:

- 5th Street and Broadway (PM Peak Hour)
- Lakeshore Avenue and MacArthur Boulevard (PM Peak Hour)
- Embarcadero and 5th Avenue (AM and PM Peak Hours)

As described on page IV.B-8, field observations of existing intersection operations revealed existing problems at the intersection of 5th Street/Broadway (backups along 5th Street during the PM peak hour caused by downstream bottlenecks in the Webster Tube) and confirmed long

delays of eastbound traffic flow at the stop sign controlled (at three of four approaches) at the intersection of Embarcadero/5th Avenue.

The project would not have a significant impact on the LOS F conditions at the Lakeshore Avenue / MacArthur Boulevard intersection under the 2010 Baseline scenario because the addition of project traffic would cause an increase in the average delay for critical movements of 3 seconds, less than the 4-second threshold of significance for the City's significance criteria. Therefore, the project impact would be less than significant.

The project also would have a less-than-significant impact at the 8th and Webster Streets intersection because the addition of project traffic would cause an increase in the average delay of less than one second, less than the City's 4-second threshold of significance.

Impact B.1a: Traffic generated by Phase 1 of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and Oak Street,* and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant. (Significant)

> **Mitigation Measure B.1a:** Install traffic signals at the unsignalized intersection of *Embarcadero and Oak Street*. The signals shall have fixed-time controls with permitted left-turn phasing, which would not require a separate left-turn arrow. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.
>
> Prior to the installation of this traffic signal, a complete traffic signal warrant analysis would be conducted at this location to verify that this location meets MUTCD signal warrants, which include both daily and peak-hour volume, accidents, and pedestrian volumes.
>
> The JLS EIR identified a number of improvements in the project study area that would be required to mitigate that project's traffic impacts, including installation of traffic signals at this intersection prior to occupancy of JLS Phase 1 project components. However, the exact
>
> timing of implementation of this improvement has not been established. If the JLS project were to install traffic signals at the intersection of Embarcadero and Oak Street prior to occupancy of Phase 1 of the Oak to Ninth project, then the Oak to Ninth project applicant would pay a fair share contribution to the cost of this traffic signal. However, if development of the JLS project were to lag behind, and the intersection of Embarcadero and Oak Street was unsignalized prior to occupancy of Phase 1 of the Oak to Ninth project, then the Oak to Ninth project applicant would pay to install the traffic signals. After implementation of this measure, the intersection would operate at LOS B in the both AM and PM peak hours.

Significance after Mitigation: Less than Significant.

Impact B.1b: The LOS F conditions at the signalized intersection of *5th Street and Broadway*, which would prevail during the PM peak hour under 2010 baseline conditions, would worsen with the addition of traffic generated by Phase 1 of the project. The project-generated increases in vehicle delay on a critical movement would exceed the four-second threshold of significance. (Significant)

As described on page IV.B-8, based on field observations of existing intersection operations, the intersection of 5th Street and Broadway is judged to operate at LOS F during the PM peak hour due to backups along 5th Street caused by downstream bottlenecks in the Webster Tube.

> **Mitigation:** No feasible mitigation measures are available that would fully improve operations at 5th Street and Broadway to acceptable levels. While improvements such as reconfiguring lanes on Broadway and adding directional signage, as discussed in the JLS EIR, would improve traffic flow conditions on some movements, downstream bottlenecks in the Webster Tube would continue to cause substantial backups and delay on 5th Street approaching Broadway, and the previously described unacceptable LOS F conditions would continue. The constrained capacity of the tube is an issue of multi-jurisdictional concern (solutions are being explored by the cities of Oakland and Alameda, Caltrans, and the Alameda County Congestion Management Agency), and no feasible measures to increase the tube's capacity have been identified to date (e.g., the tube cannot simply be widened as can a roadway).

Significance after Mitigation: Significant and Unavoidable.

Impact B.1c: The signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp* would degrade from LOS E to LOS F during the PM peak hour with the addition of traffic generated by Phase 1 of the project. (Significant)

> **Mitigation Measure B.1c:** Optimize the traffic signal timing at the signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.
>
> To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at LOS D or better.

Significance after Mitigation: This project impact would be significant and unavoidable because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.1c without the approval of Caltrans. However, in the event that Mitigation Measure B.1c could be implemented, the impact would be less than significant.

Impact B.1d: Traffic generated by Phase 1 of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and 5th Avenue,* and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour. (Significant)

Mitigation Measure B.1d: Install traffic signals at the unsignalized intersection of *Embarcadero and 5th Avenue*. The signals shall have fixed-time controls with permitted left-turn phasing, which would not require a separate left-turn arrow. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.

Prior to the installation of this traffic signal, a complete traffic signal warrant analysis would be conducted at this location to verify that this location meets MUTCD signal warrants, which include both daily and peak-hour volume, accidents, and pedestrian volumes.

As described on page IV.B-59, at locations along Embarcadero, there would be intermittent periods during the PM peak hour when queues from one intersection would "spill-back" to adjacent intersections, and to minimize the effects of this queuing, coordination with signal phasing and timing of adjacent intersections shall include signal interconnects.

See page IV.B-28 for a description of the timing, funding and implementation responsibility for this mitigation measure, which the JLS Redevelopment EIR identified as required to mitigate that project's traffic impacts prior to occupancy of JLS Phase 1 project components. After implementation of this measure, the intersection would operate at LOS C or better in the both AM and PM peak hours.

Significance after Mitigation: Less than Significant.

Impact B.1e: Traffic generated by Phase 1 of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and I-880 Northbound Off-Ramp – 6th Avenue,* and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant, during the PM peak hour. (Significant)

Mitigation Measure B.1e: Install traffic signals at the unsignalized intersection of *Embarcadero and I-880 Northbound Off- Ramp – 6th Avenue*. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate

time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.

Prior to the installation of this traffic signal, a complete traffic signal warrant analysis would be conducted at this location to verify that this location meets MUTCD signal warrants, which include both daily and peak-hour volume, accidents, and pedestrian volumes.

As described on page IV.B-59, at locations along Embarcadero, there would be intermittent periods during the PM peak hour when queues from one intersection would "spill-back" to adjacent intersections, and to minimize the effects of this queuing, coordination with signal phasing and timing of adjacent intersections shall include signal interconnects.

The project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at LOS C or better in the both AM and PM peak hours.

Significance after Mitigation: This project impact would be significant and unavoidable because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.1e without the approval of Caltrans. However, in the event that Mitigation Measure B.1e could be implemented, the impact would be less than significant.

Table IV.B-6 presents levels of service (and average vehicle delay) under mitigated conditions. All significant impacts would be mitigated to an acceptable LOS C or better after implementation of the above-described measures, except at 5th Street / Broadway during the PM peak hour.

TABLE IV.B-6

2010 AM AND PM PEAK HOUR MITIGATED INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

			Project Condition				Mitigated Condition			
			AM Peak		PM Peak		AM Peak		PM Peak	
No.	**Intersection**	**Mitigation**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**
#4	Embarcadero & Oak Street	Signal	E	42.1	**F**	**>70**	B	13.5	B	15.8
#5	5th Street & Broadway	None feasible	D	43.8	**F**	*** [a]**	D	43.8	**F**	*** [a]**
#12	6th Street & Jackson Street	Optimize Timing	C	* [b]	**F**	**80.5**	C	* [b]	D	50.0
#36	Embarcadero & 5th Avenue	Signal	**F**	**>70**	**F**	**>70**	A	9.5	C	21.2
#37	Embarcadero & I-880 Northbound Off-Ramp – 6th Avenue	Signal	**F**	**>70**	**F**	**>70**	A	6.9	C	22.3

[a] See text on page IV.B-8 about how field observations show substantially worse LOS than calculated LOS under existing conditions.

[b] See text on page IV.B-10 about how field observations show worse LOS than calculated LOS under existing conditions.

Significant impacts are denoted in **Bold** typeface.

SOURCE: Fehr & Peers Transportation Consultants

Long-Term 2025 Conditions – Project Impacts

Traffic generated by the buildout of the project was assigned to the local roadway, and the intersection operations were assessed. As described on page IV.B-24, project trips were assigned to the roadway network and study intersections based on trip distributions patterns shown in **Figure IV.B-2**. See **Appendix C** for figures showing the project trip assignment for the Project Buildout scenario, and the 2025 With Project intersection traffic volumes. No improvements are assumed to occur in the 2025 With Project scenario except for those improvements constructed by the project along the project site frontage.

Impact B.2: Traffic generated by buildout of the project would affect traffic levels of service at local intersections in the project vicinity in 2025. (Significant Impact at the intersections described below under Impacts B.2a through B.2q)

Table IV.B-7 presents changes in levels of service (and average vehicle delay) due to project-generated traffic at study intersections under long-term (2025) conditions (i.e., year 2025 Baseline traffic volumes versus 2025 baseline volumes with buildout of the project). Under the 2025 baseline condition, the following 13 intersections would operate at an unacceptable level of service without the project traffic:

- Webster Street and Atlantic Avenue (AM and PM Peak Hours)
- Embarcadero and Oak Street (AM and PM Peak Hours)
- 5th Street and Broadway (PM Peak Hour)
- Jackson Street and 6th Street (PM Peak Hour)
- Market Street and West Grand Avenue (PM Peak Hour)
- Harrison Street and West Grand Avenue (AM Peak Hour)
- Foothill Boulevard and Lakeshore Avenue (AM Peak Hour)
- Lakeshore Avenue and MacArthur Boulevard (PM Peak Hour)
- Lakeshore Avenue and Lake Park Avenue (PM Peak Hour)
- Embarcadero and 5th Avenue (AM and PM Peak Hours)
- 14th Avenue / 7th Street and East 12th Street (Southbound) (PM Peak Hour)
- 14th Avenue (Eastbound) and Foothill Boulevard (PM Peak Hour)
- 23rd Avenue and 16th Street (PM Peak Hour)

As a condition of project approval, the project applicant shall be required to fully fund the cost of Mitigation Measure B.1c and B.1e, and to pay their fair share of the cost of Mitigation Measures B.1a and B.1d, to mitigate significant impacts caused by development of Phase 1 of the project. As described on page IV.B-28, that “fair share” could vary depending on whether or not the JLS project implements the latter measures prior to occupancy of Phase 1 of the Oak to Ninth project. On the basis of that commitment to the timely implementation of these improvements, analysis of buildout of the project assumed the required mitigation measures would be in-place at the following intersections under 2025 with project conditions (as reflected in **Table IV.B-7**):

- Embarcadero and Oak Street
- 6th Street and Jackson Street
- Embarcadero and 5th Avenue
- Embarcadero and I-880 Northbound Off-Ramp – 6th Avenue

TABLE IV.B-7

2025 AM AND PM PEAK HOUR INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

			AM Peak Hour				PM Peak Hour			
		Traffic	Baseline		With Project [a]		Baseline		With Project [a]	
No.	Intersection	Control	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
#1	Atlantic & Webster (Alameda)	Signal	E	74.6	**F**	**82.0**	E	57.9	E	61.7
#2	Atlantic & Constitution (Alameda)	Signal	D	44.0	D	45.4	D	38.5	D	40.8
#3	Embarcadero & Broadway	AWSC	A	9.4	B	14.5	C	21.3	**F**	**>70**
#4	Embarcadero & Oak Street	SSSC/ Signal	F	63.6	C	20.2	F	57.4	D	39.0
#5	5th Street & Broadway	Signal	E	77.6	E	75.2	F	* [b]	**F**	* [b]
#6	5th Street & Webster Street	SSSC	A	10.0	B	10.1	A	9.5	A	9.7
#7	5th Street & Jackson Street	Signal	B	10.9	B	11.2	B	10.6	B	12.7
#8	5th Street & Madison Street	Signal	A	8.2	A	8.3	B	14.6	B	17.8
#9	5th Street & Oak Street	Signal	C	21.9	D	52.9	E	60.7	**F**	**>100**
#10	6th Street & Broadway	Signal	C	25.3	C	28.8	C	23.1	C	25.6
#11	6th Street & Webster Street	SSSC	B	10.3	B	10.3	A	9.5	A	9.6
#12	6th Street & Jackson Street	Signal	E	77.0	**F**	**>100**	F	>100	**F**	**>100**
#13	7th Street & Market Street	Signal	B	15.2	B	15.2	C	26.2	C	26.7
#14	7th Street & Broadway	Signal	B	14.9	B	15.5	C	22.3	E	57.6
#15	7th Street & Webster Street	Signal	B	13.2	B	13.7	B	14.8	B	15.7
#16	7th Street & Jackson Street	Signal	B	14.3	B	16.0	C	23.6	D	36.9
#17	7th Street & Madison Street	Signal	B	13.9	B	13.9	B	16.7	B	17.2
#18	7th Street & Oak Street	Signal	B	13.4	B	12.6	E	61.4	E	60.3
#19	8th Street & Market Street	Signal	B	10.3	B	10.4	B	14.2	B	14.2
#20	8th Street & Broadway	Signal	B	12.7	B	13.2	B	13.0	B	14.3
#21	8th Street & Webster Street	Signal	D	38.2	D	45.5	E	* [c]	E	* [c]
#22	8th Street & Jackson Street	Signal	C	24.4	D	39.6	B	16.5	C	19.5
#23	8th Street & Madison Street	Signal	A	10.0	A	10.0	A	9.6	A	9.4
#24	8th Street & Oak Street	Signal	B	15.5	B	15.5	B	15.4	B	15.2
#25	West Grand Ave. & Market Street	Signal	B	15.6	B	15.6	E	73.8	E	74.1
#26	West Grand Ave. & Broadway	Signal	E	60.4	E	60.3	E	78.0	E	78.9
#27	West Grand Ave. & Harrison Street	Signal	F	>100	**F**	**>100**	D	49.3	D	50.6
#28	10th Street & Oak Street	Signal	B	10.4	B	10.4	B	10.4	B	10.4
#29	1st Ave. & International Blvd	Signal	B	16.3	B	16.5	C	22.1	C	22.4
#30	Lakeshore Ave. & Foothill Blvd	Signal	E	58.1	**E**	**64.1**	B	18.3	B	19.7
#31	Lakeshore Ave. & East 18th Street	Signal	D	39.9	D	39.3	D	37.5	D	40.2
#32	Lakeshore Ave. & Hanover Avenue	Signal	A	6.2	A	6.2	A	7.4	A	7.4
#33	Lakeshore Ave. & Brooklyn Ave.	Signal	A	7.7	A	7.7	A	6.8	A	6.9
#34	Lakeshore Ave. & MacArthur Blvd	Signal	C	25.5	C	26.2	F	>100	**F**	**>100**
#35	Lakeshore Ave. & Lake Park Ave.	Signal	D	43.5	D	43.9	E	55.8	**E**	**58.9**

(*Continued*)

TABLE IV.B-7 (continued)

2025 AM AND PM PEAK HOUR INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

No.	Intersection	Traffic Control	AM Peak Hour				PM Peak Hour			
			Baseline		With Project [a]		Baseline		With Project [a]	
			LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
#36	Embarcadero & 5th Avenue	SSSC/ Signal	F	>70	D	49.2	F	>70	**F**	**>100**
#37	Embarcadero & I-880 Northbound Off-Ramp – 6th Avenue	SSSC/ Signal	B	12.6	B	19.0	B	14.8	**F**	**>100**
#38	Embarcadero & I-880 Southbound On-Ramp – 10th Avenue	AWSC	B	11.1	D	29.4	B	14.3	**E**	**42.7**
#39	Embarcadero & I-880 Southbound Off-Ramp – 16th Avenue	SSSC	B	14.7	C	15.5	B	13.0	C	16.5
#40	5th Avenue & 7th/8th Streets	Signal	B	14.7	B	16.8	D	37.4	**F**	**81.5**
#41	14th Avenue & 7th/12th St. (SB)	Signal	C	24.9	C	27.2	E	72.0	**F**	**87.7**
#42	14th Avenue & East 12th St. (NB)	Signal	B	16.0	B	16.0	B	12.1	B	12.6
#43	East 12th Street & 23rd Avenue	Signal	B	19.0	C	20.8	B	16.8	B	18.9
#44	East 12th Street & 5th Avenue	Signal	B	16.5	C	28.3	B	19.1	D	40.5
#45	International Blvd & 14th Avenue	Signal	B	12.8	B	13.1	B	16.8	B	17.3
#46	International Blvd & 23rd Avenue	Signal	B	19.0	C	21.0	B	19.0	C	24.2
#47	International Blvd & 5th Avenue	Signal	B	14.6	B	15.0	B	14.9	B	14.9
#48	Foothill Blvd & 5th Avenue	Signal	B	12.1	B	13.2	C	20.2	C	28.2
#49	Foothill Blvd & 14th Ave. (WB)	Signal	D	54.1	**E**	**55.8**	C	21.2	C	21.5
#50	Foothill Blvd & 14th Ave. (EB)	Signal	C	27.4	C	27.4	F	>100	**F**	**>100**
#51	Foothill Blvd & 23rd Avenue	Signal	C	21.5	C	21.3	B	13.1	B	13.7
#52	16th Street & 23rd Avenue	Signal	B	17.3	B	17.6	E	70.7	**E**	**74.2**

[a] Mitigation measures required for impacts in 2010 are assumed to be in-place under 2025 "with project" conditions

[b] See text on page IV.B-8 about how field observations show substantially worse LOS than calculated LOS under existing conditions.

[c] See text on page IV.B-10 about how field observations show worse LOS than calculated LOS under existing conditions**.**

Note: The LOS/Delay for Side-Street Stop-Control (SSSC) intersections represent the worst movement or approach; for Signalized and All-Way Stop-Control (AWSC) the LOS/Delay represent overall intersection. Significant impacts are denoted in **Bold** typeface.

SB = Southbound; NB = Northbound; WB = Westbound; EB = Eastbound

Significant impacts are denoted in **Bold** typeface.

SOURCE: Fehr & Peers Transportation Consultants

The project would have a less-than-significant impact at the 8th and Webster Streets intersection because the addition of project traffic would cause an increase in the average delay of less than one second, less than the City's 4-second threshold of significance.

Impact B.2a: The signalized intersection of *Atlantic Avenue and Webster Street* in Alameda would degrade from LOS E to LOS F during the AM peak hour with the addition of traffic generated by buildout of the project. (Significant)

Mitigation Measure B.2a: The project applicant shall pay its fair share contribution to the cost of improvements proposed by the City of Alameda at the signalized intersection of *Atlantic Avenue and Webster Street*. Intersection reconfiguration would consist of adding and restriping lanes to provide the following lanes per approach:

- Webster Street (from Oakland) – 1 Left-turn lane, 2 Through lanes, and 1 Right-turn lane (non-channelized right turn)
- Webster Street (to Oakland) – 2 Left-turn lanes, 1 Through lane, and 1 Through/Right-turn lane
- Atlantic Avenue (towards Alameda Point) – 1 Left-turn lane, 1 Through lane, and 1 Through/Right-turn lane
- Atlantic Avenue (away from Alameda Point) – 2 Left-turn lanes, 2 Through lanes, and 1 Right-turn lane

This mitigation measure was identified by the City of Alameda as the required improvement to accommodate redevelopment of the former Naval Air Station. The project would contribute to the implementation of this mitigation measure through payment of a fair share cost of the improvement (to be determined). During the AM and PM peak hours, the project's contribution to the estimated growth in traffic between the existing and cumulative traffic volumes (including project traffic). would be 5 and 6 percent, respectively. The project applicant would pay this fair share amount to the City of Alameda, which would then be responsible for the implementation of this improvement.

After implementation of this measure, the intersection would operate at LOS E in the AM peak hour, and at LOS D in the PM peak hour. LOS E is an unacceptable condition, but the average delay would be lower than under the No Project condition, and the project impact would therefore be mitigated to a less-than-significant level.

Significance after Mitigation: This project impact would be significant and unavoidable because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2a without the approval of the City of Alameda). In addition, despite the payment of the project's fair share cost of the improvement, this impact would remain significant and unavoidable because implementation of this mitigation depends on the subsequent development of the Alameda Point site, payment of traffic fees by developers, and other funding sources. Should the Alameda Point development be delayed, then sufficient funds may not be available to fully implement this mitigation measure. However, in the event that Mitigation Measure B.2a could be implemented, the impact would be less than significant.

Impact B.2b: Traffic generated by buildout of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and Broadway*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour. (Significant)

Mitigation Measure B.2b: Install traffic signals at the unsignalized intersection of *Embarcadero and Broadway*. The signals shall have fixed-time controls with permitted

left-turn phasing, which would not require a separate left-turn arrow. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.

Prior to the installation of this traffic signal, a complete traffic signal warrant analysis would be conducted at this location to verify that this location meets MUTCD signal warrants, which include both daily and peak-hour volume, accidents, and pedestrian volumes.

The JLS EIR identified a number of improvements in the project study area that would be required to mitigate that project's traffic impacts, including installation of traffic signals at this intersection prior to occupancy of buildout of the JLS project. However, the exact timing of implementation of this improvement has not been established. If the JLS project were to install traffic signals at the intersection of Embarcadero and Broadway prior to buildout of the Oak to Ninth project, then the Oak to Ninth project applicant would pay a fair share contribution to the cost of this traffic signal. However, if development of the JLS project were to lag behind, and the intersection of Embarcadero and Broadway was unsignalized prior to buildout of the Oak to Ninth project, then the Oak to Ninth project applicant would pay to install the traffic signals. After implementation of this measure, the intersection would operate at an acceptable LOS B or better in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant.

Impact B.2c: The LOS F conditions at the signalized intersection of *5th Street and Broadway*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen with the addition of traffic generated by buildout of the project. The project-generated increases in vehicle delay would exceed the two-second threshold of significance. (Significant)

As described on page IV.B-8, based on field observations of existing intersection operations, the intersection of 5th Street and Broadway is judged to operate at LOS F during the PM peak hour due to backups along 5th Street caused by downstream bottlenecks in the Webster Tube. The actual amount of increased delay that addition of traffic generated by buildout of the project to the intersection would cause is not known, but the average control delay would increase by more than two seconds (exceeding the threshold of significance).

Mitigation: No feasible mitigation measures are available that would fully improve its operations to acceptable levels. While improvements such as reconfiguring lanes on Broadway and adding directional signage, as discussed in the JLS EIR, would improve traffic flow conditions on some movements, downstream bottlenecks in the Webster Tube would continue to cause substantial backups and delay on 5th Street approaching Broadway, and the previously described unacceptable LOS F conditions would continue.

The constrained capacity of the tube is an issue of multi-jurisdictional concern (solutions are being explored by the cities of Oakland and Alameda, Caltrans, and the Alameda County Congestion Management Agency), and no feasible measures to increase the tube's capacity have been identified to date (e.g., the tube cannot simply be widened as can a roadway).

Significance after Mitigation: Significant and Unavoidable.

Impact B.2d: The signalized intersection of *5th and Oak Streets at the I-880 Southbound On-Ramp* would degrade from LOS E to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project. (Significant)

Mitigation Measure B.2d: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *5th and Oak Streets at the I-880 Southbound On-Ramp*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.

The JLS EIR identified a number of improvements in the project study area that would be required to mitigate that project's traffic impacts, including signal optimization at this intersection prior to occupancy of buildout of the JLS project. However, the exact timing of implementation of this improvement has not been established. If the JLS project were to optimize the traffic signal timing at the intersection of 5th and Oak Streets prior to buildout of the Oak to Ninth project, then the Oak to Ninth project applicant would pay a fair share contribution to the cost of retiming this intersection. However, if development of the JLS project were to lag behind, and the intersection of Embarcadero and Broadway was unsignalized prior to buildout of the Oak to Ninth project, then to ensure that signal timing optimization occurs, the Oak to Ninth project applicant would pay to install the traffic signals. After implementation of this measure, the intersection would operate at an acceptable LOS E or better in both the AM and PM peak hours.

Significance after Mitigation: This project impact would be significant and unavoidable because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2d without the approval of Caltrans. However, in the event that Mitigation Measure B.2d could be implemented, the impact would be less than significant.

Impact B.2e: The signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp* would degrade from LOS E to LOS F during the AM peak hour with the addition of traffic generated by buildout of the project, and the LOS F conditions that, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (total intersection average vehicle delay would exceed the two-second threshold of significance) with the addition of traffic generated by buildout of the project. (Significant)

Mitigation: No feasible mitigation measures are available. The 2010 analysis concluded that the impact from Phase 1 development could be mitigated through optimization of signal timing (see Mitigation Measure B.1c). However, with the additional growth in background traffic and the growth in project traffic that would occur from 2010 to 2025, this retiming could not fully mitigate the impact from Project Buildout. Given the constrained right-of-way at this location, the addition of turn lanes or other similar improvements would not be feasible.

Significance after Mitigation: Significant and Unavoidable.

Impact B.2f: The LOS F conditions at the signalized intersection of *West Grand Avenue and Harrison Street*, which would prevail during the AM peak hour under 2025 baseline conditions, would worsen (total intersection average vehicle delay would exceed the two-second threshold of significance) with the addition of traffic generated by buildout of the project. (Significant)

Mitigation Measure B.2f: Optimize the traffic signal timing for the AM peak period at the signalized intersection of *West Grand Avenue and Harrison Street*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.

To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at an acceptable LOS D or better in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant.

Impact B.2g: The LOS E conditions at the signalized intersection of *Lakeshore Avenue and Foothill Boulevard*, which would prevail during the AM peak hour under 2025 baseline conditions, would worsen (an increase in the total intersection average vehicle delay of more than four seconds) with the addition of traffic generated by buildout of the project. (Significant)

Mitigation Measure B.2g: Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Lakeshore Avenue and Foothill Boulevard*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.

To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at LOS E in the AM peak hour, which is an unacceptable condition, but the increase in average delay from the No Project condition would be less than the four-second threshold of significance

established by the City of Oakland. The project impact would therefore be mitigated to a less-than-significant level.

Assessment of possible further mitigation measures (to achieve an acceptable LOS D or better condition) such as addition of a right-turn lane on Foothill Boulevard indicates that there is not sufficient right-of-way available for this additional lane at the intersection.

Significance after Mitigation: Less than Significant

Impact B.2h: The LOS F conditions at the signalized intersection of *Lakeshore Avenue and MacArthur Boulevard*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (an increase in the average vehicle delay for a critical movement of more than four seconds) with the addition of traffic generated by buildout of the project. (Significant)

Mitigation: No feasible mitigation measures are available. Assessment of possible mitigation measures indicates that optimization of signal timing at this intersection would reduce average vehicle delays by about 15 seconds, but would not fully mitigate the project's impact. Other improvements (to achieve an acceptable LOS D or better condition), such as additional turn lanes, are not feasible because there is not sufficient right-of-way available for additional lanes at the intersection.

Significance after Mitigation: Significant and Unavoidable.

Impact B.2i: The LOS E conditions at the signalized intersection of *Lakeshore Avenue and Lake Park Avenue*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (an increase in the average vehicle delay for a critical movement of more than six seconds) with the addition of traffic generated by buildout of the project. (Significant)

Mitigation Measure B.2i: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *Lakeshore Avenue and Lake Park Avenue*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.

To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at an acceptable LOS D or better in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

Impact B.2j: The LOS F conditions at the intersection of *Embarcadero and 5th Avenue*, which would prevail during the PM peak hour under 2025 baseline unsignalized conditions, would continue under traffic signal control (installed by 2010 [see Mitigation Measure B.1d]) with the addition of traffic generated by buildout of the project. (Significant)

The project site plan does not provide sufficient capacity for this intersection. A modification of the project site plan would be needed to add additional lanes on Embarcadero and to restripe 5th Avenue to provide sufficient capacity at this location (see **Figure IV.B-3**).

> **Mitigation Measure B.2j:** Widen Embarcadero to provide two through travel lanes in each direction along the project site frontage (i.e., from north of 4th Avenue to 9th Avenue), with separate left-turn lanes provided at the intersections, and provide appropriate lane configurations on the streets that intersect Embarcadero within the above-cited limits.
>
> The project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at an acceptable LOS D or better in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

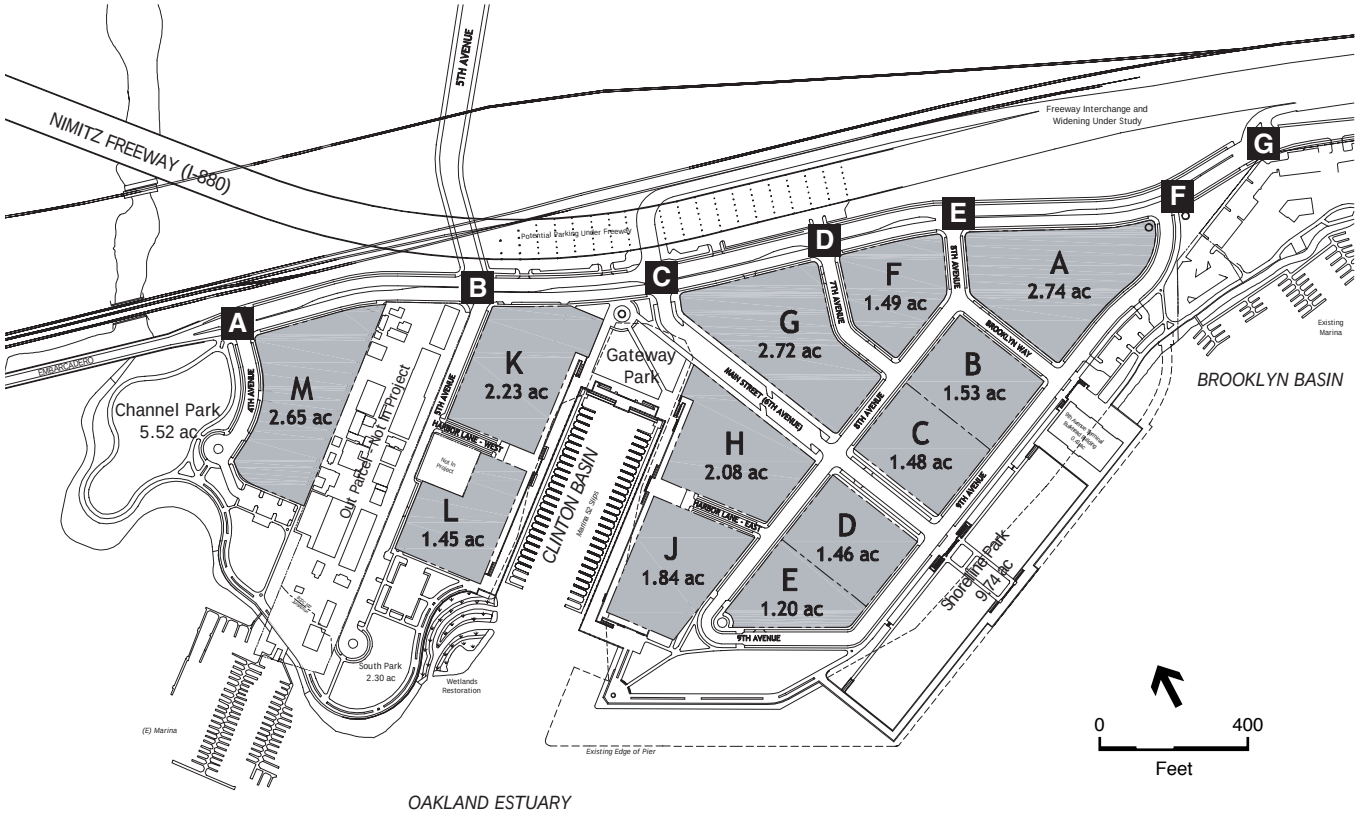
Impact B.2k: The intersection of *Embarcadero and I-880 Northbound Off-Ramp* (to be signalized by 2010 [see Mitigation Measure B.1e]) would degrade from LOS B to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project. (Significant)

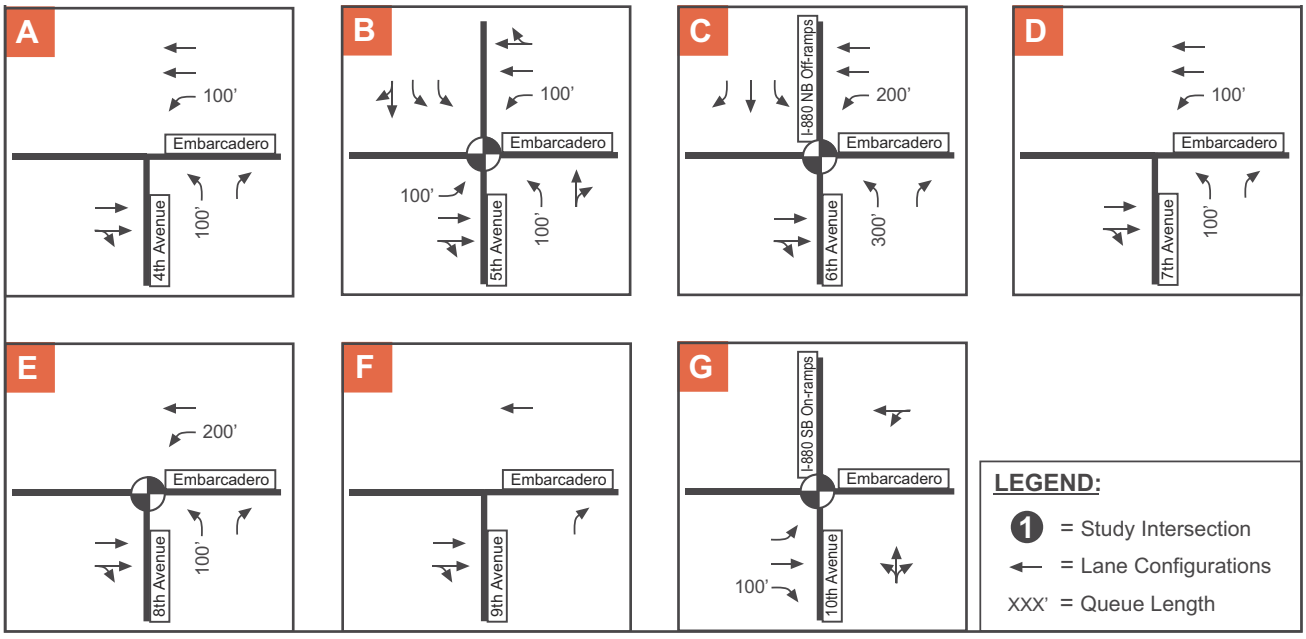
The project site plan does not provide sufficient capacity for this intersection. A modification of the project site plan is recommended to add additional lanes on Embarcadero to provide sufficient capacity at this location.

> **Mitigation Measure B.2k:** Implement Mitigation Measure B.2j.
>
> The project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at an acceptable LOS C or better in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

Impact B.2l: Traffic generated by buildout of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and I-880 Southbound On-Ramp – 10th Avenue*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour. (Significant)





SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

Figure IV.B-3
Recommended Lane Configurations on Embarcadero

Mitigation Measure B.2l: Install traffic signals at the unsignalized intersection of *Embarcadero and I-880 Southbound On- Ramp – 10th Avenue*. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.

Prior to the installation of this traffic signal, a complete traffic signal warrant analysis would be conducted at this location to verify that this location meets MUTCD signal warrants, which include both daily and peak-hour volume, accidents, and pedestrian volumes.

The project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at LOS B in both the AM and PM peak hours.

As described on page IV.B-59, at locations along Embarcadero, there would be intermittent periods during the PM peak hour when queues from one intersection would "spill-back" to adjacent intersections, and to minimize the effects of this queuing, coordination with signal phasing and timing of adjacent intersections shall include signal interconnects.

Significance after Mitigation: This project impact would be significant and unavoidable because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2l without the approval of Caltrans. However, in the event that Mitigation Measure B.2l could be implemented, the impact would be less than significant.

Impact B.2m: The signalized intersection of *5th Avenue and 7th/8th Streets* would degrade from LOS D to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project. (Significant)

Mitigation Measure B.2m: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *5th Avenue and 7th/8th Streets*. Additionally, the westbound and eastbound (5th Avenue) approaches of the intersection would be restriped within the current paved approach, and on-street parking spaces adjacent to the intersection would be removed, to provide separate left-turn, through, and through/right-turn lanes. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.

To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. The City of Oakland, which has jurisdiction over this intersection, would be responsible for its implementation. After implementation of this measure, the intersection would operate at an acceptable LOS D or better in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant.

Impact B.2n: The signalized intersection of *14th Avenue and 7th/12th Streets (Southbound)* would degrade from LOS E to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project. (Significant)

Mitigation Measure B.2n: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *14th Avenue and 7th/12th Streets (Southbound)*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.

To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. The City of Oakland, which has jurisdiction over this intersection, would be responsible for its implementation. After implementation of this measure, the intersection would operate at LOS E in the PM peak hour, which is an unacceptable condition, but the average delay would be lower than under the No Project condition, and the project impact would therefore be mitigated to a less-than-significant level.

Assessment of possible further mitigation measures (to achieve an acceptable LOS D or better condition) such as addition of a right-turn lane, and conversion of the through/right lane to through movements only, on 14th Avenue indicates that there is not sufficient right-of-way available for this additional lane at the intersection.

Significance after Mitigation: Less than Significant

Impact B.2o: The signalized intersection of *Foothill Boulevard and 14th Avenue (Westbound)* would degrade from LOS D to LOS E during the AM peak hour with the addition of traffic generated by buildout of the project. (Significant)

Mitigation Measure B.2o: Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Foothill Boulevard and 14th Avenue (Westbound)*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.

To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. The City of Oakland, which has jurisdiction over this intersection, would be responsible for its implementation. After implementation of this measure, the intersection would operate at an acceptable LOS C in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

Impact B.2p: The LOS F conditions at the signalized intersection of *Foothill Boulevard and 14th Avenue (Eastbound)*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (total intersection average vehicle delay would exceed the two-second threshold of significance) with the addition of traffic generated by buildout of the project. (Significant)

> **Mitigation Measure B.2p:** Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Foothill Boulevard and 14th Avenue (Eastbound)*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.
>
> To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. The City of Oakland, which has jurisdiction over this intersection, would be responsible for its implementation. After implementation of this measure, the intersection would operate at an acceptable LOS C in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

Impact B.2q: The LOS E conditions at the signalized intersection of *16th Street and 23rd Avenue*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (an increase in the average vehicle delay for a critical movement of more than six seconds) with the addition of traffic generated by buildout of the project. (Significant)

> **Mitigation Measure B.2q:** Optimize the traffic signal timing for the PM peak period at the signalized intersection of *16th Street and 23rd Avenue*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.
>
> To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. The City of Oakland, which has jurisdiction over this intersection, would be responsible for its implementation. After implementation of this measure, the intersection would operate at an acceptable LOS C or better in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

Table IV.B-8 presents levels of service (and average vehicle delay) under mitigated conditions. As shown, all significant impacts would be mitigated to an acceptable level of service after implementation of the above-described measures, except at the following six intersections:

- Atlantic Avenue / Webster Street (AM and PM peak hours)
- 5th Street / Broadway (PM peak hour)
- 6th Street / Jackson Street (AM and PM peak hours)

TABLE IV.B-8

2025 AM AND PM PEAK HOUR MITIGATED INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

			Project Condition				Mitigated Condition			
			AM Peak		PM Peak		AM Peak		PM Peak	
No.	Intersection	Mitigation	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
#1	Atlantic & Webster (Alameda)	Add Lanes	**F**	**82.0**	E	61.7	E [a]	62.3	D	48.3
#3	Embarcadero & Broadway	Signal	B	14.5	**F**	**>70**	A	7.5	B	10.7
#5	5th Street & Broadway	None feasible	E	75.2	**F** [a]	**>100**	E	75.2	**F** [b]	**>100**
#9	5th Street & Oak Street	Optimize Timing	D	52.9	**F**	**>100**	D	52.9	E	62.2
#12	6th Street & Jackson Street	None feasible	**F**	**>100**	**F**	**>100**	**F**	**>100**	**F**	**>100**
#27	West Grand Ave. & Harrison St.	Optimize Timing	**F**	**>100**	D	50.6	C	31.4	D	50.6
#30	Lakeshore Ave. & Foothill Blvd	Optimize Timing	**E**	**64.1**	B	19.7	E [a]	59.3	B	19.7
#34	Lakeshore Ave. & MacArthur Blvd	None feasible	C	26.2	**F**	**>100**	C	26.2	**F**	**>100**
#35	Lakeshore Ave. & Lake Park Ave.	Optimize Timing	D	43.9	**E**	**58.9**	D	43.9	D	47.5
#36	Embarcadero & 5th Avenue	Widen Embarcadero	D	49.2	**F**	**>100**	D	49.2	C	29.9
#37	Embarcadero & I-880 NB Off-Ramp	Widen Embarcadero	B	19.0	**F**	**>100**	B	10.1	C	30.8
#38	Embarcadero & I-880 SB On-Ramp	Signal	D	29.4	**E**	**42.7**	B	17.6	B	19.0
#40	5th Avenue & 7th/8th Streets	Optimize Timing	B	16.8	**F**	**81.5**	D	38.7	D	47.9
#41	14th Avenue & 7th/12th St. (SB)	Optimize Timing	C	27.2	**F**	**87.7**	C	27.2	E [a]	63.8
#49	Foothill Blvd & 14th Ave. (WB)	Optimize Timing	**E**	**55.8**	C	21.5	C	26.7	B	17.9
#50	Foothill Blvd & 14th Ave. (EB)	Optimize Timing	C	27.4	**F**	**>100**	C	25.1	C	28.7
#52	16th Street & 23rd Avenue	Optimize Timing	B	17.6	**E**	**74.2**	B	17.6	C	29.3

[a] After implementation of the identified mitigation measure, the increase in average delay from the No Project condition would be less than the four-second threshold of significance established by the City of Oakland, and the project impact would be mitigated to a less-than-significant level, even with an unacceptable LOS.

[b] See text on page IV.B-8 about how field observations show substantially worse LOS than calculated LOS under existing conditions.

Significant impacts are denoted in **Bold** typeface.

SOURCE: Fehr & Peers Transportation Consultants

- Lakeshore Boulevard / Foothill Boulevard (AM peak hour)
- Lakeshore Boulevard / MacArthur Boulevard (PM peak hour)
- 14th Avenue / 7th/12th Streets (PM peak hour)

For three of the above-listed six intersections, implementation of the identified mitigation measures would mitigate the project impact to a less-than-significant level because either the increase in average delay from the No Project condition would be less than the four-second threshold of significance established by the City of Oakland (at Atlantic Avenue / Webster Street and Lakeshore Boulevard / Foothill Boulevard), or the average delay would be lower than under the 2025 No Project condition (at 14th Avenue / 7th/12th Streets).

Cumulative 2025 Conditions

In addition to the 2025 intersection analysis discussed above, which identifies project-specific impacts, full evaluation of potential impacts requires an assessment of the project's contribution to cumulative traffic conditions at intersections that will operate at unacceptable levels of service. This cumulative impact methodology compares the contribution of the project traffic to overall traffic growth (i.e., the difference between existing and cumulative [with project] volumes). The project would have a significant impact if it would contribute 5 percent or more to the traffic growth at deficient intersections (where the intersection exceeds acceptable thresholds).

Impact B.3: Traffic generated by buildout of the project would contribute to cumulatively significant impacts at local intersections in the project vicinity in 2025. (Significant Impact at the intersections described below under Impacts B.3a through B.3o)

As shown in **Table IV.B-7**, page IV.B-33, the following 18 intersections would operate at an unacceptable (as defined by location, within or outside the Downtown area; see page IV.B-13) LOS E or F under 2025 cumulative (with project) peak-hour conditions:

- Atlantic Avenue and Webster Street (AM and PM Peak Hours)
- Embarcadero and Broadway (PM Peak Hour)
- 5th Street and Broadway (PM Peak Hour)
- 5th Street and Oak Street (PM Peak Hour)
- 6th Street and Jackson Street (AM and PM Peak Hours)
- West Grand Avenue and Market Street (PM Peak Hour)
- West Grand Avenue and Harrison Street (AM Peak Hour)
- Lakeshore Avenue and Foothill Boulevard (AM Peak Hour)
- Lakeshore Avenue and MacArthur Boulevard (PM Peak Hour)
- Lakeshore Avenue and Lake Park Avenue (PM Peak Hour)
- Embarcadero and 5th Avenue (PM Peak Hour)
- Embarcadero and I-880 Northbound Off-Ramp (PM Peak Hour)
- Embarcadero and I-880 Southbound On-Ramp (PM Peak Hour)
- 5th Avenue and 7th/8th Streets (PM Peak Hour)
- 14th Avenue and 7th/East 12th Streets (Southbound) (PM Peak Hour)
- Foothill Boulevard and 14th Avenue (Eastbound) (AM Peak Hour)
- Foothill Boulevard and 14th Avenue (Westbound) (PM Peak Hour)
- 16th Street and 23rd Avenue (PM Peak Hour)

At West Grand Avenue / Market Street, West Grand Avenue / Harrison Street, and Foothill Boulevard / 14th Avenue (Eastbound), the project would contribute two percent or less to the projected growth in traffic volume from existing to 2025 (with project) conditions, i.e., a less-than-considerable contribution. The other 15 deficient locations are described below.

Impact B.3a: Traffic generated by buildout of the project would contribute at least five percent of the cumulative traffic increases at the signalized intersection of *Atlantic Avenue and Webster Street* in Alameda during the AM and PM peak hours, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

> **Mitigation Measure B.3a:** Implement Mitigation Measure B.2a (contribute fair-share contribution to intersection improvements proposed by the City of Alameda).
>
> After implementation of this measure, the intersection would operate at LOS E in the AM peak hour, and at LOS D in the PM peak hour. LOS E is an unacceptable condition, but the average delay would be lower than under the No Project condition. For cumulative impacts, however, the significance criterion is whether the project would have a cumulatively considerable contribution to the unacceptable LOS (i.e., would contribute more than five percent of the cumulative traffic increase). Because implementation of Mitigation Measure B.2a would not reduce volumes at this intersection, the project's percent contribution would remain cumulatively considerable.

Significance after Mitigation: This cumulative impact would be significant and unavoidable, both because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2a without the approval of the City of Alameda), and because even though the increased average delay for the above-described mitigated condition would be less than the threshold of significance established by the City of Oakland, implementation of Mitigation Measure B.2a would not reduce volumes at this intersection, and the project's percent contribution would remain cumulatively considerable.

Impact B.3b: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the unsignalized intersection of *Embarcadero and Broadway* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

> **Mitigation Measure B.3b:** Implement Mitigation Measure B.2b (install traffic signals).
>
> After implementation of this measure, the intersection would operate at an acceptable LOS B or better in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant.

Impact B.3c: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *5th Street and*

***Broadway* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions. (Significant)**

As described on page IV.B-8, based on field observations of existing intersection operations, the intersection of 5th Street and Broadway is judged to operate at LOS F during the PM peak hour due to backups along 5th Street caused by downstream bottlenecks in the Webster Tube.

> **Mitigation:** No feasible mitigation measures are available that would fully improve its operations to acceptable levels. While improvements such as reconfiguring lanes on Broadway and adding directional signage, as discussed in the JLS EIR, would improve traffic flow conditions on some movements, downstream bottlenecks in the Webster Tube would continue to cause substantial backups and delay on 5th Street approaching Broadway, and the previously described unacceptable LOS F conditions would continue. The constrained capacity of the tube is an issue of multi-jurisdictional concern (solutions are being explored by the cities of Oakland and Alameda, Caltrans, and the Alameda County Congestion Management Agency), and no feasible measures to increase the tube's capacity have been identified to date (e.g., the tube cannot simply be widened as can a roadway).

Significance after Mitigation: Significant and Unavoidable.

Impact B.3d: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *5th and Oak Streets at the I-880 Southbound On-Ramp* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

> **Mitigation Measure B.3d:** Implement Mitigation Measure B.2d (optimize traffic signal timing).
>
> After implementation of this measure, the intersection would operate at an acceptable LOS E or better in both the AM and PM peak hours.

Significance after Mitigation: This cumulative impact would be significant and unavoidable because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2d without the approval of Caltrans. However, in the event that Mitigation Measure B.2d could be implemented, the impact would be less than significant.

Impact B.3e: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp* during the AM and PM peak hours, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

> **Mitigation:** No feasible mitigation measures are available. The 2010 analysis concluded that the impact from Phase 1 development could be mitigated through optimization of

signal timing (see Mitigation Measure B.1c). However, with the additional growth in background traffic and the growth in project traffic that would occur from 2010 to 2025, this retiming could not fully mitigate the impact from Project Buildout. Given the constrained right-of-way at this location, the addition of turn lanes or other similar improvements would not be feasible.

Significance after Mitigation: Significant and Unavoidable.

Impact B.3f: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *Lakeshore Avenue and Foothill Boulevard* during the AM peak hour, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

Mitigation Measure B.3f: Implement Mitigation Measure B.2g (optimize traffic signal timing).

After implementation of this measure, the intersection would operate at LOS E in the AM peak hour, which is an unacceptable condition, but the increase in average delay from the No Project condition would be less than the threshold of significance established by the City of Oakland. For cumulative impacts, however, the significance criterion is whether the project would have a cumulatively considerable contribution to the unacceptable LOS (i.e., would contribute more than five percent of the cumulative traffic increase). Because implementation of Mitigation Measure B.2g would not reduce volumes at this intersection, the project's percent contribution would remain cumulatively considerable.

Assessment of possible further mitigation measures (to achieve an acceptable LOS D or better condition) such as addition of a right-turn lane on Foothill Boulevard indicates that there is not sufficient right-of-way available for this additional lane at the intersection.

Significance after Mitigation: This cumulative impact would be significant and unavoidable because even though the increased average delay for the above-described mitigated condition would be less than the threshold of significance established by the City of Oakland, implementation of Mitigation Measure B.2g would not reduce volumes at this intersection, and the project's percent contribution would remain cumulatively considerable.

Impact B.3g: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *Lakeshore Avenue and MacArthur Boulevard* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

Mitigation: No feasible mitigation measures are available. Assessment of possible mitigation measures indicates that optimization of signal timing at this intersection would reduce delays, but would not fully mitigate the project's impact. Other improvements (to achieve an acceptable LOS D or better condition), such as additional turn lanes, are not

feasible because there is not sufficient right-of-way available for additional lanes at the intersection.

Significance after Mitigation: Significant and Unavoidable.

Impact B.3h: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *Lakeshore Avenue and Lake Park Avenue* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

Mitigation Measure B.3h: Implement Mitigation Measure B.2i (optimize traffic signal timing).

After implementation of this measure, the intersection would operate at an acceptable LOS D or better in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

Impact B.3i: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the unsignalized intersection of *Embarcadero and 5th Avenue* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

Mitigation Measure B.3i: Implement Mitigation Measure B.2j (widen Embarcadero).

After implementation of this measure, the intersection would operate at an acceptable LOS D or better in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

Impact B.3j: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the unsignalized intersection of *Embarcadero and I-880 Northbound Off-Ramp* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

Mitigation Measure B.3j: Implement Mitigation Measure B.2j (widen Embarcadero).

After implementation of this measure, the intersection would operate at an acceptable LOS C or better in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

Impact B.3k: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the unsignalized intersection of *Embarcadero and I-880 Southbound On-Ramp* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

Mitigation Measure B.3k: Implement Mitigation Measure B.2l (install traffic signals).

After implementation of this measure, the intersection would operate at LOS B in both the AM and PM peak hours.

Significance after Mitigation: This cumulative impact would be significant and unavoidable because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2l without the approval of Caltrans. However, in the event that Mitigation Measure B.2l could be implemented, the impact would be less than significant.

Impact B.3l: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *5th Avenue and 7th/8th Streets* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

Mitigation Measure B.3l: Implement Mitigation Measure B.2m (optimize traffic signal timing).

The City of Oakland, which has jurisdiction over this intersection, would be responsible for its implementation. After implementation of this measure, the intersection would operate at an acceptable LOS D or better in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant.

Impact B.3m: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *14th Avenue and 7th/East 12th Streets (Southbound)* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

Mitigation Measure B.3m: Implement Mitigation Measure B.2n (optimize traffic signal timing).

The City of Oakland, which has jurisdiction over this intersection, would be responsible for its implementation. After implementation of this measure, the intersection would operate at LOS E in the PM peak hour, which is an unacceptable condition, but the average delay would be lower than under the No Project condition. For cumulative impacts, however, the

significance criterion is whether the project would have a cumulatively considerable contribution to the unacceptable LOS (i.e., would contribute more than five percent of the cumulative traffic increase). Because implementation of Mitigation Measure B.2n would not reduce volumes at this intersection, the project's percent contribution would remain cumulatively considerable.

Assessment of possible further mitigation measures (to achieve an acceptable LOS D or better condition) such as addition of a right-turn lane, and conversion of the through/right lane to through movements only, on 14th Avenue indicates that there is not sufficient right-of-way available for this additional lane at the intersection.

Significance after Mitigation: This cumulative impact would be significant and unavoidable because even though the average delay for the above-described mitigated condition would be lower than under the No Project condition, implementation of Mitigation Measure B.2n would not reduce volumes at this intersection, and the project's percent contribution would remain cumulatively considerable.

Impact B.3n: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *Foothill Boulevard and 14th Avenue (Westbound)* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

Mitigation Measure B.3n: Implement Mitigation Measure B.2o (optimize traffic signal timing).

After implementation of this measure, the intersection would operate at an acceptable LOS C in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

Impact B.3o: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *16th Street and 23rd Avenue* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions. (Significant)

Mitigation Measure B.3o: Implement Mitigation Measure B.2q (optimize traffic signal timing).

After implementation of this measure, the intersection would operate at an acceptable LOS C or better in both the AM and PM peak hours.

Significance after Mitigation: Less than Significant

Transit Impacts

Impact B.4: The project would generate demand for alternative transportation service for the area. (Potentially Significant)

As described in the Setting, no transit currently serves the project site, with the closest BART service provided by the Lake Merritt station, approximately one mile away. Limited parking is provided at the Lake Merritt station, with 206 spaces dedicated for use by commuters. The nearest AC Transit service is provided at the Lake Merritt BART station or the Amtrak station, about one and 0.75 mile from the project site, respectively.

Transit Service and Facilities to Accommodate Possible Demand

As discussed in Section A, Land Use, the City of Oakland seeks to encourage the use of alternative transportation modes, and it is reasonable to assume there would be a demand for transit service by project residents, employees, and visitors. At this time, no funded transit service expansions are planned for the project site, and the project site plans do not indicate provision for transit facilities, such as bus stops/turnouts, on the Embarcadero and other major internal project roadways. Given the location of the Lake Merritt BART station and the current configurations of the BART lines, an additional (nearer) BART station would not be feasible. Possible future transit services are an expansion of AC Transit service, a privately-funded shuttle service that would convey project residents and workers to nearby transit stations. Several discussions have taken place between the project applicant and AC Transit regarding additional bus service to the site (specifically extension of Line 11 – Harrison), but no final decision has been made as of publication of this document.

If AC Transit were to expand service to this site, transit facilities, such as bus stops/turnouts, would have to be provided. Private transit (shuttle) service would also require pullouts or dedicated spaces to serve the site. The provision of transit service facilities on the site could reduce the vehicular trips and parking demand associated with both residents and employees on the site. The absence of transit facilities to service the project site would hinder development of transit and/or shuttle service. This is considered a potentially significant impact.

Transit Ridership

It could be assumed that a negligible number of transit trips would be generated by the project because of the barriers to transit usage. These barriers include the absence of existing transit service to the project site, the distance to the nearest transit facilities, and the relatively low number of parking spaces at the Lake Merritt BART station. Research indicates that most transit users prefer to access a station within one-quarter to one-half-mile of their origin or destination. With no additional transit service, would-be transit riders would have to walk one mile or more from many areas inside the project to reach either the BART or Amtrak station. Given these considerations, the number of transit users from the project site likely would be minimal unless additional transit service is provided to the site.

However, a simple assumption of no transit trips could understate the transit impacts associated with the project. Therefore, the ACCMA model was used to estimate an unconstrained number of transit trips generated by the project. The ACCMA model estimates that approximately 250 peak-hour transit trips would be generated by the project site, approximately 75 AC Transit trips and 175 BART trips. It is anticipated that each project-generated transit trip would include an automobile trip between the project site and the transit stations at Lake Merritt BART or the Jack London Square Amtrak.

Project Effects – AC Transit

An impact would occur on an AC Transit line if the project would add more than three percent to the total ridership on a line when the average passengers per seat rate (i.e., load factor) on that line exceeds more than 125 percent. Average ridership, based on load factors reported by AC Transit, is 80 percent or less on the bus lines nearest the project site (at the Lake Merritt BART station). The above-described estimated 75 peak-hour project AC Transit trips would not cause any AC Transit bus lines to exceed 125 percent, and the project impact with respect AC Transit would be less than significant.

Project Effects – BART Standing Capacity

An impact would occur on a BART line if the project would add more than three percent to the total ridership on a line when the average load factor on that line exceeds more than 135 percent. During the peak hour, 24 trains access the Lake Merritt BART station traveling both north and south. The above-described estimated 175 peak-hour BART trips would add about six riders per train, causing a limited (one percent) increase in the average load factor, and the project impact with respect BART standing capacity would be less than significant.

Project Effects – BART Gate Capacity

An impact would occur at a BART station if the project would add more than three percent to the total ridership combined with an average wait time of one minute or more. The current peak-hour ridership at the Lake Merritt BART station is about 1,063 entries and exits. Field observations conducted in January 2005 during the AM and PM peak hours indicated that delay experienced at the fare gates was minimal. Only one queue longer than one minute was observed, during the PM peak hour. The average queue was seven passengers, with a per-person delay of 16 seconds. The additional BART trips from the project would cause a total ridership increase of about 16 percent, which would not cause the average wait time to increase to one minute, and the project impact with respect BART gate capacity would be less than significant.

> **Mitigation Measure B.4a:** The project applicant shall redesign the project site plan to include transit facilities, including bus turnouts on the Embarcadero at a minimum, to ensure that bus service could be accommodated if agreement with AC Transit were to be met to extend service to the project site. Additional facilities would include bus stops within the project, or even a dedicated transit center at which public buses and/or private shuttles could stop.

Mitigation Measure B.4b: The project applicant shall operate a private shuttle service to complement AC Transit service that might be extended to the project site. The shuttle service shall have an adequate number of shuttle stops located onsite, and shall operate on a frequency sufficient to attract use of the service by project residents and employees.

Mitigation Measure B.4b complements Air Quality Mitigation Measure C.7.

Significance after Mitigation: Less than Significant.

Bicycle Impacts

Impact B.5: The project would create demand for bicycle parking. (Less than Significant)

The Bicycle Master Plan requires new development to provide both short-term and long-term parking for bicycles. For multi-family residential uses with private garages, the recommendation is for one short-term bicycle parking space per 10 units; no long-term bicycle parking spaces would be required. For retail and restaurant uses, one short-term space per 5,000 square feet and one long-term bicycle parking spaces per 8,000 square feet are recommended.

To meet the recommended goals of the Bicycle Master Plan, the project would be required to provide 128 short-term and 9 long-term bicycle parking spaces for Phase 1, and 350 short-term and 25 long-term spaces under buildout of the project. The parking ratios described above are presented as recommendations in the Bicycle Plan. However, the City is now considering adopting requirements in its Zoning Ordinance that would be lower than summarized above.

As part of the proposed project, bicycle parking spaces would be provided in onsite locations, at a level determined by the City and in a manner consistent with the City's practices at the time of project construction.

Mitigation: None required.

Pedestrian Safety Impacts

Impact B.6: The project would increase the potential for pedestrian safety conflicts. (Less than Significant)

As described in the Setting, within the general project area, some pedestrian facilities are provided, though given the current industrial orientation of the project site, no sidewalks are provided on-site. Many of the study area roadways provide sidewalks on both sides, and the Bay Trail currently extends from Jack London Square to the Estuary Park along 2nd Street.

The project would increase both pedestrian activity and vehicular traffic in and around the project area, particularly along the Embarcadero. As described in the Project Description, the proposed project would include a continuous public Class I trail along the entirety of the project shoreline, linking an existing Bay Trail segment, which ends at Estuary Park, to 10th Avenue, where the trail currently continues east to the Martin Luther King Regional Shoreline and beyond. The adopted Pedestrian Master Plan (PMP), which is part of the City's General Plan, includes PMP Policy 1.2. Traffic Signals, which recommends use of traffic signals and their associated features (e.g., pedestrian signal heads) to improve pedestrian safety at dangerous intersections. As described under Impacts B.1 and B.2, above, intersections in the project area, including those serving as access points for the project site, would be signalized to mitigate significant project effects on traffic flow conditions. As stipulated in Mitigation Measures B.1a, B.1d, B.1e, B.2b and B.2l, pedestrian signal heads (with adequate time for pedestrians to cross the streets) would be installed when new traffic signals are installed. These traffic control devices would safely accommodate the added vehicular and pedestrian traffic, and the project would have a less-than-significant impact on pedestrian safety.

Pedestrian safety is an issue of general concern throughout Oakland, and adoption of the above-cited Pedestrian Master Plan provides the City with a mechanism of addressing conditions in various areas, with a focus on high pedestrian activity areas or corridors, where pedestrian volumes and collision rates tend to be higher than the rest of the city. The following is a general discussion of issues and concerns in high pedestrian activity areas (e.g., the San Antonio and Chinatown areas), and how the proposed project potentially would affect those areas.

Drivers and pedestrians share responsibility for pedestrian safety. While increased vehicular volumes may contribute to pedestrian collisions, there are many other factors, such as signal timing (i.e., the amount of time pedestrians have to cross the street at signalized intersections), intersection and roadway design (e.g., the presence or absence of pedestrian crossing signals, and the prohibition or allowance of right turns on a red light), adjacent land uses, parking movements, as well as pedestrian volumes and characteristics that also affect pedestrian safety. Chinatown's proximity to regional roadways (freeway ramps and the Webster/Posey tubes) and downtown Oakland, as well as the mix of through and local traffic with high pedestrian volumes, has resulted in concern and action on the part of community members and the City. The Revive Chinatown Streetscape and Pedestrian Improvement Project, funded by a Transportation for Livable Communities grant and local matching funds, will include installation of corner bulb-outs (which shortens the crossing distance at intersections), scramble traffic signals (which allow pedestrians on all four corners to cross at the same time, including diagonally, while red lights stop all vehicles), pedestrian countdown timers (to show pedestrians how many seconds of "Walk" time remains), crosswalk striping, and bilingual signs. These enhancements will improve pedestrian safety by reducing conflicts with vehicles and by providing pedestrians with better information about safely crossing streets. The San Antonio district is east of the project site, and while about half of the traffic generated by the project would use regional roadways to access the project site, the rest would be dispersed through the local roadway system. The proposed project would increase traffic along 5th, 14th, and 23rd Avenue, and Foothill and International Boulevard, and East 12th Street. The major signalized intersections on those roads currently have

pedestrian signal heads and crosswalks, and operate at good levels of service (i.e., LOS C or better). Those intersection would operate at acceptable service levels (i.e., LOS D or better) at all but one intersection with addition of traffic generated by buildout of the project (with, in some cases, implementation of required mitigation measures identified in the EIR). The intersection of 14th Avenue and 7th/12th Streets is projected to operate at an unacceptable LOS E in 2025 during the PM peak hour with or without the project. The traffic control devices and pavement markings would safely accommodate vehicular and pedestrian traffic, and the project would have a less-than-significant impact on pedestrian safety.

Mitigation: None required.

Site Access and Circulation Impacts

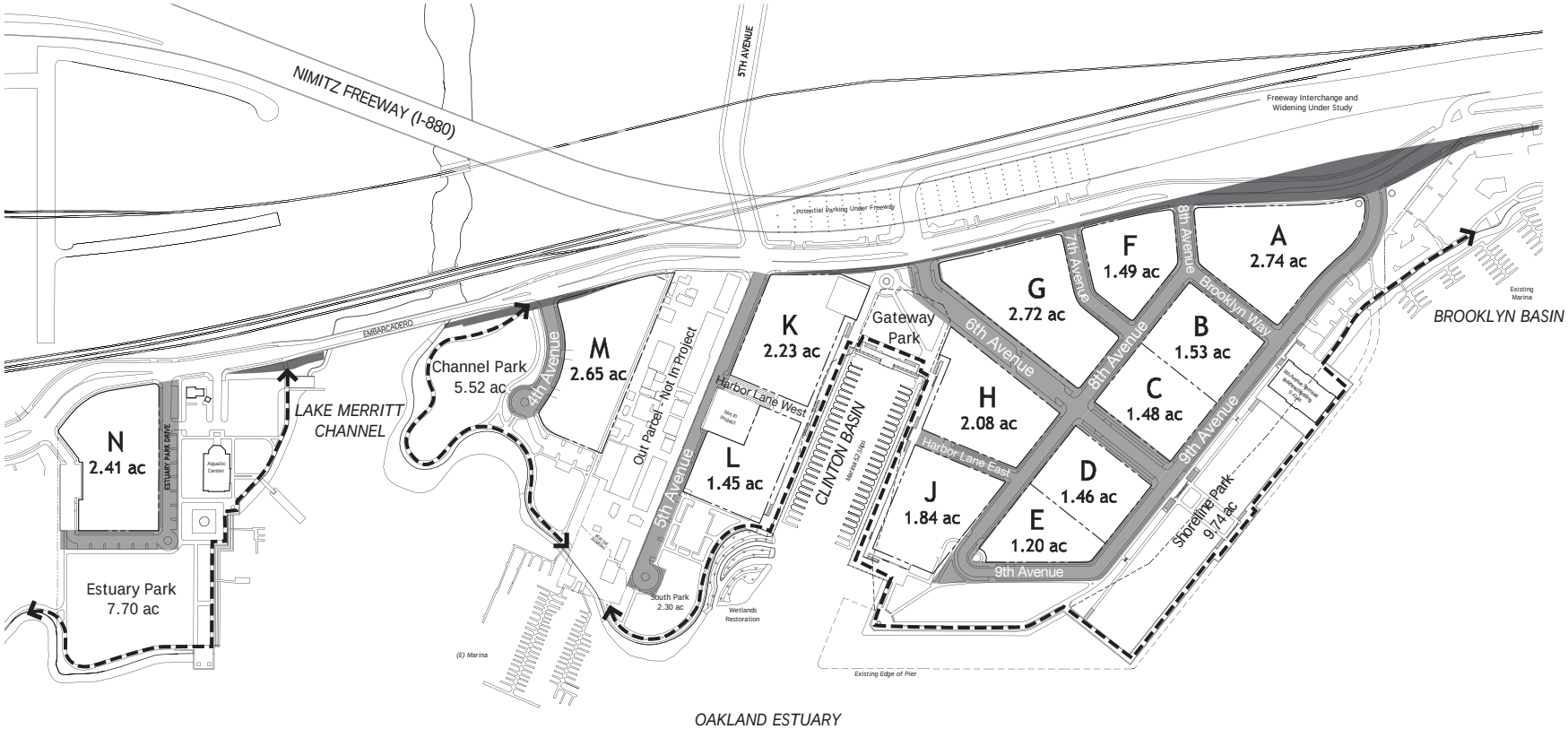
Impact B.7: The project would increase the potential for conflicts among different traffic streams. (Significant)

This impact assessment is based on the project site plan (see **Figure IV.B-4**). Aspects of the site plan assessed include the lane configurations on Embarcadero along the project boundary, access at project entrances/exits, traffic control at intersections, and internal roadway design. For the purposes of this study, the design of the project is judged to have a significant impact if the project incorporates design elements that would not comply with Caltrans design standards, as defined by of the 5th Edition of the Caltrans *Highway Design Manual* (Caltrans, 1995). When Caltrans design standards are unavailable or unclear, then other documents were used (e.g., the Manual of Uniform Traffic Control Devices (MUTCD). For the cross-sectional elements, the Caltrans recommends the use of America Association of State Highway and Transportation Officials (AASHTO) standards for city and county roadways that are not under the jurisdiction of Caltrans.

The project site would connect to Embarcadero by several public streets (4th, 5th, 6th, 7th, 8th, and 9th Avenues) that would provide full access into the development. Based on the impact analysis for 2010 and 2025 (see Impacts B.1 and B.2, above), traffic signals would be required on Embarcadero at 5th Avenue and 6th Avenue (the latter at the I-880 northbound off-ramp); in addition, a signal would be required at Embarcadero at 10th Avenue (at the I-880 southbound on-ramp) to mitigate project impacts. The other project access roadways would be full access and are assumed for this analysis initially to operate under side-street stop-sign control.

Spacing of Project Access Along Embarcadero

The *Highway Design Manual* and AASHTO do not provide formal standards for intersection spacing. However, based on standard traffic engineering principles, several general guidelines can be applied for signalized and unsignalized intersections. The first guideline (spacing for signalized intersections) sets about 800 feet or more as optimal, with 500-600 feet considered the minimum. The intersections of Embarcadero/5th Avenue and Embarcadero/6th Avenue are about



Dedicated Public Streets and Right-of-Way

Additional Right-of-Way for Embarcadero

Bay Trail

0 400
Feet

SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

Figure IV.B-4
Project Site
Street and Pedestrian Ways

500 feet apart, and the intersection of Embarcadero/I-880 Southbound On-Ramp at 10th Avenue is approximately 1,000 feet from the next adjacent intersections. Based on this spacing standard, the site access intersections at Embarcadero/7th Avenue and Embarcadero/9th Avenue must remain unsignalized because a potential signal at the former would be less than 500 feet from the Embarcadero/6th Avenue signal, and a potential signal at the latter would be less than 400 feet from the signalized intersection at Embarcadero/I-880 Southbound On-Ramp at 10th Avenue. If needed for site access, a traffic signal could be installed at Embarcadero/8th Avenue.[13] Given the short distance of the Embarcadero/9th Avenue intersection to the adjacent southbound freeway on-ramp at 10th Avenue, it is recommended that this intersection be converted to right-in / right-out operation.

The second guideline (spacing for unsignalized intersections) sets 350 feet as the minimum distance, as defined by the Caltrans *Highway Design Manual* (Table 405.1A) for corner sight distance considerations. A corner sight distance of 350 feet is required for a vehicles traveling at 30 miles per hour (considered appropriate for the posted 25 mph speed limit on Embarcadero).[14] A review of the project site plan indicates that all of the unsignalized intersections are spaced at least 350 feet apart on Embarcadero.

Queuing at Intersections Along Embarcadero

The purpose of this queuing analysis is to confirm the lane configuration changes and access changes recommended in the sections above. On the basis of a micro-simulation analysis, with an additional through lane on Embarcadero, and the other lane configurations presented previously, the queuing (backups) along Embarcadero would be minimized. A review of the estimated queues at the intersections indicated that backups would be minimal along Embarcadero, with some occasional “spill-back” from one adjacent intersection to another. The average queue length during the PM peak hour would be less than the storage length at all of the intersections along Embarcadero in front of the project site; the maximum queue at several locations would intermittently exceed the available storage area. See **Appendix C** for documentation.

At several locations, there would be intermittent periods during the PM peak hour when queues from one intersection would “spill-back” to adjacent intersections. This queuing would occur in the southbound direction along Embarcadero and occurs at 4th, 6th, and 10th Avenues. To minimize queuing along Embarcadero, signal interconnects would be installed to coordinate the traffic signals at 5th, 6th, 8th, and 10th Avenues.

Queuing also would occur at Embarcadero/7th Avenue for vehicles trying to exit the project, particularly for left-turn vehicles. Therefore, this roadway would have to be restricted to right-in/right-out operations only for vehicles turning onto Embarcadero.

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13 A review of the peak-hour traffic signal warrants from the Manual of Uniform Traffic Control Devices (MUTCD) indicates that a traffic signal would be warranted at Embarcadero/8th Avenue.

14 If a driver were traveling along a roadway at 30 miles per hour and a car pulled out in front of them, that driver would require 350 feet to recognize the car and safety decelerate to 85 percent of their intended speed.

Emergency Access

As stated in the Significance Criteria, the project results in a significant impact if the design of the project contains fewer than two emergency access routes for streets exceeding 600 feet in length. This criterion identifies roadways that are long cul-de-sacs that could be difficult for emergency vehicles to access. For example, if there is only one access point to a roadway, then emergency vehicle access to adjacent properties could potentially be obstructed, and there would be no alternate routes available.

The proposed project would have four roadways with only one access point – 4th Avenue, 5th Avenue, Harbor Lane West, and Harbor Lane East (see **Figure IV.B-3**). Each of these roadways would be less than 600 feet in length, as measured on the project site plan, and the project impact would be less than significant.

Railroad Operations

An issue related to emergency vehicle access is the operations of the railroad. There is a rail line (operated by Union Pacific Rail Road [UPRR]) running east of the project site that carries freight and Amtrak passenger train service. An at-grade crossing of these tracks is located at 5th Avenue and includes standard protective equipment (i.e., signals and movable gates). Amtrak passenger service out of the Jack London Square station operates on three lines (Capital Corridor, 24 trains per day, San Joaquin, 12 trains per day, and Coast Starlight, 2 trains per day). Freight rail service operates with no set/published schedule. Therefore, field observations were conducted to determine how the freight rail service might operate on a typical weekday.

Field data was collected from 7:00 AM to 6:00 PM in September 2004 at the current at-grade crossing of the UPRR line on 5th Avenue. Data collected included the number of trains that passed by the crossing, the classification of train (freight or Amtrak), the number of vehicles in each train, and the amount of time that the crossing gates were closed. On the day studied, six freight trains passed by the project site during the data collection period. These trains varied in length from 8 cars to 91 cars, and the amount of time the gates were down varied from one to five minutes. During the 11-hour data collection effort, freight trains caused the gates to be down for a total of about 20 minutes, or 3 percent of the total observed time. Because no set schedule exists for freight rail operations, more or fewer trains could operate along this line in the future. The only certainty is that the UPRR will continue to use these tracks for freight operations in the foreseeable future.

When a freight train is crossing the tracks across 5th Avenue, access to the project site would be limited. For non-emergency vehicles, these obstructions would be a temporary inconvenience. However, a track blockage by a freight train could be a more serious issue for an emergency vehicle traveling to the project site. Available alternative routes that an emergency vehicle can use to access the site are the at-grade crossing on Oak Street (to the north) and the overcrossing on 16th Avenue (to the south). A long freight train could simultaneously block the at-grade crossings at 5th Avenue and Oak Street, which would limit access to the site to the 16th Avenue alternative route. The availability of alternative routes would minimize any significant delay in response time, given the relative frequency and duration of train obstructions at both the 5th

Avenue and Oak Street crossings in typical conditions or in the instance of a simultaneous emergency in the project area (Poulson, 2004).

Internal Project Site Design Elements

Spacing of Internal Intersections. The spacing of internal intersections was judged using sight distance criteria. On the basis of less-restrictive stopping sight distance criteria (consistent with *Highway Design Manual* recommendations for intersections not located on major public streets like the Embarcadero), spacing of internal intersections would be appropriate.

Cross-section Elements. The major cross-sectional elements of the internal project roadways include travel lanes, parallel parking lanes, angled parking lanes, bicycle lanes, sidewalks, curb ramps, and crosswalks. Applicable standards and guidance from AASHTO, the MUTCD, and the America Disabilities Act (ADA) were applied.

- Travel lane widths on internal roadways would be 10 feet or more, which exceeds AASHTO's minimum lane width (9 feet).

- Roadways within the project site that would provide parallel parking would have parking widths of 8 feet, which matches AASHTO's recommended width.

- Neither the *Highway Design Manual* nor AASHTO provide explicit standards for the design of angled parking spaces. The *Dimensions of Parking* provides guidance regarding the designs of parking facilities (Urban Land Institute, 2000). The project roadway cross-sections would provide 29 feet for the angled parking space plus adjacent travel lane, which matches the minimum depth for an angled parking space (17 feet, excluding the curb overhang) plus travel lane (12 feet) in the ULI document.

- The project would provide six-foot-wide bike lanes on the Embarcadero, which exceeds AASHTO's minimum lane width (4 feet).

- The sidewalk widths shown on the project site plan vary from 5 feet to 16 feet, which exceeds AASHTO's minimum width criterion (4 feet).

  There are other design considerations applicable to sidewalks besides the minimum width. For example. Design considerations are needed for the minimum pedestrian zone (a clear space devoid of obstacles), the maximum grade, cross slopes for sidewalks, and the design of sidewalk surfaces, in keeping with ADA standards. The project site plan does not provide sufficient detail to allow determination of ADA compliance by the project at this time.

- The project site plan shows crosswalks at all internal project intersections and at project intersections on Embarcadero. The MUTCD requires that crosswalks have a minimum width of 6 feet, with a preferred width of 10 feet. A review of the site plan indicates that the crosswalks shown have sufficient width.

However, there appear to be several locations where additional crosswalks would be required, including potential mid-block crossings where pedestrians may chose to cross internal project roadways. One potential location would be 9th Avenue, west of the Ninth Avenue Terminal location because there are sidewalks connecting to 9th Avenue at this location, but no crosswalks.

- Both ADA and AASHTO provide specific guidelines regarding the design of curb ramps. Curb ramps provide connections between the sidewalks and the street and are typically found at intersections and other pedestrian crossing locations. Important issues relating to the design of curb include the width of a curb ramp and the slope of the ramp. For example, a ramp with an excessive slope could be difficult for a person in a wheelchair to navigate.

  The project site plan indicates that curb ramps are provided at each marked crosswalk location. The curb ramps are sufficiently wide and are provided at all crosswalks shown on the current project site plan. However, the site plan is not sufficiently detailed to indicate whether the maximum grade is exceeded on the curb ramps.

  Mitigation Measure B.7: The project applicant shall redesign the site plan as follows:

  - Reconfigure the intersections of Embarcadero/7th Avenue and Embarcadero/9th Avenue intersection for right-in/right-out movements only (to ensure proper spacing between signalized intersections).
  - Install a traffic signal at the intersection of Embarcadero and 8th Avenue.
  - Install signal interconnect on Embarcadero between 5th and 10th Avenues to allow for coordination of traffic signals along Embarcadero (to minimize queuing [back-ups] on Embarcadero).
  - The design of pedestrian facilities including sidewalks, crosswalks, and curb ramps shall comply with ADA standards and other applicable legislation.

Significance after Mitigation: Less than Significant.

Required Congestion Management Program Evaluation

The Alameda County Congestion Management Program (CMP) requires the assessment of development-driven impacts to regional roadways. Because the project would generate more than 100 “net new” PM peak-hour trips, the CMP requires the use of the Countywide Travel Demand Forecasting Model to assess the impacts on regional roadways near the project site during the PM peak hour. The CMP and Metropolitan Transportation System (MTS) roadways in the project vicinity identified in NOP comments by ACCMA (July 20, 2004 letter) include Interstate 880, Interstate 980 / State Route 24, Interstate 580, Broadway, Brush Street, Castro Street, Grand Avenue, Martin Luther King Jr. Way, San Pablo Avenue, and Telegraph Avenue.[15]

[15] Note that the roadway segments included in this evaluation is not based on an assessment of the project trip distribution or application of a screening criteria to determine if the project would contribute enough new trips to warrant analysis.

The Countywide Model is a regional travel demand model that uses socio-economic data and roadway and transit network assumptions to forecast traffic volumes and transit ridership using a four-step modeling process that includes trip generation, trip distribution, mode split, and trip assignment. This process takes into account changes in travel patterns due to future growth and balances trip productions and attractions.

For the purposes of the CMP Analysis, the land uses of the proposed project were added to the assumptions in the Countywide Model; the land use assumptions in the Countywide Model for the rest of the City of Oakland were not modified. At this time, these land uses are different from the Oakland Cumulative Scenario that was used for the cumulative analysis. This version of the Countywide Model was based on ABAG *Projections 2002* land uses for 2010 and 2025. The project falls within traffic analysis zone (TAZ) 95 and a portion of TAZ 799.

The traffic baseline forecasts for 2010 and 2025 (PM peak hour) were extracted for the CMP and MTS highway segments from the Countywide Model. Due to fluctuations in the model forecasts and the model's limited number of TAZs in the project area, the "with project" forecasts were not used directly for the CMP roadway analysis. Instead, traffic estimates were computed for the proposed project and manually added to the 2010 and 2025 baseline volumes from the Countywide Model. The "with project" level of service results were compared to the baseline results for each model horizon year. Highway impacts were summarized at the designated roadway segments (links) on the MTS and CMP networks. The PM peak hour volumes, v/c ratios and the LOS for baseline and "with project" conditions represent both directions of flow. Detailed tables are provided in **Appendix C** and include all data for 2010 and 2025 forecast years.

Operations of the MTS freeway and surface street segments were assessed using a volume-to-capacity (v/c) ratio methodology. For freeway segments, a per-lane capacity of 2,000 vehicles per hour (vph) was used, consistent with the 2003 and 2004 *Congestion Management Program* documents. For surface streets, a per-lane capacity of 800 vehicles per hour was used. Roadway segments with a v/c ratio greater than 1.00 signify LOS F.

Due to differences in the land use assumptions and traffic zone and roadway network details, the forecasted traffic volumes on the roadway links can be different from the intersection volumes, particularly at the local level. The first area of difference is the land use data sets employed for the intersection forecasts and the MTS forecasts. The intersection forecasts, which are used to assess project traffic impacts on City of Oakland intersections, are based on land use data developed by HEG for the City of Oakland, which differs from the data in the ACCMA model. The second area of difference is the use of a furnessing process. The intersection forecasts use the output of the ACCMA model as an input to develop intersection volumes in conjunction with existing traffic counts. The MTS roadway analysis reports the outputs of the ACCMA model directly on a roadway segment level. It is not unusual for there to be discrepancies given that the two analyses measure impacts at a different scale. For local streets, intersections are typically a more accurate measure of operating conditions because the capacity of an urban street, defined as the number of vehicles that can pass through its intersections, is controlled by the capacity at its intersections.

2010 Impacts on Regional and Local Roadways

Impact B.8: The project would contribute to 2010 changes to traffic conditions on the regional and local roadways. (Less than Significant)

The addition of project-generated traffic to the regional and local roadways would not change the peak-hour levels of service on any of the roadways when compared to the 2010 baseline condition, except for I-980 (between I-880 and I-580), which would change from LOS A to B during the AM peak hour. This roadway would nonetheless continue to operate at acceptable levels of service.

Mitigation: None required.

2025 Impacts on Regional and Local Roadways

Impact B.9: The project would contribute to 2025 changes to traffic conditions on the regional and local roadways. (Significant)

The addition of project-generated traffic to the regional and local roadways would result in a change in peak-hour level of service at the following locations when compared to the 2025 baseline condition:

Addition of project trips on southbound I-880 from the project to High/42nd Street during the PM peak hour would cause the v/c ratio to increase within unacceptable LOS F by more than the 3-percent threshold of significance, which would be a significant impact.

PM Peak Hour

- I-880 (northbound from Hegenberger Street to High/42nd Street, and from High/42nd Street to the project), which would degrade from LOS D to E.
- I-880 (northbound from I-980 to I-880/Toll Plaza), which would degrade from LOS C to D.
- I-880 (southbound from I-880/Toll Plaza to I-980), which would degrade from LOS D to E.
- Martin Luther King Jr. Way (southbound from Adeline Street to SR 24), which would change from LOS D to E.
- Broadway (westbound from 14th Street to 7th Street), which would change from LOS A to B.
- Telegraph Avenue (northbound from Ashby Avenue to Bancroft Way), which would change from LOS D to E.

AM Peak Hour

- I-880 (northbound from the project to I-980), which would degrade from LOS D to E.

- Broadway (eastbound from Embarcadero to 7th Street), which would change from LOS A to B.

The above-cited roadway segments would nonetheless continue to operate at acceptable levels of service (LOS E or better), and the project impact on those segments would be less than significant.

> **Mitigation:** Direct mitigation of the project's significant impact on the freeway segment is not feasible. Factors that limit the mitigation of impacts include constrained right-of-way, no regional or local traffic impact fee mechanism to collect and disperse funds for roadways improvements, and the inherent difficulties with widening the freeways, such as the need to widen over crossings and structures adjacent to the freeway.
>
> One method to reduce vehicular trips from the project would be the inclusion of transit through the addition of transit stops, an extension of AC Transit service to the site, and the provision of a complementary private shuttle service that would connect the project to major adjacent destinations such as Downtown Oakland and Jack London Square. While inclusion of transit facilities and provision of both public and private transit service to the site would not fully mitigate the project's impacts on the regional freeway system, a reduction in trips to the site would lessen the impacts of the project on these roadways.

Significance after Mitigation: Significant and Unavoidable.

Construction Period Impacts [16]

Impact B.10: Project construction would temporarily affect traffic flow and circulation, parking, and pedestrian safety. (Potentially Significant)

During the construction period, temporary and intermittent transportation impacts would result from truck movements as well as construction worker vehicles to and from the project site. The construction-related traffic would result in a temporary reduction to the capacities of project area streets because of the slower movements and larger turning radii of construction trucks compared to passenger vehicles. Given the nearby I-880 freeway ramps, use of local roadways would be limited. Truck traffic that occurs during the peak commute hours (7:00 to 9:00 AM and 4:00 to 6:00 PM) could result in worse levels of service and higher delays at local intersections than during off-peak hours.

Construction work on the site would include two main types of activities, i.e., site preparation and building construction on each of the parcels. Building construction on an individual parcel could occur only after the completion of the site preparation work. These activities are described in more detail below.

[16] This section was prepared on the basis of preliminary estimates of construction phasing, duration, materials and equipment staging, and road closures provided by Oakland Harbor Partners (project sponsor).

Site preparation includes all of the activities required to allow construction on the individual parcels of the project. Major components of site preparation would involve removal of all existing structures such as buildings, parking lots and other man-made items, removal of contaminated soil material, deposition of clean fill, grading of the site, and construction of necessary infrastructure. At this time, it is anticipated that about three feet of soil would be removed from the site, and three feet of new fill material would be deposited uniformly across the project site. The final phase of site preparation would be the installation of infrastructure that would include onsite roadways, water lines, and other required items. A variety of equipment would be required for the site preparation stage, including bulldozers, grading machines, cranes, and dump trucks, which would be responsible for the removal and deposition of cut and fill material on the site. Reconstruction of the Embarcadero along the project frontage would occur as part of site preparation activities.

Building construction involves the assembly of the buildings on each individual parcel; it is anticipated there would be 13 to 15 buildings constructed on the project site. Major elements of building construction would include driving piles to support the building foundation, constructing the building frame, pouring concrete to serve as the floor of each story, and completing the interior of each building. Interior work within each building would include adding the necessary piping and wiring, adding windows, and installing interior fixtures such as sinks and faucets.

Given the size of the project site, it is anticipated that the construction workers, vehicles, and equipment would be stored onsite. In the earlier phases of construction, these vehicles would be stored on vacant parcels within the project site. During later phases of the project, the project open spaces would be used to store vehicles and equipment. According to the project applicant, the site construction activities would not require any off-site storage of equipment or vehicles. Designation of storage and staging areas for equipment, materials, and vehicles would be a requirement of a construction traffic management plan (see Mitigation Measure B.11).

The project would be developed in four major phases over a period of approximately 11 years. It is anticipated that the project would start construction in 2007 and be completed and occupied in several subphases, with full buildout complete in approximately 2018. Based on information provided by the project applicant, the following major assumptions were used to develop this schedule:

- Site preparation would begin in 2007.
- Each parcel would require at least one year of site preparation prior to building construction.
- Building construction would begin in 2008
- Construction of each building would require two to three years after the completion of the site preparation.
- Construction would be phased, with site preparation and building construction potentially occurring on separate parcels concurrently.
- Site preparation work would require five years to complete on the entire project beginning in 2007 and ending in 2012.
- Construction work on the individual buildings would occur over a ten-year period, beginning in 2008 and ending in 2018

According to the project applicant, the number of construction workers employed on the site can be estimated using the following assumptions:

- Site preparation would require 50 workers per day per parcel.
- Building construction would require between 50 and 60 workers per day per parcel and would vary by the size of the building.
- The maximum number of building construction workers infrequently (5-10% of the time) would be between 100 and 120 workers per parcel during periods of very heavy activity. These periods of heaviest activity would occur sporadically throughout the 2-3 year construction time frame.

The anticipated number of daily construction workers for each year of construction is provided in **Table IV.B-9**. This table also indicates the allocation between workers involved with site preparation versus building construction. As shown, the total number of workers onsite per day would range up to 270 to 300 workers, during the three-year period from 2010 to 2012; the level of workers for most years would range from 120 to 220 workers per day.

TABLE IV.B-9

PROJECT CONSTRUCTION WORKERS LEVELS (workers per day)

Year	Site Preparation	Building Construction	Total
2007	50	0	50
2008	50	170	220
2009	50	170	220
2010	50	220	270
2011	50	250	300
2012	0	270	270
2013	0	120	120
2014	0	160	160
2015	0	160	160
2016	0	120	120
2017	0	120	120
2018	0	60	60
Peak Level	50 (*2007-2011*)	270 (*2012*)	300 (*2011*)

SOURCE: Oakland Harbor Partners (project sponsor)

The following assumptions were applied to estimate the number of trips associated with the construction workers:

- Construction workers would travel to the site in private vehicles.

- Vehicles carrying workers to the site would have an auto occupancy equivalent to the regional average (approximately 1.2 persons per vehicle for work trips).
- There would be two daily trips associated with each worker (i.e., commuting to and from the site)
- A majority of the worker trips would occur outside of the morning and afternoon peak traffic hours (i.e., construction workers would arrive by 7:00 AM and leave by 3:30 PM. For purposes of this analysis, 25 percent of the trips are assumed to occur during the peak traffic hours.

Based on these assumptions, the project workers would generate an additional 500 daily construction trips and approximately 62 additional trips in each of the peak hours, at a peak level of activity in 2011.

The construction activities, including the site preparation and the building construction, are expected to generate varying level of truck activity. Truck trips generated by the project would include:

- Dump trucks removing contaminated soil
- Dump trucks delivering clean fill
- Flat bed trucks delivering piles
- Cement trucks
- Delivery trucks providing drywall, interior furnishings, appliances and other items

Similar to construction workers, the number of trucks is expected to vary as the construction activity varies. For example, the highest number of trucks would be required for the removal and deposition of soil at the site, activities that are anticipated to occur during the initial site preparation phase. Another activity which would require a large number of trucks is pouring the floors of each building, requiring a daily influx of cement mixer trucks. As construction concludes, fewer trucks would be required because deliveries would only be required intermittently. For example, a single large delivery truck should be able to deliver many of the appliances required for several units in each building.

The following assumptions were applied to determine the truck trips associated with the project:

- 50 truck round trips (100 one-way trips) per day would be required during the site preparation phase. These trucks would be needed to remove the contaminated soil. Additionally, these trucks would be depositing fill material to replace the removed soil. It is anticipated that each truck might make at least 2-3 round trips per day.
- 50 truck round trips (100 one-way trips) per day per building would be required to deliver cement for the flooring. Again, these trucks may be making several round trips throughout the day. It is anticipated that cement would only be required during the first year of construction. Additionally, cement trucks may only be required 2-3 weeks per year.
- 5 truck round trips (10 one-way trips) per day per building would occur on all other days of construction activity. These trucks would be delivering materials as described above.

As shown in **Table IV.B-10**, the number of daily one-way truck trips is expected to vary between 10 and 400 trips, with the peak level of truck traffic occurring in 2011.

TABLE IV.B-10

PROJECT CONSTRUCTION TRUCK TRIPS (truck trips per day) [a]

Year	Site Preparation	Building Construction	Total
2007	100	0	100
2008	100	300	400
2009	100	30	130
2010	100	220	320
2011	100	300	400
2012	0	230	230
2013	0	20	20
2014	0	210	210
2015	0	120	120
2016	0	110	110
2017	0	20	20
2018	0	10	10
Peak Level	100 (*2007-2011*)	300 (*2011*)	400 (*2011*)

[a] The truck trips in this table represent one-way trips. One-way trips are either inbound to, or outbound from, the project site; two one-way trips equal one round trip. For example, site preparation would generate 50 round trips, and 100 one-way trips.

SOURCE: Oakland Harbor Partners (project sponsor)

The traffic associated with the construction of the project can be expected to negatively affect traffic flow in the project study area, particularly on Embarcadero and access points to/from I-880. The greatest impact would occur from vehicles associated with the delivery and removal of any cut and fill from the site. During peak periods of construction on the I-880 Seismic Retrofit, this impact would likely be exacerbated. The City of Oakland would work in cooperation with Caltrans to mitigate cumulative effects that may occur during periods when the proposed project and the I-880 Seismic Retrofit project overlap.

Mitigation Measure B.10: Prior to the issuance of each building permit, the project applicant and construction contractor shall meet with the Traffic Engineering and Parking Division of the Oakland Public Works Agency and other appropriate City of Oakland agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction. The project applicant shall develop a construction management plan for review and approval by the City Traffic Engineering Division. The plan shall include at least the following items and requirements:

- A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. In addition, the information shall include a construction staging plan for any right-of-

way used on the Embarcadero, including sidewalk and lane intrusions and/or closures.

- Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur.
- Location of construction staging areas for materials, equipment, and vehicles (must be located on the project site).
- Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation and safety; and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant.
- Temporary construction fences to contain debris and material and to secure the site.
- Provisions for removal of trash generated by project construction activity.
- A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an onsite complaint manager.
- Provisions for monitoring surface streets used for truck routes so that any damage and debris attributable to the trucks can be identified and corrected.

It is anticipated that this Construction Traffic Management Plan would be developed in the context of a larger Construction Management Plan, which would address other issues such as hours of construction on site, limitations on noise and dust emissions, and other applicable items.

Significance after Mitigation: Less than Significant.

Evaluation of Project's Proposed Parking Supply

Because a Court of Appeal decision (regarding a challenge to San Francisco's treatment of parking as a social, not physical, effect) held that parking is not part of the permanent physical environment, and that parking conditions change over time as people change their travel patterns, unmet parking demand created by the project need not be considered a significant environmental effect under CEQA unless it would cause significant secondary effects.[17] However, the City of Oakland, in its review of the proposed project, wants to ensure that the provision of parking spaces in conjunction with measures to lessen parking demand (by encouraging the use of non-auto travel modes) would result in minimal adverse effects to project occupants and visitors, and that any secondary effects (such as on air quality due to drivers searching for parking spaces)

[17] San Franciscans Upholding the Downtown Plan v. the City and County of San Francisco (2002) 102 Cal.App.4th 656.

will be minimized. As such, although not required by CEQA, this EIR provides City policymakers and other readers of this document with information about the relation between proposed parking supply and estimated parking demand and City code requirements.

Parking deficits may be associated with secondary physical environmental impacts, such as air quality and noise effects, caused by congestion resulting from drivers circling as they look for a parking space. However, the absence of a ready supply of parking spaces, combined with available alternatives to auto travel (e.g., transit service, shuttles, taxis, bicycles or travel by foot), may induce drivers to shift to other modes of travel, or change their overall travel habits. Any such resulting shifts to transit service, in particular, would be in keeping with the City's "Transit First" policy.

Additionally, regarding potential secondary effects, cars circling and looking for a parking space in areas of limited parking supply is typically a temporary condition, often offset by a reduction in vehicle trips due to others who are aware of constrained parking conditions in a given area. Hence, any secondary environmental impacts that might result from a shortfall in parking in the vicinity of the proposed project are considered less than significant.

City Off-Street Parking Requirements

A consideration when evaluating the project's proposed parking supply is how it compares to the City's Municipal Code requirements for off-street parking (Municipal Code Chapter 17.116). However, Code requirements are not used to judge parking impacts; parking supply versus estimated parking demand (discussed below) is used to judge impacts. It is anticipated that the project site would be rezoned from the current site zoning to the proposed Planned Waterfront Zoning District. Based on these assumptions, parking code requirements for the project would be as shown in **Table IV.B-11**. The parking requirements for the proposed project are shown in **Table IV.B-12**. As shown, the project would require and provide 1,277 off-street parking spaces for Phase 1, and 3,534 spaces at project buildout.[18]

Parking Demand

The level of demand for parking spaces depends on various factors, including the availability of alternative modes of transportation (e.g., public/private transit, and/or facilities to accommodate bicycles) and proximity to trip destinations (e.g., shopping and/or recreational attractions). The project's parking demand was estimated on the basis of parking demand rates derived from data published by the Institute of Transportation Engineers (ITE, 2004b),and professional engineering judgment as to how characteristics of the proposed project fit in the ITE data. The ITE data are based on surveys of different types of land uses in different areas; residential uses were surveyed

[18] The proposed project would provide covered parking at minimum rates of one space per residential unit, one space per 500 sq. ft. of commercial space, and one space per five boat slips. For the project analyzed herein, the project would provide 1,277 covered spaces for Phase 1, and 3,534 covered spaces for project buildout. The project also would provide parking in surface lots in the open space areas of the site (about 30 spaces for Phase 1, and about 75 spaces for project buildout), and on-street parking within the project site (about 230 spaces for Phase 1, and about 375 spaces for project buildout). These surface lot spaces and on-street spaces do not count toward satisfying the Code requirement.

TABLE IV.B-11

PROPOSED PLANNED WATERFRONT ZONING DISTRICT PARKING STANDARDS

Land Use	Parking Requirement
Residential Unit	1 space per dwelling unit
General Commercial	1 space per 500 square feet of floor area
Marina	1 space per five boat slips

SOURCE: City of Oakland

TABLE IV.B-12

CITY OFF-STREET PARKING REQUIREMENT BY PHASE [a]

Land Use	Phase 1	Buildout Total
Residential Units	1,139	3,100
General Commercial	138	400
Marina	0	34
City Requirement	1,277	3,534
Proposed Parking [b]	1,277	3,534

[a] The parking calculations in this table are based on requirements for the anticipated zoning designations (shown in Table IV.B-11).
[b] The proposed project would provide parking in surface lots in the open space areas of the site (about 30 spaces for Phase 1, and about 75 spaces for project buildout). The project also would provide on-street parking within the project site (about 230 spaces for Phase 1, and about 375 spaces for project buildout). This totals an additional 260 spaces supplied in Phase 1 and 450 more spaces supplied at project buildout compared to the proposed parking indicated. Surface lot spaces, and on-street parking spaces do not count toward satisfying the Code requirement.

SOURCES: City of Oakland and Oakland Harbor Partners (project sponsor)

in both suburban and urban areas. Also, ITE data are presented for individual land use types (that is, do not take into account the interrelationship among a mix of uses, such as residential, and commercial, in proximity to each other).

For the project's residential component, parking generation data for residential condominiums (LU Code 230) are available in ITE's *Parking Generation* for suburban and urban areas. The current relative lack of convenient transit service opportunities for future residents of the project site supports use of suburban-based parking demand data. On the other hand, the proposed density of the project's residential units, and the mix of residential, commercial, and recreational use, supports use of urban-based parking demand data. The project's provision of a continuous public trail along the entirety of the project shoreline, linking to the existing Bay Trail, would accommodate alternative transportation (bicycle and pedestrian) traffic to off-site destinations. Greater transit availability for project occupants, in the form of increased AC Transit service and/or complementary private shuttle service, would make the project more urban-like. For the project's commercial components, parking demand was estimated for the general commercial portion (LU Code 820) and the grocery store site (LU Code 850). In order to provide decision makers and the general public with information to judge whether or not changes to the project are

needed, **Table IV.B-13** presents estimated parking demand using both suburban and urban parking demand rates from ITE. As shown, the total parking demand would be about 5,270 spaces using the suburban-based residential rate, and about 3,379 spaces using the urban-based residential rate.

TABLE IV.B-13

ESTIMATED PEAK PARKING DEMAND

		Phase 1			Project Buildout		
Land Use	**Rate**	**Size**	**Demand**	**Supply**	**Size**	**Demand**	**Supply**
General Commercial	3.02/ksf	69	208		170	513	
Grocery Store	4.36/ksf	0	0		30	131	
Marina	0.59/slip	0	0		170	100	
Non-residential Subtotal			*208*			*744*	
Residential (*Suburban*) [a]	1.46/du	1,139	1,663		3,100	4,526	
Residential (*Urban*) [a]	0.85/du	1,139	968		3,100	2,635	
TOTAL (*Suburban residential rate*)			**1,871**	**1,277** [b]		**5,270**	**3,534** [b]
TOTAL (*Urban residential rate*)			**1,176**	**1,277** [b]		**3,379**	**3,534** [b]

[a] According to ITE's *Parking Generation*, residential condominiums were surveyed in both urban and suburban areas. For purposes of this analysis, both parking ratios were used to provide decision makers and the general public with information to judge whether or not changes to the proposed project are needed.

[b] The proposed project's parking supply would consist of covered spaces to accommodate the estimated parking demand. The Phase 1 project analyzed herein also would provide about 230 on-street spaces, and about 30 spaces in surface lots in the open space areas of the site. The project buildout analyzed herein also would provide about 375 on-street spaces, and about 75 spaces in surface lots in the open space areas of the site. However, those additional surface-lot and on-street parking spaces are not assumed for purposes of determining how well the project would accommodated its generated parking demand.

SOURCES: Fehr & Peers Transportation Consultants, and ESA, using data from ITE, *Parking Generation* (3rd Edition), 2004

Shared Parking Adjustments

The above-described estimates of total parking demand is the sum of the parking demand generated by individual project components, and does not take into account possible shared use of onsite parking spaces. For example, a person living in one of the residential units might walk, rather than drive, to a restaurant that is located within the project site. Because of this interaction between the various uses, the total parking demand should reflect some reduction, which is reflected in a shared-use discount. Because the potential overlap between the uses cannot be definitively identified at this time (as the types of commercial uses have not been defined), several shared-use reductions were analyzed ranging up to 25 percent.

For purposes of this analysis, this shared use reduction was applied to the retail spaces (general commercial and grocery store) because the number of retail spaces would be the limiting factor, and the parking demand for the residential uses are not likely to be sensitive to the presence or absence of adjacent commercial uses. The number of parking spaces required by the retail uses is

expected to be heavily dependent on the location of adjacent residential uses. In addition, resident parking is likely to be reserved and could not be shared by multiple users.

Tables in **Appendix C** document the anticipated reduction in the total parking demand based on the application of a shared-use reduction to the retail spaces. As shown in those tables, the anticipated parking demand may be reduced by up to about 160 spaces, reducing the total parking demand to as low as about 5,110 spaces (if the suburban residential rate were applied) or about 3,220 spaces (if the urban residential rate were applied).

Phase 1 of the Project. As shown in **Table IV.B-13**, Phase 1 of the project would generate a peak demand for about 1,870 parking spaces (using a suburban rate) or about 1,175 spaces (using an urban rate), and would provide a total supply of about1,277 spaces, which would yield either a shortfall of about 594 spaces (suburban rate) or a surplus of about 101 spaces (urban rate).

Buildout of the Project. As shown in **Table IV.B-13**, buildout of the project would generate a peak demand for about 5,270 parking spaces (using a suburban rate) or about 3,380 spaces (using an urban rate), and would provide a total supply of 3,534 spaces, which would yield either a shortfall of about1,736 spaces (suburban rate) or a surplus of about 155 spaces (urban rate).

Even with the application of the maximum shared parking reductions, the suburban-based parking demand would exceed the parking supply by about 1,576 spaces. In particular, it is likely that parking for the residential units would spill over to the on-street spaces and reduce the potential parking spaces for the commercial areas of the development. Potential conflicts would be highest if the project contains retail uses that attract persons from outside of the project site. For example, the project is anticipated to contain a grocery store, which would likely attract shoppers from the surrounding area. It is possible that the project could also contain other uses such as restaurants, which also could attract visitors from outside of the project site.

While parking deficits are not considered a significant environmental impact that requires mitigation measures, the following improvement measures would help ensure that the provision of parking spaces in conjunction with measures to lessen parking demand would result in minimal adverse effects to project occupants and visitors, and that any secondary effects (such as on air quality due to drivers searching for parking spaces) would be minimized:

- The project applicant shall design the project to reduce the difference between parking demand and parking supply, by decreasing parking demand or increasing parking supply). Decreasing parking demand could be accomplished by implementation of Mitigation Measures B.5a and B.5b (provide public and/or private transit service to the project site).

- The project applicant shall incorporate parking control and management techniques into the project site plan, with a goal to preserve parking spaces for retail uses to ensure that there is adequate parking for the commercial uses. Specific recommended measures include:

    - On-street parking would be limited to two-hour occupancy during peak hours of retail activity (defined as 9:00 AM to 8:00 PM on weekdays and weekends) along

certain, appropriate retail streets. These restrictions would limit occupancy of these spaces by residents, guests, and their visitors.

- Short-term (30-minute) loading and unloading spaces would also be provided throughout the on-street parking.
- Parking meters would be installed for on-street parking to facilitate enforcement of parking regulations.
- Parking limits would be enforced to ensure parking restrictions are being followed by residents, visitors, and patrons.
- Each residential dwelling unit would be assigned one space within the parking structures.
- Employees would be allowed to park in the parking structures in the spaces not assigned to residences.
- Visitors to the residences would be allowed to park in the parking structures during the day or in on-street spaces overnight.
- Shared parking would be explored to allow visitors/customers to the commercial uses to park in off-street spaces in addition to the on-street spaces.

By establishing these controls, the parking spaces within the project site would be more clearly delineated between residential supply (residents, guests, and visitors) and the commercial supply (workers and patrons). Even with these parking controls, however, insufficient parking could exist unless the project were designed to reduce the difference between parking demand and parking supply.

Parking for Large Events

The project applicant is not proposing to hold events (such as concerts) at the project site. However, it is appropriate to address effects of such an eventuality in this document. Any large event on the project site would require a Special Event Permit from the City of Oakland Police Department, which requires the event sponsor to disclose parking locations for event attendees, and if applicable, to designate a shuttle system to access the event from off-site parking locations. Additionally, this permit allows the Police Department to identify traffic control measures that would be in place before, during, and after the event to minimize traffic disruption. It is noted that for organizers of special events at Jack London Square (be it an agency like the Port of Oakland, or another entity) to obtain a permit from the City of Oakland, the organizers must demonstrate that steps will be taken to manage vehicular and non-vehicular traffic access, and parking demand.

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C. Air Quality and Meteorological Conditions

Introduction

This section provides an overview of the existing air quality within the Oak to Ninth Avenue Project area and surrounding region, the associated regulatory setting, and an analysis of potential impacts on air quality that would result from implementation of the project. This section also provides an analysis of potential impacts resulting from exposure to toxic air contaminants (TACs), as well as an assessment of hazardous wind effects.

Setting

Regulatory Setting

Federal

The Federal Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (EPA) to define National Ambient Air Quality Standards (NAAQS) to protect national public health and welfare. “Criteria” air pollutants are potentially harmful emitted compounds that have established national standards to protect sensitive receptors identified in the CAA, including the elderly, young children, people with pre-existing illness, and individuals performing strenuous work or exercise. National standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, and respirable particulate matter (PM10 and PM2.5, particulates less than 10 and 2.5 microns in diameter, respectively). California has adopted more stringent ambient air quality standards for most of the criteria air pollutants (referred to as State Ambient Air Quality Standards or State standards). **Table IV.C-1** provides a brief discussion of the related health effects and principal sources for each pollutant. National and state standards are presented in **Table IV.C-2**, as reported by the California Air Resources Board.

The U.S. EPA, in pursuance of the CAA Amendments of 1990, required each state to identify areas (air basins or portions thereof) within its borders as either “attainment” or “non-attainment” for each criteria air pollutant, based on whether the national standards had been met. The federal Clean Air Act also requires non-attainment areas to prepare air quality plans that include strategies for achieving attainment. Air quality plans developed to meet federal requirements are referred to as State Implementation Plans (SIPs).

State

The California Air Resources Board (CARB) is the state’s air quality management agency, which is responsible for establishing and reviewing the state ambient air quality standards, compiling the California State Implementation Plan and securing approval of that plan from U.S. EPA, and identifying toxic air contaminants (TACs). The state Air Resources Board also regulates mobile emissions sources in California, such as construction equipment, trucks, and automobiles, and oversees the activities of air quality management districts, which are organized at the county or

TABLE IV.C-1

STATE AND NATIONAL CRITERIA AIR POLLUTANT SOURCES AND HEALTH EFFECTS

Pollutant	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Formed when reactive organic gases (ROG) and nitrogen oxides (NO_X) react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
Carbon Monoxide	Classified as a chemical asphyxiant, carbon monoxide interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
Nitrogen Dioxide	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
Sulfur Dioxide	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
Respirable Particulate Matter (PM10)	May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g. wind-raised dust and ocean sprays).
Fine Particulate Matter (PM-2.5)	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NO_X, sulfur oxides, and organics.
Lead	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurologic dysfunction.	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.

SOURCES: Air Resources Board, *ARB Fact Sheet: Air Pollution Sources, Effects and Control*, October 2001, http://www.arb.ca.gov/research/health/fs/fs2/fs2.htm.

regional level. The county or regional air quality management districts are primarily responsible for regulating stationary emissions sources at industrial and commercial facilities within their geographic area and for preparing the air quality plans that are required under the federal Clean Air Act and California Clean Air Act.

State standards are stricter than national ambient air quality standards, as depicted in **Table IV.C-2**. Similar to the federal CAA, the California Clean Air Act (CCAA) designates air basins in the state as either attainment or non-attainment based on whether the specified area meets state standards. The California Clean Air Act also requires plans for non-attainment areas with respect to the state standards. Thus, just as areas in California have two sets of attainment or non-attainment designations, many also have two sets of air quality plans: one to meet federal

TABLE IV.C-2

ATTAINMENT STATUS OF THE PROJECT AREA FOR THE STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone	8 Hour			0.08 ppm	N
	1 Hour	0.09 ppm (180 µg/m^3)	N	0.12 ppm (235µg/m^3)	N
Carbon Monoxide	8 Hour	9.0 ppm (10 mg/m^3)	A	9 ppm (10 mg/m^3)	A
	1 Hour	20 ppm (23 mg/m^3)	A	35 ppm (40 mg/m^3)	A
Nitrogen Dioxide	Annual Average			0.053 ppm (100 µg/m^3)	A
	1 Hour	0.25 ppm (470 µg/m^3)	A		
Sulfur Dioxide	Annual Average			80 µg/m3 (0.03 ppm^3)	A
	24 Hour	0.04 ppm (105 µg/m^3)	A	0.14 ppm (365 µg/m^3)	A
	1 Hour	0.25 ppm (655 µg/m^3)	A		
Particulate Matter (PM10)	Annual Arithmetic Mean	20 µg/m^3	N	50 µg/m^3)	A
	24 Hour	50 µg/m^3	N	150 µg/m^3	U
Particulate Matter - Fine (PM2.5)	Annual Arithmetic Mean	12 µg/m^3	N	15 µg/m^3)	U
	24 Hour			65 µg/m^3	U
Sulfates	24 Hour	25 µg/m^3	A		
Lead	Calendar Quarter			1.5 µg/m^3)	A
	30 Day Average	1.5 µg/m^3)	A		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3	U		
Vinyl Chloride (chloroethene)	24 Hour	0.010 ppm (26 µg/m^3	No information available		
Visibility Reducing particles	8 Hour(1000 to1800 PST)		A		
A=Attainment N=Nonattainment U=Unclassified					
mg/m^3=milligrams per cubic meter		ppm=parts per million		µg/m^3=micrograms per cubic meter	

SOURCE: Bay Area Air Quality Management District, Air Quality Standards and Attainment. July 2005.
http://www.baaqmd.gov/pln/air_quality/ambient_air_quality.asp

requirements relative to the national standards and one to meet state requirements relative to the state standards.

Local

San Francisco Bay Area Air Basin

The city of Oakland is located in Alameda County and is within the boundaries of the San Francisco Bay Area Air Basin (Bay Area). The Bay Area is in attainment or unclassified for all federal criteria pollutants, except for ozone. "Unclassified" is defined in the CAA Amendments as any area that cannot be classified, on the basis of available information, as meeting or not meeting the national primary and secondary air quality standard for the specified pollutant (CARB 2003).

The project area is in attainment of most state standards for criteria pollutants. The Bay Area is in non-attainment for state standards for ozone, PM10, and PM2.5. Hydrogen sulfide is unclassified, and there is not enough information available to classify vinyl chloride. **Table IV.C-2** shows the attainment status of the Bay Area with respect to the federal and state ambient air quality standards for different criteria pollutants.

As noted earlier, the federal Clean Air Act and the state California Clean Air Act require plans to be developed for areas designated as non-attainment (with the exception of areas designated as non-attainment for the state PM10 standard). Plans are also required under federal law for areas designated as "maintenance" for national standards. Such plans are to include strategies for attaining the standards. Currently, there are two plans for the Bay Area: the San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard (ABAG 2001) developed to meet federal ozone air quality planning requirements, and the Bay Area Clean Air Plan and Triennial Assessment (BAAQMD, 2000) developed to meet planning requirements related to the state ozone standard.

Rules and Regulations

The regional agency primarily responsible for developing air quality plans for the Bay Area is the Bay Area Air Quality Management District (BAAQMD), the agency with permit authority over most types of stationary emission sources of air pollutants in the Bay Area. BAAQMD exercises permit authority through its *Rules and Regulations*. Both federal and state ozone plans rely heavily upon stationary source control measures set forth in BAAQMD's *Rules and Regulations*. In contrast to the ozone plans, the *Carbon Monoxide Maintenance Plan* relies heavily on mobile source control measures. With respect to the construction phase of the project, applicable BAAQMD regulations would relate to portable equipment (e.g., gasoline- or diesel-powered engines used for power generation, pumps, compressors, pile drivers, and cranes), architectural coatings, and paving materials. Equipment used during project construction would be subject to the requirements of BAAQMD Regulation 2 (Permits), Rule 1(General Requirements) with respect to portable equipment unless exempt under Rule 2-1-105 (Exemption, Registered Statewide Portable Equipment); BAAQMD Regulation 8 (Organic Compounds), Rule 3

(Architectural Coatings); and BAAQMD Regulation 8 (Organic Compounds), Rule 15 (Emulsified and Liquid Asphalts).

Regional Setting

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features that influence pollutant movement. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, and consequently affect air quality. This setting section provides region-specific information related to climate and topography.

General Climate, Meteorology and Wind Conditions

The Bay Area Air Basin encompasses the nine-county region including all of Alameda, Contra Costa, Santa Clara, San Francisco, San Mateo, Marin and Napa Counties, and the southern portions of Solano and Sonoma Counties. The climate of the Bay Area is determined largely by a high-pressure system that is almost always present over the eastern Pacific Ocean off the West Coast of North America. High-pressure systems are characterized by an upper layer of dry air that warms as it descends, restricting the mobility of cooler marine-influenced air near the ground surface, and resulting in the formation of subsidence inversions. In winter, the Pacific high-pressure system shifts southward, allowing storms to pass through the region. During summer and fall, emissions generated within the Bay Area can combine with abundant sunshine under the restraining influences of topography and subsidence inversions to create conditions that are conducive to the formation of photochemical pollutants, such as ozone.

Specifically, the project site would be located within the Northern Alameda and Western Contra Costa Counties climatological subregion of the Bay Area Air Basin. This subregion stretches from Richmond to San Leandro with the San Francisco Bay as its western boundary and its eastern boundary defined by the Oakland-Berkeley Hills. In this area, marine air traveling through the Golden Gate, as well as across San Francisco and the San Bruno Gap, is a dominant weather factor. The Oakland-Berkeley Hills cause the westerly flow of air to divert to the north and south of Oakland, which causes diminished wind speeds. The prevailing winds for most of this subregion are from the west.

Average wind speeds in Oakland are highest during summer and lowest during winter months. However, strongest peak winds occur in winter, when speeds of over 50 miles per hour have been recorded. Except during storms, the highest wind speeds are in the mid-afternoon and the lowest are in the early morning. At night, especially in the winter, cooling temperatures on land result in light offshore (northeasterly and easterly) winds from the Oakland Hills toward San Francisco Bay.

Data collected at the former U.S. Naval Air Station at the city of Alameda show that winds from the west and north-northwest are the most frequent and strongest winds during all seasons in the

Oakland area. Of the 16 wind directions measured at the naval station, nine directions, centered on the west (46 percent), north-northwest (22 percent) and south-southeast (14 percent) comprise the most frequency occurrences. All other wind directions occur less than 19 percent of the time. Calm conditions (which include the directional breakdowns stated above) occur during 8 percent of annual observations.

Temperature in Oakland averages 58 degrees Fahrenheit (F) annually, ranging from an average of 40 degrees F on winter mornings to mid-70s in the late summer afternoons. Daily and seasonal oscillations of temperature are small because of the moderating effects of the nearby ocean. In contrast to the steady temperature pattern, rainfall is highly variable and predominantly confined to the "rainy" period from early November to mid-April. Oakland averages 18 inches of precipitation annually, but because much of the area's rainfall is derived from the fringes of mid-latitude storms, a shift in the annual storm track of a few hundred miles can mean the difference between a very wet year and near drought conditions.

Existing Air Quality

The approximately 64.2-acre Oak to Ninth Avenue Project site is bound by the Oakland Estuary on the south, the Embarcadero and I-880 on the north, Brooklyn Basin/Ninth Avenue Terminal on the east, and Fallon Street on the west. The BAAQMD operates a regional monitoring network that measures the ambient concentrations of the six criteria pollutants. Existing and probable future levels of air quality in Oakland can generally be inferred from ambient air quality measurements conducted by the BAAQMD at its monitoring stations. The major pollutants of concern in the Bay Area, ozone, particulate matter, and carbon monoxide are monitored at a number of locations. The monitoring station closest to the project site is on Alice Street in Oakland, approximately one-half mile from the project site. The station monitors ozone and carbon monoxide. Currently, the nearest stations to the project site that monitor particulate matter (PM-2.5 and PM10) are part of the Port of Oakland's West Oakland Particulate Monitoring Program. The Port of Oakland and West Oakland residential monitoring stations are located approximately three miles and two miles northwest of the project site, respectively. **Table IV.C-3** shows a six-year summary of ozone, carbon monoxide, and particulate matter monitoring data from the Alice Street and West Oakland (Port and Residential) stations. The table also compares measured pollutant concentrations with state and national ambient air quality standards.

Ozone

Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and that can cause substantial damage to vegetation and other materials. Ozone is not emitted directly into the atmosphere but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and nitrogen oxides (NOx). ROG and NOx are known as precursor compounds for ozone. Significant ozone production generally requires ozone precursors to be present in a stable atmosphere with strong sunlight for approximately three hours. Ozone is a regional air pollutant because it is not emitted

directly by sources but is formed downwind of sources of ROG and NOx under the influence of wind and sunlight. Ozone concentrations tend to be higher in the late spring, summer, and fall, when the long sunny days combine with regional subsidence inversions to create conditions conducive to the formation and accumulation of secondary photochemical compounds, like ozone. On-road motor vehicles are the single largest source of ozone precursors in the Bay Area (BAAQMD, 1999).

Based on the data shown in **Table IV.C-3**, there have been no exceedances of the state and the national 1-hour ozone standards recorded at the Alice Street station in the project vicinity over the last six years. Countywide ROG and NOx emissions are expected to decrease by approximately 12 and 17 percent respectively from 2005 to 2010 (CARB, 2005a).

Carbon Monoxide

Carbon monoxide is a non-reactive pollutant that is a product of incomplete combustion and is mostly associated with motor vehicle traffic. High carbon monoxide concentrations develop primarily during winter when periods of light winds combine with the formation of ground-level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased carbon monoxide emission rates at low air temperatures. When inhaled at high concentrations, carbon monoxide combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia.

The project site is located in an area designated as an “attainment” area for carbon monoxide standards (**Table IV.C-2**). Further, according to the **Table IV.C-3** there have been no exceedances of state and national ambient carbon monoxide standards at the Alice Street station area in the city of Oakland in the last six years. Based on BAAQMD carbon monoxide isopleth maps, existing background carbon monoxide concentrations in the project vicinity are approximately 6.0 and 4.0 parts per million, one-hour and eight-hour average respectively (BAAQMD, 1999). On-road motor vehicles are responsible for approximately 70 percent of the carbon monoxide emitted within the San Francisco Bay Area and 71 percent of the emissions in Alameda County (CARB, 2005a). Carbon monoxide emissions are expected to decrease within the county by approximately 19 percent between 2005 and 2010 (CARB, 2005a).

TABLE IV.C-3

AIR QUALITY DATA SUMMARY (1999-2003) FOR THE PROJECT AREA: ALICE STREET AND WEST OAKLAND MONITORING STATIONS

Pollutant	Standard[c]	Monitoring Data by Year				
		1999	2000	2001	2002	2003
Ozone[a]:						
Highest 1 Hour Average (ppm) [d]		0.08	0.07	0.07	0.05	0.08
Days over State Standard	0.09	0	0	0	0	0
Days over National Standard	0.12	0	0	0	0	0
Highest 8 Hour Average (ppm) [d]		0.06	0.05	0.04	0.04	0.05
Days over National Standard	0.08	0	0	0	0	0
Carbon Monoxide[a]:						
Highest 8 Hour Average (ppm) [d]		5.2	3.4	4.0	3.3	2.8
Days over State Standard	9.0	0	0	0	0	0
Days over National Standard	9.0	0	0	0	0	0
Particulate Matter – 2.5 microns[b]:						
Port: Highest 24 Hour Average (g/m^3) [d]		--	--	--	27.03	36.09
Days over National Standard	65	--	--	--	0	0
Residential: Highest 24 Hour Average (g/m^3) [d]		--	--	--	36.0	45.42
Days over National Standard	65	--	--	--	0	0
Particulate Matter – 10 microns[b]:						
Port: Highest 24 Hour Average (g/m^3) [d]		--	--	--	**110.49**	42.58
Days over State Standard	50	--	--	--	**4**	0
Days over National Standard	150	--	--	--	0	0
Residential: Highest 24 Hour Average (g/m^3) [d]		--	--	--	**60.88**	**67.53**
Days over State Standard	50	--	--	--	**2**	**2**
Days over National Standard	150	--	--	--	0	0

[a] Ozone and CO data are from the Alice Street station in Oakland.
[b] PM2.5 and PM10 data are from the West Oakland (Port and Residential) monitoring stations.
[c] Generally, state standards are not to be exceeded and national standards are not to be exceeded more than once per year.
[d] ppm = parts per million; g/m^3 = micrograms per cubic meter.

NOTE: Values in **bold** are in excess of applicable standard. -- = Data unavailable.

SOURCES: California Air Resources Board, 2004, *Summaries of Air Quality Data*, 1999, 2000, 2001, 2002, 2003; http://www.arb.ca.gov/adam.
GAIA Consulting, Inc., *West Oakland Particulate Air Quality Monitoring Program – Annual Progress Report (September 2002 – August 2003)*, December 2003.
GAIA Consulting, Inc., *West Oakland Particulate Air Quality Monitoring Program – Annual Progress Report (September 2001 – August 2002)*, February 2003.

Particulate Matter

PM10 and PM-2.5 consist of particulate matter that is 10 microns or less in diameter and 2.5 microns or less in diameter, respectively. (A micron is one-millionth of a meter). PM10 and PM-2.5 represent fractions of particulate matter that can be inhaled into the air passages and the lungs and can cause adverse health effects. Particulate matter in the atmosphere results from

many kinds of dust- and fume-producing industrial and agricultural operations, fuel combustion, and atmospheric photochemical reactions. Some sources of particulate matter, such as demolition and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates also can damage materials and reduce visibility.

PM10 emissions in the project area are mainly from urban sources, dust suspended by vehicle traffic, and secondary aerosols formed by reactions in the atmosphere. Particulate concentrations near residential sources generally are higher during the winter, when more fireplaces are in use and meteorological conditions prevent the dispersion of directly emitted contaminants. Based on the West Oakland (Port and Residential) station data shown in **Table IV.C-3**, there have been no exceedances of the national 24-hour Average standards for PM-2.5 over the last two years. At the Port station, PM10 exceeded the state 24-hour Average standard for 4 days in 2002. At the Residential station, PM10 exceeded the state 24-hour Average standard for 2 days in 2002 and 2 days in 2003. Direct PM10 emissions in Alameda County are expected to increase by approximately 1 percent between 2005 and 2010 (CARB, 2005a). This increase would be primarily from stationary sources (such as industrial activities) and area sources (such as construction and demolition, road dust, and other miscellaneous processes).

Other Criteria Pollutants

The standards for nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead are being met in the Bay Area, and the latest pollutant trends suggest that these standards will not be exceeded in the foreseeable future (BAAQMD 1999). Ambient levels of airborne lead in the Bay Area are well below the state and federal standard and are expected to continue to decline. Because no sources of lead emissions exist on the project site or are proposed by the project, lead emissions are not required to be quantified by the BAAQMD and are not further evaluated in this analysis.

Sensitive Receptors

Individuals sensitive to air pollutants include the elderly, young children, people with pre-existing illness, and individuals performing strenuous work or exercise. Sensitive receptors are land uses such as child-care centers, schools, playgrounds, retirement or convalescent homes, and hospitals that often house these sensitive individuals who are more susceptible to adverse effects to the respiratory system than the general public (BAAQMD 1999). Individuals performing strenuous work or exercise are sensitive to air pollutants due to the greater inspiration and intake of air pollutants after strenuous physical exertion. Occupants of residential areas are also sensitive to air pollutants because residents tend to be at home for prolonged periods of time and thus have the potential for extended exposure. Occupants of industrial and business areas are the least sensitive to air pollutants because of the general health of the working population and the short exposure periods.

The existing sensitive receptors in the project area are part of the six-acre Fifth Avenue Point work-live artist community along 5th Avenue, south of the Embarcadero. Fifth Avenue Point includes a mix of residential, industrial, and commercial uses on privately owned parcels. Also, proposed parks and open space recreational areas to be developed as part of the project would also be considered sensitive land uses. Due to the project construction phasing, proposed residential units that would be completed during initial phases would be occupied while other parcels are under construction developed. Therefore, the nearest sensitive receptors to project-related air quality impacts include the new project residents and tenants.

Air Quality and Meteorological Conditions Impacts Discussion

Significance Criteria

The project would be considered to have a significant effect on the environment if the impact would satisfy any of the following significance criteria from the CEQA Guidelines, Appendix G, and the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines:

Air Quality and Odor

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations;
- Frequently create substantial objectionable odors affecting a substantial number of people;
- Contribute to CO concentrations exceeding the State ambient air quality standard of 9 ppm averaged over 8 hours and 20 ppm for 1 hour (addressed in Impact 4.C.3). Also, pursuant to BAAQMD significance criteria guidelines (BAAQMD 1999), localized CO concentrations should be estimated if:

    1. vehicle emissions of CO would exceed 550 lb/day;
    2. project traffic would impact intersections or roadway links operating at Level of Service (LOS) D, E, or F or would cause a decrease in LOS to D, E, or F; or
    3. project traffic would increase traffic volumes on nearby roadways by 10 percent or more, unless the increase in traffic volume is less than 100 vehicles per hour.

- Result in total emissions of ROG, NOx, or PM10 of 15 tons per year or greater, or 80 pounds (36 kilograms) per day or greater.

The City of Oakland considers a project's impacts cumulatively significant if it would meet either of the following criteria:

- Result in any individually significant impact; or
- Result in a fundamental conflict with the local general plan, when the general plan is consistent with the regional air quality plan. When the general plan fundamentally conflicts with the regional air quality plan, then if the contribution of the project is cumulatively considerable when analyzed the impact to air quality should be considered significant.

Toxic Air Contaminants

According to the BAAQMD CEQA Guidelines, any project with the potential to expose sensitive receptors (including residential areas) or the general public to substantial levels of TACs would be deemed to have a significant impact. Cancer risk is defined as the lifetime probability of developing cancer from exposure to carcinogenic substances and is expressed as increased chances in one million of contracting cancer. Noncancer adverse health risks are measured against a hazard index, which is the ratio of the predicted exposure concentration to a threshold level that could cause adverse health effects, as established by the California Office of Environmental Health Hazard Assessment (OEHHA).

Projects that exceed the following BAAQMD thresholds of significance for TACs would be considered to have a significant impact:

- Result in potential to expose persons to substantial levels of TACs, such that the probability of contracting cancer for the Maximally Exposed Individual (MEI[1]) exceeds 10 in one million;
- Result in ground level concentrations of non-carcinogenic TACs such that the Hazard Index would be greater than 1 for the MEI; or
- Result in a substantial increase in diesel emissions;

In addition to assessing the incremental health risks of the project on the general public to test for significance, the compatibility of the project within the existing land use should also be assessed. In this case, the effects of other facilities surrounding the project site on the health of inhabitants of the site should be evaluated. Although there are no specific guidelines for establishing significance criteria for judging land use compatibility, CARB has published a Report that addresses land use compatibility (CARB, 2005b). In this case, an impact on the project site would

[1] MEI is the Maximally Exposed Individual, which represents the worst-case risk estimate based on a theoretical person continuously exposed for 70 years at the point of highest compound concentration in air.

be significant, if nearby sources contribute DPM health risks greater than 10 percent of typical DPM health risk levels for the region.

Wind

Potential changes in wind conditions in public areas that result from the existence of tall buildings are not regulated within the City of Oakland's General Plan or Zoning Regulations. Tall buildings can redirect winds that would otherwise pass over a site down to ground level and intensify them, resulting in wind speeds and wind turbulence that makes otherwise desirable pedestrian walkways and open spaces unpleasant or unsafe. Appendix G of the CEQA Guidelines does not address wind impacts, however the City of Oakland has established criteria for determining the acceptability of wind conditions that might exist. The City of Oakland's 2004 CEQA Criteria/Thresholds of Significance indicates a significant impact exists if the project:

- Results in winds exceeding 36 miles per hour (mph) for more than 1 hour during daylight hours during the year (The wind analysis only needs to be done if the project's height is 100 feet or greater [measured to the roof] **and** one of the following conditions exist: (a) the project is located adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the project is located in Downtown.[2])

Local Plans and Policies

Oakland General Plan policies and other applicable plans and policies that pertain to the topics addressed in this section, and that apply to the project, are listed in **Appendix F**. Key policies are identified and discussed in Section IV.A, Land Use, Plans, and Policies. General Plan policies that are also significance criteria or contain a regulatory threshold which the project must meet are addressed in this section.

Project Impacts

Methodology

Project-related air quality impacts fall into two categories: short-term impacts due to construction, and long-term impacts due to project operation. First, during project construction, the project would affect local particulate concentrations primarily due to fugitive dust sources. Over the long term, the project would result in an increase in emissions primarily due to related motor vehicle trips. Onsite stationary sources and area sources would result in lesser quantities of pollutant emissions.

For the evaluation of demolition and construction impacts, BAAQMD does not require a detailed quantification of construction emissions. Instead, it recommends that evaluation of the significance of impacts be based on a consideration of the control measures to be implemented

2 Downtown is defined in the Land Use and Transportation Element (LUTE) of the General Plan (page 67) as the area generally bounded by West Grand Avenue to the north, Lake Merritt and Channel Park to the east, the Oakland Estuary to the south and I-980/Brush Street to the west.

(BAAQMD 1999). The BAAQMD CEQA Guidelines recognize that construction equipment emit ozone precursors, but indicate that such emissions are included in the emission inventory that is the basis for regional air quality plans. The Guidelines note that PM10 is the pollutant of greatest concern, potentially leading to adverse health effects as well as nuisance concerns such as reduced visibility and soiling of exposed surfaces. Generally, if appropriate measures are implemented to reduce fugitive dust, then the residual impact can be presumed to be less than significant. Without these measures, the impact is generally considered to be significant, particularly if sensitive land uses (e.g., residential) are located in the project vicinity. However, although the Guidelines state that quantification of construction emissions is not necessary, the Guidelines also state that a lead agency may elect to calculate construction emissions. Given this option, further analysis was undertaken to estimate construction particulate emissions for the project using the Sacramento Metropolitan Air Quality Management District (SMAQMD) methodology (SMAQMD 2004).

Existing and projected traffic air pollutant emissions generated around the Oak to Ninth Project site are based on the URBEMIS 2002 Air Pollution Emission Model version 8.7 (Rimpo and Associates, 2005) and the California Line Source Dispersion Model (CALINE 4) (Caltrans, 1998) using traffic survey data by Fehr & Peers transportation consultants. Emissions are estimated for the years 2004 (existing), 2010 (interim), and 2025 (buildout) and are compared to applicable BAAQMD significance thresholds. Lastly, cumulative impacts of the project were evaluated based on the BAAQMD CEQA Guidelines as discussed under the Significance Criteria, above.

Project Construction

Construction of the project would occur in three distinct phases – 1) demolition of existing buildings, 2) soil clearing, grading, soil handling, and site improvement and 3) building construction. The project sponsor provided information about the construction equipment that would be required for each of these phases, as well as the duration of each phase. Overall, based on the duration of each phase and the construction schedule (described in more detail in the Project Description, Chapter III), construction would occur on the project site almost continuously from 2007 until 2018. More specifically, building demolition would occur in 2007, 2009, and 2011, while soil work and site improvements would occur in 2008 and again from 2010 until 2012 (see **Appendix J**). This work would proceed across the project site, generally east to west and north to south. Likewise, building construction and occupancy would proceed across the project site between 2009 until 2018.

For this analysis, emissions of diesel exhaust from all off-road and on-road construction-related vehicles were determined based on emission rates and duration of use for each piece of equipment. Diesel exhaust emissions rates for all on-road diesel trucks (e.g., dump trucks) were obtained from CARB's EMFAC2002 emissions model (CARB, 2003), while off-road diesel construction equipment (e.g., excavators, backhoes, and scrapers) were obtained from the

SMAQMD's *Guide to Air Quality Assessment in Sacramento County*[3] (SMAQMD, 2004). Using these models, diesel particulate matter (DPM) emissions were estimated for each year of construction. Annual DPM emissions from construction equipment were estimated to be about 1,008 pounds per year over the 12-year construction period. **Table IV.C-4** summarizes DPM emissions for the future years (2007, 2010, 2020, and 2040) in the vicinity of the project. The table reports DPM emissions from construction and operations as well as DPM emissions from other area sources not related to the project. A detailed year-by-year breakdown of DPM emissions for these sources is given in **Appendix J**.

TABLE IV.C-4

SUMMARY OF DPM EMISSIONS (LBS) IN THE VICINITY OF THE PROJECT FROM ALL SOURCES IN FUTURE YEARS

	DPM emissions (lbs)					
	Project					
Year	Construction	Operation	I-880 trucks	Trains	Boats	Totals
2007	554	0	5,508	262	442	**6,766**
2010	1,598	36	4,117	253	442	**6,446**
2020	0	46	2,235	224	392	**2,897**
2040	0	43	1,547	178	309	**2.077**

NOTES:
Calculations of yearly DPM emissions are based in part on the following total distances traveled:
(a) project trucks - one mile (i.e., one-half mile as the truck approaches the site and one-half mile as it departs the site);
(b) I-880 trucks - two miles (i.e., one mile as the truck approaches the project site area and one mile as it departs the area); and
(c) trains - two miles (i.e., one mile as the train approaches the project site area and one mile as it departs the area).

The incremental exposure levels and cancer risks at nearby receptors from construction DPM emissions were calculated by using the EPA dispersion model SCREEN3 (USEPA, 1995). In the modeling analysis, it was assumed that, on a long-term basis, emissions would occur at various locations at the site. As a result construction emissions were assumed to be an area source distributed over the project site.

Annual average exposure levels of DPM were calculated at residences located near the site, some as close as 500 feet from the edge of the site, while other locations are about 1,000 feet from the edge of the site. The model predicted that DPM concentrations from construction would range from 0.05 to 0.1 micrograms per cubic meter. The dispersion model runs are provided in **Appendix J**. Assuming that construction activities would occur over 12 years, the incremental cancer risk over a lifetime is estimated to range from 3 to 5 in a million. This incremental cancer risk is less than the BAAQMD significance threshold of 10 in a million.

[3] Although the project lies within the jurisdiction of the BAAQMD, the BAAQMD does not typically require calculation of emissions from construction equipment and therefore does not provide emission rates for such equipment. The SMAQMD has an established construction emissions threshold and requires that construction emissions be calculated, therefore SMAQMD emission rates are used for this analysis.

Impact C.1: Activities associated with demolition, site preparation, and construction would generate short-term emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions. (Potentially Significant)

Construction related emissions would be short term, but may still cause adverse effects on local air quality. The project would involve construction of approximately 3,100 residential units, 200,000 square feet of ground-floor retail uses, and a total of 3,534 parking spaces for project uses. To accomplish this, the project would demolish approximately 482,200 square feet of existing buildings over the four major phases of project construction described in Chapter III, Project Description.

A project's most common construction activities include site preparation, earthmoving, and general construction. Site preparation includes activities such as general land clearing and grubbing. Earthmoving activities include cut and fill operations, trenching, soil compaction, and grading. General construction includes adding improvements such as roadway surfaces, structures and facilities. The emissions generated from these construction activities include

- Dust (including PM10 and PM-2.5) primarily from "fugitive" sources (i.e., emissions released through means other than through a stack or tailpipe) such as soil disturbance;
- Combustion emissions of criteria air pollutants (ROG, NOx, CO, SOx, PM10) primarily from operation of heavy equipment construction machinery (primarily diesel operated), portable auxiliary equipment and construction worker automobile trips (primarily gasoline operated);
- Evaporative emissions (ROG) from asphalt paving and architectural coating applications.

Demolition may result in airborne entrainment of asbestos, a TAC, particularly where structures built prior to 1980 are being demolished. Some structural components of the buildings to be demolished may contain hazardous materials such as asbestos used in insulation, fire retardants, or building materials (floor tile, roofing, etc.), and lead-based paint. If asbestos were found to be present in building materials to be removed, demolition and disposal would be required to be conducted in accordance with standard procedures specified by the BAAQMD.

Construction activities would result in the emission of ROG, NO_x, CO, Sox, and PM10 from equipment exhaust, construction-related vehicular activity, and construction worker automobile trips. Emission levels for construction activities would vary depending on the number and type of equipment, duration of use, operation schedules, and the number of construction workers. Criteria pollutant emissions of ROG and NO_x from these emission sources would incrementally add to the regional atmospheric loading of ozone precursors during project construction. BAAQMD CEQA Guidelines recognize that construction equipment emit ozone precursors, but indicate that such emissions are included in the emission inventory that is the basis for regional air quality plans. Therefore construction emissions of ROG and NOx are not expected to impede attainment or maintenance of ozone standards in the Bay Area (BAAQMD, 1999). The impact regarding ROG and NOx would therefore be less than significant.

Construction-related fugitive dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. Clearing, grading, and soil work would occur in 2008 and again from 2010 until 2012. In the absence of mitigation, construction activities may result in significant quantities of dust, and as a result, local visibility and PM10 concentrations may be adversely affected on a temporary and intermittent basis during the construction period. In addition, the fugitive dust generated by construction would include not only PM10 but also larger particles that would fall out of the atmosphere within several hundred feet of the site and that could result in nuisance-type impacts. PM10 would also be generated from equipment exhaust, construction-related vehicular activity, and construction worker automobile trips. The BAAQMD CEQA Guidelines do not specify construction significance thresholds for the Bay Area because the BAAQMD encourages the implementation of control measures that would mitigate construction-related air quality impacts and obviate the need to establish significance standards. In the absence of local significance thresholds for construction-related emissions of PM10, surrounding air district thresholds for PM10 emissions were applied. All of the following districts are in non-attainment for PM10 emissions, as is the Bay Area:

- San Joaquin Valley Air Pollution Control District: No PM10 threshold for construction is specified. Similar to the BAAQMD, the PM impact is assumed to be less than significant, as long as certain dust mitigation measures are implemented.

- Monterey Bay Unified Air Pollution Control District: 82 pounds-per-day construction threshold for PM10.

- South Coast Air Quality Management District: 150 pounds-per-day construction threshold for PM10.

- SMAQMD: Threshold is the CAAQS of 50 micrograms per cubic meter. Appendix B of the SMAQMD *Guide to Air Quality Assessment* (SMAQMD 2004) provides a screening table to help assess PM10 impacts. This table lists PM10 mitigation measures based on maximum area graded per day. If the applicant implements the mitigation measures specified for the project size, the screening table shows that the project is likely not significant for PM10. For a maximum graded area per day of five acres and below, no mitigation is required. For five to eight acres, exposed soil must be watered twice daily, and two feet of freeboard space must be maintained on soil hauling trucks. These control measures are not as stringent as the BAAQMD's basic controls.

The PM10 emissions from construction equipment, haul trucks, worker vehicles, and fugitive dust were estimated for the construction years 2007 through 2018 based on Table 3.2, Construction Equipment Emission Rates (pounds/day) for Years 2000 to 2010, of the SMAQMD *Guide to Air Quality Assessment*. The maximum disturbed area per day was assumed to be five acres. The maximum estimated PM10 emissions would be 78 pounds per day and would occur in the year 2010 (see **Appendix J** for equipment, vehicle, and fugitive dust assumptions). This level of emissions would be below the construction threshold of significance for PM10 of other air

districts listed above and would be below the BAAQMD operational standard of 80 pounds per day. As a result, based on the quantification of construction emissions, PM10 generated by project construction would be considered less than significant. Even though PM10 emissions would be considered less than significant with respect to other air district thresholds, there are BAAQMD measures that could further reduce the generation and dispersion of particulate matter.

Mitigation Measure C.1a: During construction, the project sponsor shall require the construction contractor to implement the following measures required as part of BAAQMD's basic and enhanced dust control procedures required for sites larger than four acres (aggregate). These include:

Basic Control Measures – The following controls should be implemented at all construction sites:

- **Water all active construction areas at least twice daily.**
- **Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.**
- **Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.**
- **Sweep daily (with water sweepers) all paved access roads, parking areas and staging area at construction sites.**
- **Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.**

Enhanced Control Measures – The following measures shall be implemented during project construction because the site is greater than four acres in area:

- **All "Basic" control measures listed above.**
- **Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).**
- **Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).**
- **Limit traffic speeds on unpaved roads to 15 miles per hour.**
- **Install sandbags or other erosion control measures to prevent silt runoff to public roadways.**
- **Replant vegetation in disturbed areas as quickly as possible.**

The following control measures shall be implemented during project construction because the site is large in area and located near sensitive receptors:

- **Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.**
- **Install wind breaks, or plant trees/ vegetative wind breaks at windward side(s) of construction areas.**
- **Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 miles per hour.**
- **Limit the area subject to excavation, grading and other construction activity at any one time.**

Mitigation Measure C.1b: Demolition and disposal of any asbestos containing building material would be in accordance with the procedures specified by Regulation 11, Rule 2 (Asbestos Demolition, Renovation and Manufacturing) of BAAQMD's regulations. Therefore, required compliance with existing regulation would reduce the potential for public health hazards associated with airborne asbestos fibers or lead dust to a less than significant level.

Significance after Mitigation: Less than Significant.

Project Operation

Regional Emissions

Impact C.2: The project would result in an increase in regional ROG, NOx, and PM emissions due to project-related traffic. (Less than Significant)

Over the long-term, the project would result in an increase in emissions primarily due to project-related motor vehicle trips. Emissions for the Existing, 2010 Interim, and 2025 Cumulative scenarios have been estimated using emission inventory model URBEMIS 2002 (version 8.7) and the traffic data provided by Fehr & Peers transportation consultants. The results are shown in **Table IV.C-5**. The traffic report estimates 2,036 total daily vehicle trips associated with Existing land uses, and 11,156 and 29,147 total daily trips associated with the Interim plus Project and Cumulative plus Project scenarios, respectively, after a 5 percent reduction for internalization (see **Table IV.B-4** in EIR Section IV.B, Transportation, Circulation and Parking). As shown in **Table IV.C-5** below, criteria air pollutant emissions from existing vehicle trips were subtracted from pollutant levels associated with the Interim and Cumulative scenarios to determine the net increase in emissions generated upon completion of the project.

TABLE IV.C-5

OPERATIONAL EMISSIONS

Scenario[a]	Criteria Air Pollutant Emissions (lbs/day)[b]			
	ROG	NOx	PM10	CO
Interim Plus Project (Year 2010)	75	72	85	860
Existing	20	18	13	227
Net Interim Plus Project Emissions	55	54	72	**633**
Significant? (Yes or No)[c]	No	No	No	Maybe[d]
Cumulative Plus Project (Year 2025)	73	54	223	667
Existing	20	18	13	227
Net Cumulative Plus Project Emissions	52	36	**210**	440
Significant? (Yes or No)	No	No	Yes	No

a Rather than using net trips from the Traffic Report to estimate operational emissions, where existing trips are subtracted from project generated trips giving 9,118 net trips for Interim plus Project and 27,111 net trips for Cumulative plus Project, the emissions generated from existing traffic (2,036 trips) were first estimated and subtracted from the estimated emissions generated from the Interim Plus Project traffic (11,154 trips) and Cumulative Plus Project traffic (29,147 trips) scenarios.

b Emissions estimates were generated using the Air Resources Board's URBEMIS 2002 model for the San Francisco Bay Air Basin, and assume a default vehicle mix. Input assumptions include EMFAC 2002 emission factors for the year 2004 for the existing scenario, year 2010 for the interim, and year 2025 for the cumulative plus project buildout scenario. All daily estimates are for summertime conditions except for CO, which assumes wintertime conditions.

c BAAQMD threshold of significance is 80 lbs/day for ROG, NOx, and PM10 and 550 lbs/day for CO.

d Projects for which mobile source CO emissions exceed 550 pounds per day do not necessarily have a significant air quality impact, but are required to estimate localized CO concentrations. Refer to Impact C.3 for analysis of project CO emissions. Notably, net cumulative levels of CO are below the 550 pounds per day threshold and are not analyzed further in the cumulative discussion.

NOTE: **Bold** values are in excess of applicable standard.

SOURCE: ESA, 2005.

Based on the estimates shown in **Table IV.C-5**, the project's contribution to the regional emissions would be below the significance thresholds specified by the BAAQMD for ROG, NOx and PM10 for the interim analysis year 2010. The project's contribution to the Cumulative scenario is discussed below under Impact C.8.

Mitigation: None Required.

Localized Carbon Monoxide

Impact C.3: Project traffic would increase localized carbon monoxide concentrations at intersections in the project vicinity. (Less than Significant)

Traffic generated by the project was analyzed to determine its potential to affect carbon monoxide concentrations along surface streets in the project area. The modeling method included traffic

levels for I-880 from Caltrans reports, background CO concentration levels from the BAAQMD (interpolated for 2004 and 2010), and traffic projections prepared for the project at the most affected local intersections in the project vicinity (BAAQMD, 1999):

- Embarcadero and 5th Avenue
- Embarcadero and 6th Avenue at the I-880 Off-ramp
- 5th Avenue and East 8th Street
- Oak Street and 5th Street

As these were the intersections most affected by project-related traffic, it was assumed that if carbon monoxide concentrations at these four intersections would not exceed the ambient air quality standards, the project's contribution to impacts at other intersections affected by project traffic to a lesser extent, would be less than significant.

As shown in **Table IV.C-6**, no violations of the CO standard would occur at the receptor locations near the intersections that were modeled. In fact, CO concentrations are lower in 2010 compared to existing levels (due to reductions in the predicted CO background concentrations due to a cleaner mix of vehicles in the future). Project traffic would have a less-than-significant effect upon CO concentrations in the area. Thus, project-related and cumulative traffic would have a less-than-significant impact on local carbon monoxide concentrations, as shown in **Table IV.C-6** and **Table IV.C-5**, respectively.

Mitigation: None Required.

TABLE IV.C-6

ESTIMATED CARBON MONOXIDE CONCENTRATIONS AT SELECTED INTERSECTIONS IN PROJECT VICINITY

		Concentrations (ppm)[a]				
Receptor location[b]	**Averaging Time (hrs.)**	**State Standard**	**Existing (2004)**	**Interim (2010) plus Project**	**Incremental Increase of Interim plus Project versus Existing**	**Significant? (Yes or No)**
5th Ave and Embarcadero	1	20	6.0	4.9	-1.1	No
6th Ave and Embarcadero	1	20	5.7	3.6	-2.1	No
5th Ave and E 8th Street	1	20	4.6	4.0	-0.6	No
Oak and 5th Street	1	20	5.5	4.6	-0.9	No

a Concentrations relate to receptor locations at approximately 30 to 50 feet from the edge of the roadways that form the intersection. The carbon monoxide analysis focuses on the weekday evening (p.m.) peak-hour because the project's effects on traffic congestion and related carbon monoxide concentrations are greater during that period. Carbon monoxide estimates shown above include background concentrations of 6 ppm, one-hour average.

b Although more than 4 receptors were modeled using Caline 4, the selected receptor locations had the greatest concentration of CO. Since these receptors are located at the intersections most affected by project-related traffic, other receptors in the project vicinity would experience lower CO concentrations and the impact would also be less than significant.

SOURCE: ESA, 2005.

Odors

Impact C.4: Operation of project facilities would produce objectionable odors that would affect a substantial number of people. (Less than Significant)

Since any sources of odor proposed as part of the project, such as restaurants, would be subject to the requirements of BAAQMD Regulation 7 – Odorous Substances, any odor impacts would be maintained by this regulation, and the impact would thus be considered less than significant.

Mitigation: None Required.

Toxic Air Contaminant Exposure

Impact C.5: Construction and operation of the project would expose existing sensitive receptors in the project vicinity and planned multifamily residential land uses associated with the project to health risks from diesel emissions. (Less than Significant)

In August 1998, the CARB identified diesel particulate matter (DPM) as a toxic air contaminant (TAC). OEHHA, which is a branch of California EPA, established toxicity values for DPM both as a carcinogen and a non-carcinogen. The carcinogenic risk factor established by OEHHA is by far much more restrictive than the non-carcinogenic risk factor, and the health risks evaluated in this report are concerned with the carcinogenic risks. An analysis was carried out to determine the health effects of diesel emissions from the project on the surrounding community. The health effects were for both construction of the project and for operations after project completion. The health effects of DPM emissions on future occupants of the project site from other sources in the area are also evaluated later in this section.

Project Operations Impacts

DPM emissions from the project during operation would occur from delivery trucks that would visit the site. Based on the traffic report conducted for this project, daily traffic increases due to the project would be approximately 9,120 net total vehicle trips by 2010 and 27,111 net total vehicle trips by 2025 (see **Table IV.B-4**, Section IV.B, Transportation, Circulation, and Parking). To determine the proportion of new trips that would be truck trips, it was assumed that the general vehicle fleet percentages used by the URBEMIS 2002 Air Pollution Emissions Model to calculate mobile source emissions would apply to this project. Specifically, the URBEMIS model indicates that trucks account for approximately 3.3 percent of all on-road motor vehicles. Therefore, in 2010 when project operations would commence, there would be approximately 300 total daily truck trips, and in 2025 there would be almost 900 total daily truck trips. Likewise, the percentage of trucks within each weight class and the portion of these trucks that are fueled by diesel were also obtained from URBEMIS2002. Lastly, diesel exhaust emissions rates for all diesel trucks were obtained from CARB's EMFAC2002 emissions model, assuming an average vehicle speed of 20 miles per hour. Total emissions were calculated for a total distance of one mile, which includes one-half mile as the truck approaches the site and one-half mile as the truck leaves the site. The annual average DPM emissions for these truck-travel distances were estimated to range from 35 pounds to 50 pounds, depending on the year of operation. **Table IV.C-4** summarizes the DPM emissions for operations in future years. Detailed future DPM emissions in future years, by operation, is provided in **Appendix J**.

Annual average DPM concentration impacts from the delivery trucks operating near the site were calculated using the SCREEN3 model, and the incremental cancer risks were estimated from these concentrations. The estimated incremental DPM concentrations near the site ranged from 0.010 to 0.015 microgram per cubic meter. The incremental cancer risks from exposure to these concentrations were estimated to be 3 to 4.5 in a million. Since these impacts are less than the BAAQMD significance threshold of 10 in a million, the impacts would be less than significant.

Impacts of Other DPM Sources on the Project Site

An analysis was also carried out to determine the impacts of DPM emissions on the project site from other sources. This time period would be when the residences would be occupied. The other sources of DPM near the site include: (1) diesel trucks traveling on I-880, (2) Amtrak and freight

trains traveling on active tracks near the project site, and (3) ships and tugs traveling in the portion of the Oakland Estuary adjacent to the site. This analysis follows the general guidelines contained in the Air Quality and Land Use Handbook released by the California Air Resources Board (CARB, April 2005). The Handbook contains a number of advisory recommendations about locating facilities near sources of roadway emissions. Specifically, the Handbook recommends avoiding siting sensitive land uses within 500 feet of freeways with 100,000 or more vehicles/day. If nearby freeways have traffic less than this amount, location of the land use would be acceptable, and no further analysis would be required. However, if the daily traffic on nearby freeways exceeds this amount, the Handbook recommends that more detailed analyses should be carried out to determine the effects of the freeways and other nearby diesel sources on the proposed land use. Since traffic counts on Route I-880 exceeds the threshold identified in the Handbook, further a site specific analysis was carried out, and emissions of DPM from nearby sources were considered in the analysis.

I-880 Diesel Trucks. The project site is located adjacent to I-880 which is a major source of vehicle emissions. Based on the most recent estimates from Caltrans, approximately 250,000 vehicles pass by the project site on I-880 every day. Of these vehicles, approximately 10.7 percent are trucks (3.4 percent two-axle, 1.4 percent three-axle, 0.4 percent four-axle, and 5.5 percent five-axle or more trucks). The percent of trucks from each size class that are fueled by diesel (as opposed to fueled by gasoline) was obtained from the URBEMIS2002 model.

Diesel exhaust emission rates for these diesel trucks were estimated using CARB's EMFAC2002 emissions model. Based on the traffic conditions that exist throughout the day on the stretch of freeway adjacent to the project site (from free flowing during off-peak hours to bumper-to-bumper congestion during peak hours), the emissions model was run assuming an average vehicle speed of 30 miles per hour. In addition, to determine the impacts on the project site, these emissions were considered for a total distance of two miles – one mile on I-880 as the trucks approach the site and one mile as the trucks depart the area. **Table IV.C-4** summarizes the DPM emissions from truck traveling on I-880 for the years when the project would be occupied, starting in the year 2010 and going out to the year 2040. The **Table IV.C-4** shows that, because of regulations on new trucks starting in 2007, there will be a considerable reduction in emissions as the older trucks are phased out.

Rail. The project site also lies near functioning rail lines used to transport both passenger trains (operated by Amtrak) and freight trains. Currently, Amtrak operates 38 passenger trains every weekday on this track, while approximately six freight trains travel past the site every day. Based on observations of train traffic along these rails by Fehr & Peers transportation consultants, it was assumed that two locomotives would be used on each freight train (for a total of 12 locomotives per day), while passenger trains would require one locomotive. Emissions associated with all rail usage were calculated using U.S. EPA *Emission Factors for Locomotives* (USEPA, 1997) based on the type of locomotive associated for each use. These emissions were calculated for a total distance of two miles – one mile as the train approaches the site and one mile as the train departs

the area. **Table IV.C-4** summarizes DPM emissions from trains near the project site going out into the future to 2040.

Marine Vessels. The portion of the Oakland Estuary adjacent to the project site does not have any cargo ship traffic as there are no active shipping berth facilities this far east along the estuary. Instead, the furthest down the estuary that cargo ships stop is at the Howard Terminal west of the Port of Oakland Building at 530 Water Street. At the same time, the U.S Coast Guard does take vessels out from Coast Guard Island further east along the estuary. Although an exact number of vessels per day was not available, based on observations, it was assumed that up to two vessels a day would go up and down the estuary. In addition, between six and eight tug boats use the project site to berth. These tug boats go out into the San Francisco Bay or Pacific Ocean to meet ships and guide them into various marine harbors. The tug boats then return back to the site to berth. Diesel emissions associated with both the U.S. Coast Guard vessels and the tug boats were calculated using the U.S. EPA *Analysis of Commercial Marine Vessels Emissions and Fuel Consumption Data* (USEPA, 2000). **Table IV.C-4** summarizes DPM emissions from diesel operated marine vessels near the project site in the future.

DPM Impacts on the Project Site

DPM exposure levels on the project site from the nearby sources were estimated by conducting screening modeling of the emissions sources described above. It was assumed that the nearest residences would be about 200 feet from the I-880 Freeway, and residences further away in the middle of the project site would be about 800 feet from the Freeway. The nearest residences would be about 700 feet from the boats traveling in the estuary. Annual average concentrations of DPM were calculated at these locations for the first year when the site would be occupied, which would be 2010. These concentrations consider the frequency of winds that would transport pollutants from the sources to the project site. The wind frequencies were based on meteorological measurements taken over five years at Oakland Airport, which is about six miles away from the site, and that would be representative of conditions at the project site. Annual average DPM concentrations were estimated to range from 0.1 to 0.2 micrograms per cubic meter. These concentration estimates consider that the project site is located upwind of the prevailing winds and that winds from the freeway to the site are infrequent.

Since the health impacts of DPM are due to chronic (long-term) exposure, the concentrations in future years should be included when calculating lifetime exposure to DPM and incremental health risk. The emissions model EMFAC2002 was used to predict DPM emissions from the largest emission source, the trucks on I-880, for future years. The model shows that DPM emissions will decrease considerably in future years because of EPA regulations. The reductions will be about 50 percent in 2020 when compared to 2010 and in 2040 by about 63 percent from 2010 levels. Consequently, lifetime exposure levels will be much lower than levels predicted for 2010. Typical lifetime exposure levels in future years would range from 0.05 to 0.1 micrograms per cubic meter. The incremental health risks from such exposure to freeway emissions would range from 15 to 30 in a million.

These predicted incremental cancer risks are much lower than levels reported in the CARB Handbook for facilities near freeways (CARB 2004), which range from 200 to 500 in a million. The CARB estimates are much higher because the CARB calculations are for receptors located downwind from the prevailing wind direction. For this project, the site is located upwind of the major DPM emission source, which is the I-880 freeway. Historical meteorological data from nearby Oakland Airport show that winds rarely blow from the freeway to the project site. Consequently, exposure levels of DPM from the freeway are much lower, and the consequent cancer risks are lower.

The incremental cancer risk from the freeway emissions would be added to the DPM background for the area, which is estimated from the Handbook to be about 300 in a million. The total risk is estimated to range 315 to 330 in a million, as compared to a background level of 300 in a million. There are no specific recommendations on acceptable cancer risks from operations not related to on a land use.

These estimates are conservatively high, mainly because of the conservative nature of the modeling. Also, it is assumed that a person would be located at the highest receptor continuously for a lifetime, and the estimated incremental risks do not consider that we spend most of our time indoors, where actual indoor exposure levels would be lower than the predicted outdoor levels. ARB estimates that indoor concentrations of DPM are about two thirds the levels of outdoor concentrations (CARB, 2000). Health risks from other sources on the project site, incorporating indoor exposure, would range from 10 to 20 in a million. Although there are no guidelines on significance criteria when considering the impacts of other sources on the project, the high-end incremental estimates of 10 to 20 in a million are small when compared to cancer risks from exposure to all TACs in California which are estimated by ARB to range from 500 to 1,000 in a million (CARB, 2005c). Consequently, the impacts of DPM from other sources on the project site would be less than significant.

Mitigation: None Required.

Wind

Impact C.6: The proposed project could result in hazardous wind conditions. (Less than Significant)

The environment within the project area is windy, and is strongly influenced by the project site's location on the Oakland Estuary exposed to west, northwest, and south-southeast winds, as well as its large open areas that allow winds to flow unobstructed from the estuary across the site. In the portions of the site that contain buildings, winds are substantially reduced by the sheltering effects of the structures. The site has full exposures to the predominant winds from the Bay, both under the regularly recurring daily and seasonal wind conditions and under storm conditions.

Wind Hazard Conditions

To simulate the project and its existing and future contexts, a 1 inch to 50 foot scale model of the project site and surrounding several blocks was constructed. The scale models were tested in a boundary layer wind-tunnel facility at the University of California, Davis, independent of the University. Wind-tunnel testing of the project simulated winds from the west (W), north-northwest (NNW), and south-southeast (SSE) wind directions. These directions were selected for testing because they represent the major wind regimes, or are relatively frequent or particularly strong, or were judged likely to result in the "worst case" with respect to pedestrian level effects for this project (Environmental Science Associates, 2005).

At least three wind hazard conditions now occur on the project site, and one additional point, not tested in the setting because it is covered by the Ninth Avenue Terminal building, is also expected to exceed wind hazard criterion. The locations and hourly annual durations of these hazard exceedences are as follows:

- at the northeast corner of Estuary Park (Location 2), two hours per year
- at the intersection of the Embarcadero and the driveway to the Jack London Aquatic Center Location 3), two hours per year
- in the open area east of Lake Merritt Channel (Location 4), one hour per year; and,
- at the edge of Ninth Avenue Pier (Location 23), along the Oakland Estuary (estimated two hours per year).

Thus, the total duration of these existing hazards is five hours per year under measurable existing conditions.

The project would generally improve hazardous wind conditions on the project site and in its vicinity. As shown in **Table IV.C-7**, specifically, it would eliminate the existing wind hazard exceedence that occurs at the intersection of the Embarcadero and the driveway to the Jack London Aquatic Center (Location 3) two hours per year. Moreover, the project would also reduce the individual hazard exceedances at Location 2 from two hours a year to one hour a year.

As part of the proposed project, the existing Ninth Avenue Terminal building would be removed, and the project's Shoreline Park would be developed in its place. Because Location 23 is covered by the Terminal building, no data exists to indicate that wind speeds at that location would be in excess of the hazard criterion. However, given that location's orientation along the waterfront exposed to direct west winds that would occur during extreme wind events, it is reasonable to expect that hazardous wind conditions would occur with or without the existing building at that location. Thus, it is expected that wind speeds at Location 23 would be no different with or

TABLE IV.C-7

WIND HAZARD CONDITIONS

Location Number	*Hazard Criterion Speed (mph)*	*Measured Equivalent Wind Speed (mph)*	*Hours per year Wind Speed Exceeds Hazard Criterion*	*Measured Equivalent Wind Speed (mph)*	*Hours per year Wind Speed Exceeds Hazard Criterion*	*Hours Change Relative to Existing Setting*
1	36	36		22		
2	36	38	*2*	27	*1*	
3	36	38	*2*	33		*-2*
4	36	36	*1*	36	*1*	
5	36			34		
6	36			22		
7	36			18		
8	36	33		21		
9	36	27		21		
10	36	26		18		
11	36	27		27		
12	36	34		30		
13	36			33		
14	36			24		
15	36	34		16		
16	36			22		
17	36			24		
18	36			34		
19	36			35		
20	36			21		
21	36			17		
22	36			25		
23	36	38*	*2**	38	*2*	
24	36			26		
25	36			23		
26	36			31		
27	36			30		
28	36	26		23		
29	36			16		
30	36	31		25		
31	36	36		21		
32	36	36		12		
Average mph and %		**33 mph**	***5-7 hrs***	**25 mph**	***4 hrs***	***-2 hrs***

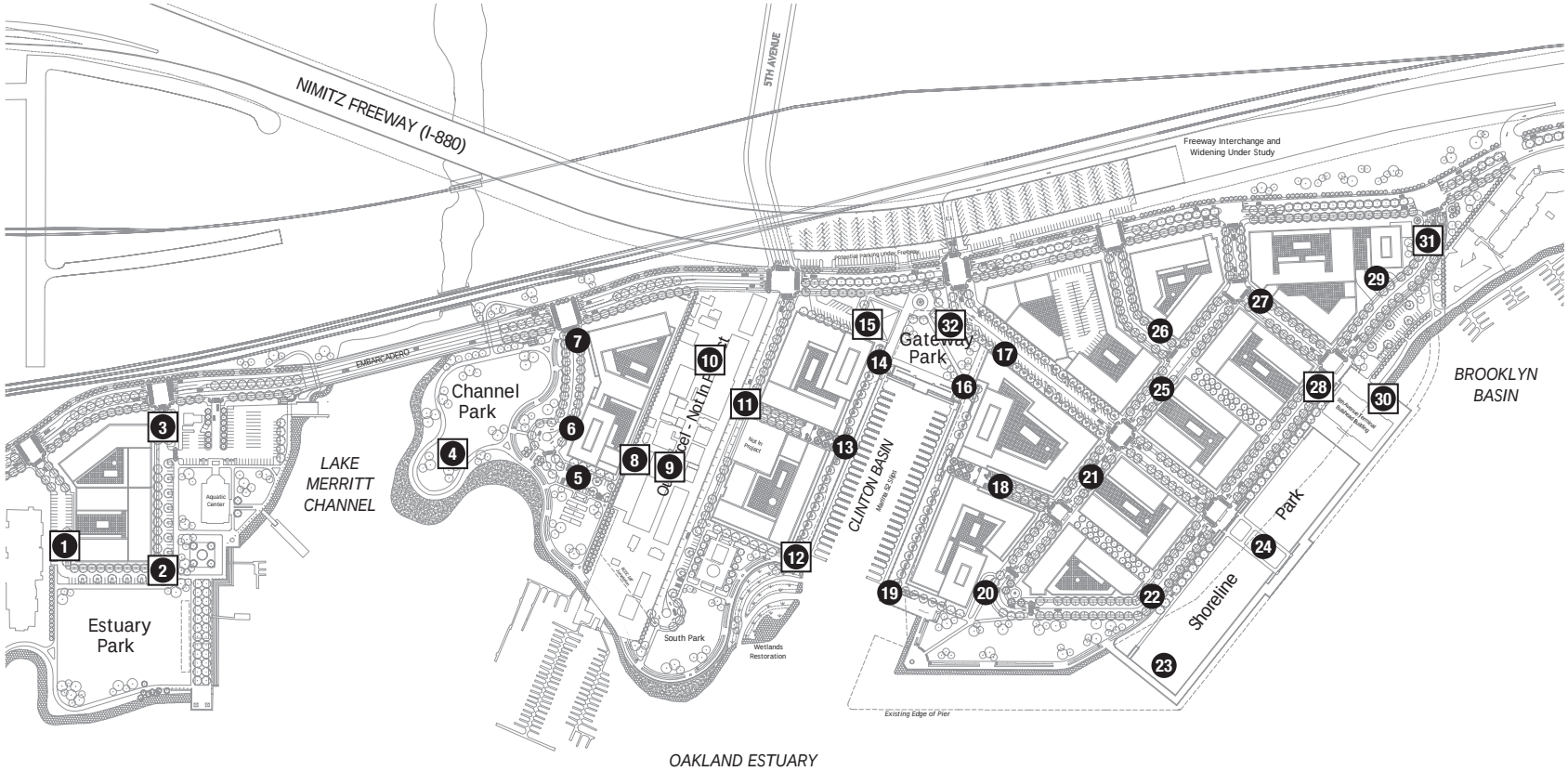
* Assumed same as project conditions. Given the orientation of Location 23 along the waterfront and exposed to direct west winds that would occur during extreme wind events, it is reasonable to expect that hazardous wind conditions would occur with or without the existing building at that location.

SOURCE: ESA, 2005.

without the shed (i.e., existing speeds at this location assumed same as projected speeds), and potentially hazardous wind conditions would not result at this location from the project, but would be a continuation of an existing condition that could occur about 2 hours a year at that waterfront location.

Therefore, the project would reduce the duration of measured hazard exceedences from a total of at least five hours per year under the existing scenario (seven hours, including the estimate for Location 23), to a total of four hours a year under the project scenario. The project would substantially reduce the speeds of the extreme winds by about 25 percent compared to existing conditions. The project would not create any new hazardous wind conditions that would exceed the CEQA threshold of the 36 mph hazard, thus the impact would be less than significant.

Mitigation: None Required.



14 Wind test point location

15 Point tested under existing and project conditions

0 400
Feet

SOURCE: ROMA Design Group; ESA

Oak to Ninth Avenue . 202622

Figure IV.C-1
Wind Test Point Location Map

Cumulative Impacts

Cumulative Regional Emissions

As stated previously (see Significance Criteria), the project that meets either of the following criteria is considered to have a significant adverse incremental effect on the region's ability to attain air quality standards.

- Result in any individually significant impact; or
- Result in a fundamental conflict with the local general plan, when the general plan is consistent with the regional air quality plan. When the general plan fundamentally conflicts with the regional air quality plan, then if the contribution of the project is cumulatively considerable when analyzed the impact to air quality should be considered significant.

Impact C.7: The project together with anticipated future cumulative development in Oakland and the Bay Area in general would contribute to regional air pollution. (Significant)

The project would result in an individually significant impact. **Table IV.C-5** shows the operational emissions of ROG, NOx, PM10, and CO due to project-related traffic estimated based on the CARB model URBEMIS 2002. For the Cumulative Plus Project scenario, the project would contribute to a cumulatively significant impact on the regional PM10 levels.

Mitigation Measure C.7: To reduce the significance of the operational impacts of the project, the project sponsor shall, as feasible and practical, implement a combination of the following mitigation measures:

Rideshare Measures

Mitigation Measure C.7a: Encourage all tenants (commercial and residential) at the site to implement carpool/ vanpool programs (e.g., carpool, ride matching for employees, assistance with vanpool formation, provision of vanpool vehicles, guaranteed ride home program, etc.). Distribute information about the Alameda County Congestion Management Agency's Guaranteed Ride Home Program to tenants of the building to facilitate alternative transportation modes. As part of the program, a person who uses an alternate mode of travel, including transit or a carpool, is provided with free taxi service in the case of unexpected circumstances. These circumstances might include unscheduled overtime or a family illness or emergency.

Mitigation Measure C.7b: Encourage commercial tenants to implement employee rideshare incentive programs providing cash payments or pre-paid fare media such as transit passes or coupons.

Transit Measures

Mitigation Measure C.7c: Construct transit facilities, such as bus turnouts/bus bulbs, benches, shelters, etc., as determined appropriate by AC Transit, consistent with Transit Mitigation Measure B.4a.

Mitigation Measure C.7d: Encourage commercial tenants to meet standard, minimum employee ridesharing requirements or to provide incentives to encourage employees to rideshare.

Mitigation Measure C.7e: Encourage commercial tenants to implement a parking cash-out program for employees (e.g., non-driving employees receive transportation allowance equivalent to the value of subsidized parking).

Shuttle Measures

Mitigation Measure C.7f: The project applicant shall operate a private shuttle service between the project site and nearby activity centers and transit nodes (e.g., Lake Merritt BART station) with an adequate number of shuttle stops located onsite, and on a frequency sufficient to attract use of the service by project residents and employees.

Bicycle and Pedestrian Measures

Mitigation Measure C.7g: Provide bicycle lanes and/or paths, connected to the community-wide network.

Mitigation Measure C.7h: Provide secure, weather-protected bicycle parking for employees.

Mitigation Measure C.7i: Provide direct, safe, attractive pedestrian and bicycle access to transit stops and adjacent development.

Mitigation Measure C.7j: Provide adequate street lighting within the street right of way immediately adjacent to and within the project site.

Mitigation Measure C.7k: Provide secure short-term bicycle parking for retail customers and other non-commute trips.

Significance after Mitigation: With implementation of the above mitigation measures, the cumulative air quality impact would be **Significant and Unavoidable**. Based on the effectiveness of these measures as determined by the BAAQMD, the above mitigation measures would reduce the operational impacts of the project by reducing motor vehicle trips by the project by 15 to 20 percent (BAAQMD, 2004). However, no feasible mitigation is available to reduce the residual impact to a less than significant level.

Cumulative Wind Effects

Impact C.8: The project, together with anticipated future cumulative development in the project area, would not result in cumulative hazardous wind conditions (Less than Significant)

With respect to cumulative wind effects, the effect of further local development of buildings similar in size to those of the project is likely to result in no impact or in overall reduction of wind speeds in the vicinity. Further, it is unlikely that other foreseeable development of similar scale would occur within or immediately adjacent to the project site.

Overall, with the project in place, notable decreases in wind speeds would occur at all the points tested for the project compared to existing conditions due to project buildings obstructing the existing, relatively uniform wind field and substantially slowing winds from the Oakland Estuary.

Mitigation: None Required.

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D. Hydrology and Water Quality

This section describes existing hydrologic conditions in the project vicinity and presents applicable regulations that pertain to hydrology, surface water, flooding, and water quality. This section also discusses the changes in hydrology and water quality that could result from construction and operation of the project and identifies potential project impacts and appropriate mitigation measures when necessary.

Setting

Hydrology

Regional

The project area lies in the Central Basin within the San Francisco Bay hydrologic region. San Francisco Bay marks a natural topographic separation between the northern and southern coastal mountain ranges. The San Francisco Bay estuarine system conveys the waters of the Sacramento and San Joaquin rivers into the Pacific Ocean. The rivers enter the Bay through the delta at the eastern end of Suisun Bay (RWQCB, 1995). Within the San Francisco Bay hydrologic region, the project area is a part of the Central Metropolitan Planning Unit in Alameda County. This unit is divided into a number of small watersheds that are defined by the natural topographic features of the region. A series of linear drainage basins trending northeast to southwest extend from the ridges of the Oakland hills across the alluvial plain[1] to San Francisco Bay (Alameda County, 1994).

Local

Topography of the project site is generally flat. The site lies at an elevation of approximately 3 to 10 feet (City of Oakland Datum[2]) and slopes south-westerly to sea level toward the Oakland Estuary or Oakland Inner Harbor. The estuary is the major receiving water body in the project area; it adjoins the project site on the west and lies along the eastern margin of San Francisco Bay. Other surface water features on the project site include Clinton Basin, Brooklyn Basin, and a portion of the Lake Merritt Channel that flows from Lake Merritt toward the Oakland Estuary (see **Figure IV.D-1**).

Oakland Estuary

The Oakland Estuary was a tidal slough that originated in a vast marsh that stretched from Lake Merritt to Brooklyn Basin. At the turn of the century, the estuary was dredged, separating Oakland from Alameda and forming the estuary as it is today. Lake Merritt remains

1 Alluvial plain is an area formed by deposition of sediment by a stream.
2 The datum line or plane of reference of all street grades is mean high tide, as determined by the City of Oakland.

SOURCE: GlobeXplorer; Environmental Science Associates, 2005

Oak to Ninth Avenue . 202622

Figure IV.D-1
Hydrologic Features in the Project Area

hydrologically connected to the estuary through tidal gates at the Seventh Street Pump Station (City of Oakland, 1993).

The estuary is influenced by both freshwater and marine water. The estuary receives freshwater inflow from a combination of natural creeks, human-made stormwater drainage facilities, and direct surface runoff. The estuary is also influenced by the marine waters of the Bay and is subject to tidal currents. Sediment from Oakland's shoreline and creeks is carried by the tidal current to shoals and sandbars, causing siltation of the shipping channels (City of Oakland, 1993).

Shoreline Conditions

The Oakland Estuary shoreline along the project site ranges from unprotected, eroding banks to cemented banks depending upon the past and present uses of the backland area. The shoreline varies significantly from the Lake Merritt Channel area to the Ninth Avenue Terminal building area (Moffatt & Nichol, 2002).

The shoreline reach from Lake Merritt Channel to the Berkeley-Oakland Ready Mix Plant is characterized by unprotected banks that are in various stages of erosion. A two- to three-foot-high berm exists on the crest of the embankment on the east bank of Lake Merritt Channel with a silt fence behind the berm to control runoff. The shoreline along the Ready Mix Plant is characterized by cemented grout probably originating from the plant. Near the Fifth Avenue Marina adjacent to the Ready Mix Plant, there is a concrete bulkhead that continues for a short section near the gangways to both walkways of the marina, followed by large concrete blocks, slabs, and other debris on the shoreline (Moffatt & Nichol, 2002).

The shoreline along Clinton Basin is characterized by concrete debris, sandy pocket beaches, unprotected banks, and several pile supported structures. Sedimentation is evident in this reach, however the amount of floating debris collected indicates a low flushing rate. The decking on the walkways and docks is made of timber and concrete (Moffatt & Nichol, 2002).

A timber wharf structure abuts the concrete wharf structure that supports the Ninth Avenue Terminal building. The wharf is made up of timber piles (over 1,000 vertical piles) and is covered by an asphalt concrete topping slab. Timber fender piles protect the waterside edge of the wharf. The wharf structure frames into a cast-in place concrete bulkhead. The toe of the wall is protected by stone riprap (Moffatt & Nichol, 2002).

Water Quality

Project Area

In addition to fresh and marine water, past and present urban uses in the area have contributed to industrial waste discharges and urban stormwater runoff that has influenced the water quality in the Oakland Estuary. Pollutant sources discharging into the estuary include both point and nonpoint discharges. A point source is any discernible, confined, and discrete conveyance (e.g., a pipe discharge) of pollutants to a water body from such sources as industrial facilities or

wastewater treatment plants. Nonpoint pollutant sources are sources that do not have a single, identifiable discharge point but are rather a combination of many sources.

Point sources in the project area include discharges through pipelines and other discharges that drain into the estuary. These are permitted discharges that are subject to prohibitions by regulatory agencies, water quality requirements, periodic monitoring, annual reporting, and other requirements designed to protect the overall water quality of the estuary and eventually the Bay.

A nonpoint source can be stormwater runoff from land that contains, for example, petroleum from parking lots, pesticides from farming operations, or sediment from soil erosion. Overland stormwater flow and urban runoff cause nonpoint pollution along the margin of the estuary, which include runoff from dredging activities, marine vessel waste, sediments, sand, industrial fuels, equipment and other operations, terminal fuel, infiltration from sewer system, accidental spills of hazardous materials, and construction activities.

Project Site

Nonpoint-source discharges from the project site present a water quality concern because of the current conditions and industrial uses including the use of two marinas, one within Clinton Basin and second at the foot of 5th Avenue. Nonpoint-source pollutants specific to the site are sediments, petroleum and oils, and litter. Sediments may be generated from erosion of compacted or loose fill materials that are close to the shore of the estuary. Some areas have sloping topography, which facilitates the easy movement of silt into the runoff. Unpaved parking areas can be especially prone to sediment generation. Sediment discharges into the estuary also appear to occur at the privately owned sand and gravel operation (Berkeley Oakland Ready Mix Plant) adjoining the future Channel Park site on the east shore of Lake Merritt Channel. Unpaved and aggregate storage areas at the ready mix plant site with materials stockpiled for concrete production may be sediment sources. Petroleum and oils are discharged from activities such as fueling and transportation of materials. Inadvertent spills of petroleum (including diesel, gasoline and oils, leaking from vehicles and equipment or spilled during transfer and filling) can affect localized areas of pavement and gravel parking areas. Leaks from boats and equipment at the marinas can also affect the water quality in the estuary. Washing of equipment and vehicles in some areas, such as the ready mix plant site, cause ponding of water that, if not managed, can discharge contaminated wash water into the estuary. Due to the level of industrial activity, lack of litter removal, and prevailing winds from the Bay, litter, either from on- or off-site locations, can end up accumulating in areas and some eventually lands in the estuary. Such nonpoint-source pollutants become entrained or mixed with stormwater runoff that flows directly into the estuary (BKF Engineers, 2002), or via Lake Merritt Channel. Stormwater at the project site currently flows over land and via storm drainage facilities directly into the estuary (City of Oakland, 1993). The system is typically in poor condition and has no formal water quality control system in place (BKF, 2005). (See Section IV.M, Utility and Services Systems, for further discussion of storm drainage facilities.)

Any construction in the State of California on one acre or more requires preparation of a stormwater prevention plan (SWPPP) to comply with the requirements of the SWRCB NPDES

General Permit. The best management practices identified in the SWPPP would help mitigate for the impact of construction activities on stormwater quality. Recent amendments also require water quality monitoring. Construction activities (e.g., excavation and trenching) in areas where shallow groundwater is present and construction dewatering is necessary would be subject to the RWQCB construction dewatering permit requirements which would help minimize the potential for discharging sediment laden groundwater from surface drainage activities.

Groundwater Resources

The project site lies in the East Bay Plain of the San Francisco Bay Hydrologic Region (Department of Water Resources [DWR] Groundwater Basin[3] No. 2-9.04), a northwest-trending alluvial plain bounded on the north by San Pablo Bay, on the east by the contact with Franciscan Basement rock, and on the south by the Niles Cone Groundwater Basin (DWR, 2004). The East Bay Plain extends from Richmond to Hayward. The alluvial materials that extend westward from the East Bay Hills to the edge of San Francisco Bay constitute the deep water-bearing strata for this groundwater basin, which is identified as a potential water source for municipal, industrial, and agricultural use (RWQCB, 1995). Since the early 1950s, historic groundwater levels in the deep aquifer in the basin have varied between -10 and -140 feet mean sea level (DWR, 2004). However, there are no water supply wells on the project site. The closest groundwater well in the project vicinity is located in Alameda, which is greater than a mile west of the project site. According to the data from 1990 through 1994, groundwater levels in the well varied from -18 feet to -7.5 mean sea level (DWR, 2005). It is unknown whether this well is a water supply well. However, it is unlikely that the well be influenced by the project. However, there are monitoring wells associated with the remediation of the contamination of the groundwater onsite and are not used for supply. The wells could be destroyed after remediation is complete.

Groundwater elevations tend to be highest in the central portion of the Ninth Avenue Terminal building area, with groundwater flow radiating outward toward the shorelines of Clinton Basin and Brooklyn Basin (Lowney Associates, 2002). The shallow water table varies between 3 and 20 feet below ground surface and is underlain by relatively impermeable Bay Mud sediment. Shallow groundwater depth means that the existing storm sewers in the project area are in the water table. The storm sewers are both a potential source of contamination to groundwater and conduits for the migration of chemicals of concern in groundwater and soils. The storm sewers also connect to the estuary so that water moves in response to tides in portions of the storm sewers. Chemicals released to the storm sewers can migrate from the pipes into the adjacent soils and groundwater. Chemicals present in groundwater may migrate into the pipes or backfill around the pipes and move to other areas of uncontaminated soil or groundwater. Results of groundwater sampling indicated groundwater contamination with total petroleum hydrocarbons, volatile organic compounds, metals, and polynuclear aromatic hydrocarbons (Lowney Associates, 2002). However, thick, impermeable Bay Mud sediment forms a barrier that impedes surface water infiltration to the underlying water sources (Lowney Associates, 2002). (See Section IV.F, Geology, Soils and Seismicity, for discussion of Bay Mud characteristics.)

[3] A groundwater basin is defined as a hydrogeologic unit containing one large aquifer or several connected and interrelated aquifers (RWQCB, 1995).

Flooding

Flooding is inundation of normally dry land as a result of rise in the level of surface waters or rapid accumulation of stormwater runoff (City of Oakland, 2004a). Flooding can also occur due to tsunamis, seiches, or failure of dams. Tsunamis are waves caused by an underwater earthquake, landslide, or volcanic eruption, while seiches are waves in an enclosed or semi-enclosed body of water such as a lake, reservoir, or harbor. Oakland is not a particularly flood-prone city, nor does it have large rivers or open coastline that can result in devastating storm-induced flooding. Flooding from tsunamis would affect low-lying areas along San Francisco Bay and the Oakland Estuary however areas along the inner harbor, Brooklyn Basin and the tidal channel (project site) would be sheltered by the island of Alameda. In addition, the likelihood of large scale devastation in Oakland resulting from seiches appears to be miniscule (City of Oakland, 2004a).

The Federal Emergency Management Agency (FEMA), through its Flood Insurance Rate Mapping program, designates areas where urban flooding could occur during 100-year and 500-year flood events.[4] The project site is located in an area designated as Flood Hazard Area C (areas of minimal flooding) and not within the 100-year or 500-year floodplain (FEMA, 1982). Storm drain facilities on the existing project site convey runoff from the site, the adjoining Embarcadero and a small portion of watershed east of the Embarcadero, and discharges to the estuary. As previously stated, the system is typically in poor condition and has no formal water quality control system in place (BKF, 2005).

Flooding can also occur due to dam failure. The California DWR, Division of Safety of Dams (DSOD) oversees the construction of dams that are over 25 feet high and impound over 15 acre-feet of water, or over 6 feet high and impound over 50 acre-feet of water. Due to DSOD regulatory oversight, monitoring, and design review, the potential is minimal for the catastrophic failure of a properly designed and constructed dam, whether caused by a seismic event, flood event, unstable slope conditions, or damage from corrosive or expansive soils. Although some areas in Oakland are within one or more dam failure inundation areas, the project site does not lie within any of these areas (ABAG, 1995).

Regulatory Setting

Several federal, state, and local agencies regulate activities that could affect hydrological and water quality features. This section describes the regulatory framework that would apply to the project.

Federal

Clean Water Act

Under the Clean Water Act (CWA) of 1977, the U.S. Environmental Protection Agency (EPA) seeks to restore and maintain the chemical, physical, and biological integrity in the nation's

[4] A 100-year flood event has a one percent probability of occurring in a single year. Although infrequent, 100-year floods can occur in consecutive years or periodically throughout a decade. A 500-year flood event has a 0.2 percent probability of occurring in a single year.

waters. The statute employs a variety of regulatory and nonregulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. The CWA authorizes the EPA to implement water quality regulations. The National Pollutant Discharge Elimination System (NPDES) permit program under section 402(p) of the CWA controls water pollution by regulating stormwater discharges into the waters of the U.S. California has an approved state NPDES program. The EPA has delegated authority for water permitting to the California State Water Resources Control Board (SWRCB), which has nine regional boards. The San Francisco Bay Regional Water Quality Control Board (RWQCB) regulates water quality in the project area.

Total Maximum Daily Load

Section 303(d) of the CWA requires that each state identify water bodies or segments of water bodies that are "impaired" (i.e., not meeting one or more of the water quality standards established by the state). These waters are identified in the Section 303(d) list as waters that are polluted and need further attention to support their beneficial uses. Once the water body or segment is listed, the state is required to establish Total Maximum Daily Load or TMDL for the pollutant causing the conditions of impairment. TMDL is the maximum amount of a pollutant that a water body can receive and still meet water quality standards. Typically, TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The intent of the 303(d) list is to identify water bodies that require future development of a TMDL to maintain water quality.

In accordance with Section 303(d), the RWQCB has identified impaired water bodies within its jurisdiction, and the pollutant or stressor responsible for impairing the water quality. Within the project area, the RWQCB has designated the Central Basin of the San Francisco Bay as an impaired water body. Pollutants that contribute to this impairment are chlordane, DDT, diazinon, dieldrin, various dioxins, exotic species, furan compounds, mercury, polyaromatic hydrocarbons, polychlorinated biphenyls, and selenium. The potential sources of the pollutants listed are non-point sources, atmospheric deposition, ballast water, industrial point sources and resource extraction, urban runoff, agriculture, exotic species, and natural sources (RWQCB, 2003). The RWQCB does not list any specific water bodies at the project site, i.e., the estuary, Clinton Basin or Lake Merritt Channel as impaired. The RWQCB is required to establish TMDLs for these pollutants in order to gradually eliminate impairment of the waters and attain water quality standards (ACCWP, 2003). Current TMDL projects include TMDLs for mercury and polychlorinated biphenyls in San Francisco Bay. The project sponsor would be required to ensure that the proposed project would not conflict with the current TMDLs and comply with specific water quality control measures under the NPDES permit requirements (see below for details) to prevent project-related contaminants from entering into the estuary, which is connected to the Central Basin.

Waste Discharge Requirements

Section 401 of the CWA requires every applicant for a federal permit or license for an activity that may result in a discharge of pollutants to the waters of the U.S. (including permits under

section 404 of the CWA, see Section IV.I, Biological Resources). The purpose of the permit application is to obtain certification that the proposed activity will comply with the state water quality standards (RWQCB, 2003b). The proposed project would require 401 certification because the project involves dredging that would be subject to Section 404 of the CWA (see Section IV.I, Biological Resources).

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act allows the SWRCB to adopt statewide water quality control plans or basin plans. The purpose of the plans is to establish water quality objectives for specific water bodies. The RWQCB has prepared the *San Francisco Bay Basin Plan* that establishes water quality objectives and implementation programs to meet the stated objectives and to protect the beneficial uses of the Bay waters (see regional regulatory discussion below). The act also authorizes the NPDES program under the CWA, which establishes effluent limitations and water quality requirements for discharges to waters of the state. Most of the implementation of SWRCB's responsibilities is delegated to the nine regional boards. Under the NPDES program, the RWQCB has established permit requirements for stormwater runoff for the project area (see Regional discussion below).

Regional

The RWQCB is responsible for the protection of beneficial uses and the water quality of water resources within the San Francisco Bay region. The RWQCB administers the NPDES stormwater permitting program and regulates stormwater in the San Francisco Bay region, which includes the project area. The City of Oakland is a permittee under the NPDES permit for the Alameda Countywide Clean Water Program (see below for detailed discussion). The RWQCB also issues 401 certifications for projects that require Section 404 permit from the U.S. Army Corps of Engineers (USACE). The regulatory requirements under the RWQCB are discussed below.

Basin Plan

The RWQCB prepared the *San Francisco Bay Water Quality Control Plan* (Basin Plan) (1995) for San Francisco Bay that contains descriptions of the legal, technical, and programmatic bases of water quality regulation in the region. The Basin Plan describes beneficial uses of major surface waters and their tributaries. The following beneficial uses have been listed for San Francisco Bay in the Central Basin:

- Ocean, Commercial, and Sport Fishing
- Estuarine Habitat
- Industrial Service Supply
- Fish Migration
- Navigation
- Industrial Process Supply
- Preservation of Rare and Endangered Species
- Water Contact Recreation
- Noncontact Recreation

- Shellfish Harvesting
- Fish Spawning
- Wildlife Habitat

The RWQCB is responsible for permitting construction activities for development projects to ensure the protection of the above beneficial uses. The Basin Plan also provides specific requirements for dredging activities that would be a part of the proposed project. In the San Francisco Bay region, the dredged material is disposed at specific ocean and in-bay disposal sites. The overall policy of the RWQCB for dredged sediment and its disposal includes a reduction of in-bay disposal volumes and an increased emphasis on beneficial reuse of the dredged material. The most likely beneficial reuse of dredged material is wetland restoration projects or for levee maintenance or repair. Therefore, the Basin Plan lists targets (see **Table IV.D-1**) for volume of dredged materials to be disposed at each of the designated sites and may require additional documentations and inspections to ensure that the project impacts from the dredging activity are minimum (USACE, 2001).

TABLE IV.D-1

DREDGED MATERIAL VOLUME TARGETS

Disposal Site	Time Frame	Volume of Dredged Material (million cubic yards per month)
Alcatraz Island	October – April	0.4
	May – September	0.3
San Pablo Bay	Any Month	0.5
Carquinez Straits	Any Month	1.0
Suisun Bay	Any Year	0.2
Alcatraz Island, San Pablo Bay, Carquinez Straits, and Suisun Bay		2.8 [a]

[a] The volume target is for each calendar year (i.e., January to December) for the total amount of disposal at the aquatic disposal sites (USACE, 2001).

SOURCE: RWQCB, 1995

McAteer-Petris Act / San Francisco Bay Conservation and Development Commission (BCDC)

The McAteer-Petris Act is a provision under California law that preserves San Francisco Bay from indiscriminate filling. The act established the San Francisco Bay Conservation and Development Commission (BCDC) as the agency charged with preparing a plan for the long-term use of the Bay and regulating development in and around the Bay while the plan was being prepared. The San Francisco Bay Plan, completed in January 1969, includes policies on 18 issues critical to the wise use of the Bay ranging from ports and public access to design considerations and weather. The McAteer-Petris Act authorizes BCDC to incorporate the policies of the Bay Plan into state law (BCDC, 2000). The Bay Plan has two features: policies to guide future uses of

the Bay and shoreline, and maps that apply these policies to the Bay and shoreline. BCDC conducts the regulatory process in accord with the Bay Plan policies and maps, which guide the protection and development of the Bay and its tributary waterways, marshes, managed wetlands, salt ponds, and shoreline (BCDC, 2003).

The project site lies within two of the BCDC jurisdictional areas, "(1) San Francisco Bay, i.e., "all areas that are subject to tidal action from the south end of the Bay to the Golden Gate… including all sloughs, and specifically, the marshlands lying between mean high tide and five feet above mean sea level; tidelands (lands lying between mean high tide and mean low tide); and submerged lands (lands lying below mean low tide)", and "(2) a shoreline band that consists of all territory located between the shoreline of the Bay and a line 100 feet landward of and parallel with that line..." (BCDC, 2003). The City and the project sponsor would be required to comply with the BCDC requirements due to the project location and dredging activities.

Construction Permitting

Construction activities on one acre or more are regulated by the RWQCB and are subject to the requirements of the NPDES General Permit for Discharges of Stormwater Runoff Associated with Construction Activity (General Construction Permit). The SWRCB established the General Construction Permit for the purpose of reducing impacts to surface waters that may occur due to construction activities. The project sponsor would be required to apply for the General Construction Permit that requires the preparation and implementation of a stormwater pollution prevention plan (SWPPP). The SWPPP is prepared before project construction begins and, in certain cases, before demolition begins and includes specifications for best management practices (BMPs) that would be implemented during construction. BMPs are measures undertaken to control degradation of surface water by preventing soil erosion or the discharge of pollutants from the construction area. Additionally, the SWPPP describes measures to prevent or control runoff after construction is complete and identifies procedures for inspecting and maintaining facilities or other project elements. Required elements of a SWPPP include:

1. Site description addressing the elements and characteristics specific to the site,
2. Descriptions of BMPs for erosion and sediment controls,
3. BMPs for construction waste handling and disposal,
4. Implementation of approved local plans,
5. Proposed post-construction controls, and
6. Non-stormwater management.

Examples of typical construction BMPs include scheduling or limiting activities to certain times of the year, installing sediment barriers such as silt fence and fiber rolls, maintaining equipment and vehicles used for construction, tracking controls such as stabilizing entrances to the construction site, and developing and implementing a spill prevention and cleanup plan. Non-stormwater management includes installing specific discharge controls during activities such as paving operations, vehicle and equipment washing and fueling.

The RWQCB has identified BMPs in the *California Storm Water Best Management Practice Handbook* (2003) to effectively reduce degradation of surface waters to an acceptable level. The City of Oakland holds a NPDES permit under the Alameda County Clean Water Program and the project would be required to comply with the permit requirements to control stormwater discharges from the construction site (see Alameda County discussion below).

Construction activities such as excavation and trenching in areas with shallow groundwater would require dewatering, which would be subject to the RWQCB construction dewatering permit requirements. Dewatering operations are regulated under State requirements for stormwater pollution prevention and control. Discharge of non-stormwater from a trench or excavation that contains sediments or other pollutants to sanitary sewer, storm drain systems, creek bed (even if dry), or receiving waters is prohibited. Discharge of uncontaminated groundwater from dewatering is a conditionally exempted discharge by the RWQCB. However, the removed water could potentially be contaminated with chemicals released from construction equipment or sediments from excavation. Therefore, disposal of dewatering discharge would require permits either from the RWQCB for discharge to surface creeks and groundwater or from local agencies for discharge to storm or sanitary sewers. The RWQCB lists non-stormwater discharge controls specifically for dewatering operations (RWQCB, 2003a). The control measures are described in the mitigation for impacts discussion. These control measures would be implemented by the project sponsor during construction activities at the project site. Discharge of water resulting from dewatering operations would require an NPDES Permit, or a waiver (exemption) from the RWQCB, which would establish discharge limitations for specific chemicals (if they occur in the dewatering flows).

Dredging Permitting

Project construction activities such as the shoreline improvement along Clinton Basin would involve dredging. The project sponsor would be required to comply with the following regulatory requirements for dredging.

The proposed project would be required to apply for Section 404 permit from the USACE prior to dredging. (See also Section IV.I, Biological Resources, for additional discussion of Section 404 permit). As a part of the Section 404 permitting process, the project sponsor would be required to obtain a water quality certification from the RWQCB under Section 401 of the CWA. The RWQCB may choose to act under the authority of the state Porter Cologne Water Quality Control Act and issue waste discharge requirements for the project in conjunction with the water quality certification. As discussed previously, the dredged material is disposed at ocean or in-bay disposal sites or reused for wetland restoration or dike maintenance. The project would be required to dredge and dispose material within the target volumes listed in **Table IV.D-1.** In the event an in-bay disposal is proposed, the project sponsor would be required to provide an adequate alternatives analysis showing that there are no practicable alternatives to in-bay disposal (USACE, 2001).

The Dredged Material Management Office (DMMO) regulates dredging and dredged material in the San Francisco Bay region. The DMMO consists of representatives from the USEPA- Region

9, U.S. Army Corps of Engineers-San Francisco, San Francisco Bay RWQCB, BCDC, and the State Lands Commission. The DMMO serves as the single point of entry for applicants to the dredging and disposal permitting process. The DMMO regulates two types of dredging projects, 1. small dredging projects defined by a project depth of less than -12 feet mean lower low water (MLLW) and generating less than 50,000 cubic yards per year on average, and 2. other dredging projects defined by project depth greater than -12 feet MLLW or average annual volumes greater than 50,000 cubic yards (USACE, 2001). The proposed project would involve a one-time dredging event of up to a depth of - 8 feet MLLW with an estimated volume of 20,000 cubic yards of the dredged material. Therefore the project sponsor would be required to apply for a dredging permit in the first category. The Impacts Analysis section below discusses the specific dredging regulatory compliance.

San Francisco Estuary Project

The San Francisco Estuary Project was established pursuant to CWA Section 320 to protect and improve the water quality and natural resources of San Francisco Bay-Delta Estuary. The San Francisco Estuary Project recommends actions in the several areas such as aquatic resources, water use, pollution prevention and reduction, dredging and waterway modification, and research and monitoring. As stated earlier, the project site is located in the San Francisco Bay hydrologic region and drains eventually into the Bay which is a part of the Bay-Delta Estuary, therefore, the following recommended actions that would apply to the project are:

- Action PO-2.4: Improve the management and control of urban runoff from public and private sources.
- Action LU-3.2: Develop and implement guidelines for site planning and BMPs.

Alameda County

The Alameda County Flood Control and Water Conservation District and the City of Oakland Public Works Agency share the responsibility for maintaining drainage facilities in Oakland. The project sponsor would be required to comply with the requirements concerning drainage issues during construction and operation of the project as a condition of receiving a drainage permit.

Alameda Countywide Clean Water Program

The Alameda Countywide Clean Water Program (ACCWP) consists of 17 participating agencies including the City of Oakland that cooperatively comply with a municipal stormwater permit issued by the RWQCB. The permit contains requirements to prevent stormwater pollution and to protect and restore creek and wetland habitat. The member agencies have developed performance standards to clarify the requirements of the stormwater pollution prevention program, adopted stormwater management ordinances, conducted extensive education and training programs, and reduced stormwater pollutants from industrial areas and construction sites (ACCWP, 2002). In the project area, the ACCWP administers the stormwater program to meet the CWA requirements by controlling pollution in the local storm drain sewer systems.

The ACCWP prepared the *Stormwater Quality Management Plan* in 2001 that is effective through June 2008 (ACCWP, 2001). This plan describes the ACCWP's approach to reducing stormwater pollution. In conjunction with the stormwater discharge permit adopted by the RWQCB, the plan is designed to enable the ACCWP member agencies to meet CWA requirements. The plan provides a framework for protection and restoration of creeks and watersheds in Alameda County in part through effective and efficient implementation of appropriate control measures for pollutants. The plan addresses the following major program areas: regulatory compliance, focused watershed management, public information/participation, municipal maintenance activities, new development and construction controls, illicit discharge controls, industrial and commercial discharge controls, monitoring and special studies, control of specific pollutants of concern, and performance standards (ACCWP, 2001). New development and construction controls in the plan would apply to the project. The plan recommends tasks to implement source, site design, post-construction stormwater treatment and hydromodification[5] controls (ACCWP, 2001).

Construction activities associated with the project would be subject to the NPDES permit requirements for stormwater management and discharges. The ACCWP NPDES permit also incorporates updated state and federal requirements related to the quantity and quality of post-construction stormwater discharges from new development and redevelopment projects.

The RWQCB issued a NPDES permit (Permit No. CAS0029831) to ACCWP that includes the City of Oakland by Order 97-030 on February 19, 1997, and modified by Order No. 99-049 on July 21, 1999. The most recent Order R2-2003-021 was adopted on February 19, 2003 for waste discharge requirements. The City of Oakland has jurisdiction over and/or maintenance responsibility for its municipal separate storm drain systems and/or watercourses in Alameda County.

C.3 Permit Requirements

The NPDES permit lists provision C.3 that governs storm drain systems and regulates post-construction stormwater runoff. The provision requires new development and redevelopment projects to incorporate treatment measures and other appropriate source control and site design features to reduce the pollutant load in stormwater discharges and to manage runoff flows. "Redevelopment" is defined as a project on a previously developed site that results in the addition or replacement of impervious surface. According to the C.3 provision in the ACCWP NPDES permit, the proposed project falls under the "significant redevelopment projects" category under Group 1 Projects. A significant redevelopment project is defined as a project on a previously developed site that results in addition or replacement of total of 43,560 square feet (one acre) or more of impervious surface. The permit requires that in the case of a significant redevelopment project that would result in an increase of, or replacement of, more than 50 percent of the impervious surface of a previously existing development, and the existing development was not subject to stormwater treatment measures, the entire project be included in the treatment measure design. The proposed project would replace more than 50 percent of the impervious surface, therefore the entire project would be required to implement treatment measures and appropriate

[5] Hydromodification is alteration of the natural flow of water through a landscape.

source control and site design measures under the NPDES permit in addition to the following conditions (ACCWP, 2003):

- Implement site design/landscape characteristics as feasible, which maximize infiltration (where appropriate), provide retention or detention, slow runoff, and minimize impervious land coverage, so that post-development pollutant loads from the site have been reduced to maximum extent possible, and

- For new and redevelopment projects, such as the proposed project, that discharge directly to water bodies listed as impaired (under section 303(d) of CWA), ensure that post-project runoff does not exceed pre-project levels for such pollutants through implementation of the control measures addressed in the C.3 provision, to the maximum extent practicable.

The C.3 provision also requires preparation of a hydrograph modification management plan (HMP). Implementation of an HMP ensures that post-project runoff shall not exceed estimated pre-project rates and/or durations, where the increased stormwater discharge rates and/or durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to changes in the amount and timing of runoff. The project would involve an overall increase in pervious areas with a reduction in storm runoff, which is a net beneficial impact. The project would install the required site design and source control measures to control any project related runoff. Therefore, the project sponsor would not be required to prepare an HMP.

City of Oakland

Oakland Ordinances and Municipal Code

The City implements the following regulations to protect water quality and water resources:

Creek Protection, Stormwater Management, and Discharge Control Ordinance

This ordinance establishes comprehensive guidelines for the regulation of discharges to the city's storm drain system and the protection of surface water quality. The ordinance identifies BMPs and other protective measures for development projects. Under the ordinance, the Public Works Agency must issue permits for storm drainage facilities that would be connected to existing city drainage facilities. In 1997, the ordinance was amended to include the requirement for a creek protection permit for any construction or related activity on creekside property. It includes enforcement provisions to provide more effective methods to deter and reduce the discharge of pollutants to the storm drain system, local creeks, and San Francisco Bay. The provisions also list clear guidelines to creekside residents for protecting the creek and habitat. The project would fall under Category III or IV[6] due to its proximity to the estuary and would be required to prepare a creek protection plan and a hydrology report (City of Oakland, 1993).

[6] Category III: Any exterior development or work that may adversely affect the creek, beyond the 20-foot setback from the top of the creek bank, and is within 100 feet of the centerline of the creek, that may or may not require any other development-related permit, including without limitation: landscape walls, fences, patios, decks, private

Grading Ordinance

Chapter 13.16 of the Oakland Municipal Code prohibits activities that would result in the discharge of pollutants to Oakland's waterways or in damage to creeks, creek functions, or habitat. The ordinance requires the use of standard BMPs to prevent pollution or erosion to creeks and/or storm drains. Additionally, a creek protection permit is required for any construction work on creekside properties (City of Oakland, 2004b). The project sponsor would apply for a creek protection permit.

Chapter 3304.2 of the Oakland Municipal Code requires a permit for grading activities on private or public property for projects that exceed certain criteria, such as amount of proposed excavation and degree of site slope. During project construction, the volume of the excavated fill material could exceed 50 cubic yards and could result in a 20 percent slope onsite, or the depth of excavation could exceed five feet at any location. Therefore, the project sponsor would be required to apply for the permit and prepare a grading plan, erosion and sedimentation control plan, and drainage plan (City of Oakland, 2004c).

Hydrology and Water Quality Impacts Discussion

Significance Criteria

A hydrology or water quality impact would be considered significant if the impact would result in any of the following criteria, which are adapted from CEQA *Guidelines*, Appendix G, and the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines:

- Violate any water quality standards or waste discharge requirements;
- Result in substantial erosion or siltation on or offsite that would affect the quality of receiving waters;
- Create or contribute substantial runoff that would be an additional source of polluted runoff;
- Otherwise substantially degrade water quality;
- Substantially alter the existing drainage pattern of the site or area (including through the alteration of the course or by increasing the rate or amount of flow of a creek, river or stream) in a manner that would result in substantial erosion, siltation, or flooding, both on or off the site; or

drainage improvements, irrigation systems, or trenching work. Additionally, any work or development that includes earthwork beyond the 20-foot setback from the top of the creek bank.

Category IV: Any exterior development or work that is conducted from the centerline of the creek to the 20-foot setback from the top of the creek bank that may or may not require any other development-related permits including without limitation: earthwork, landscape walls, fences, patios, decks, private drainage improvements, irrigation systems, or trenching work.

- Fundamentally conflict with elements of the City of Oakland creek protection ordinance (Oakland Municipal Code Chapter 13.16). Although there are no quantitative criteria to assess impacts, factors to be considered in determining significance include whether there is substantial degradation of water quality through (a) discharging a substantial amount of pollutants into a creek; (b) significantly modifying the natural flow of the water or the creek's capacity; (c) depositing substantial amounts of new material into a creek or causing substantial bank erosion or instability; or (d) substantially endangering public or private property or threatening public health or safety.

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or proposed uses for which permits have been granted);

- Result in substantial flooding on or offsite;

- Create or contribute substantial runoff that would exceed the capacity of existing or planned stormwater drainage systems;

- Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, that would impede or redirect flood flows;

- Place within a 100-year flood hazard area structures that would impede or redirect flood flows;

- Expose people or structures to a substantial risk of loss, injury, or death involving flooding;

- Result in inundation by seiche, tsunami, or mudflow.

As discussed in Setting, the Bay Mud sediment onsite forms a barrier that impedes surface water infiltration to the underlying water sources. Given the sediment barrier and considering that the groundwater beneath the project site is not a source for municipal or agricultural uses (RWQCB, 1995), the project would not affect groundwater resources.

Local Plans and Policies

Oakland General Plan policies and other applicable plans and policies that pertain to hydrology, water quality, and related effects, and that apply to the project, are listed in **Appendix F**. Key policies are identified and discussed in Section IV.A, Land Use, Plans, and Policies. General Plan policies that are also significance criteria or contain a regulatory threshold which the project must meet are addressed in this section.

Methodology

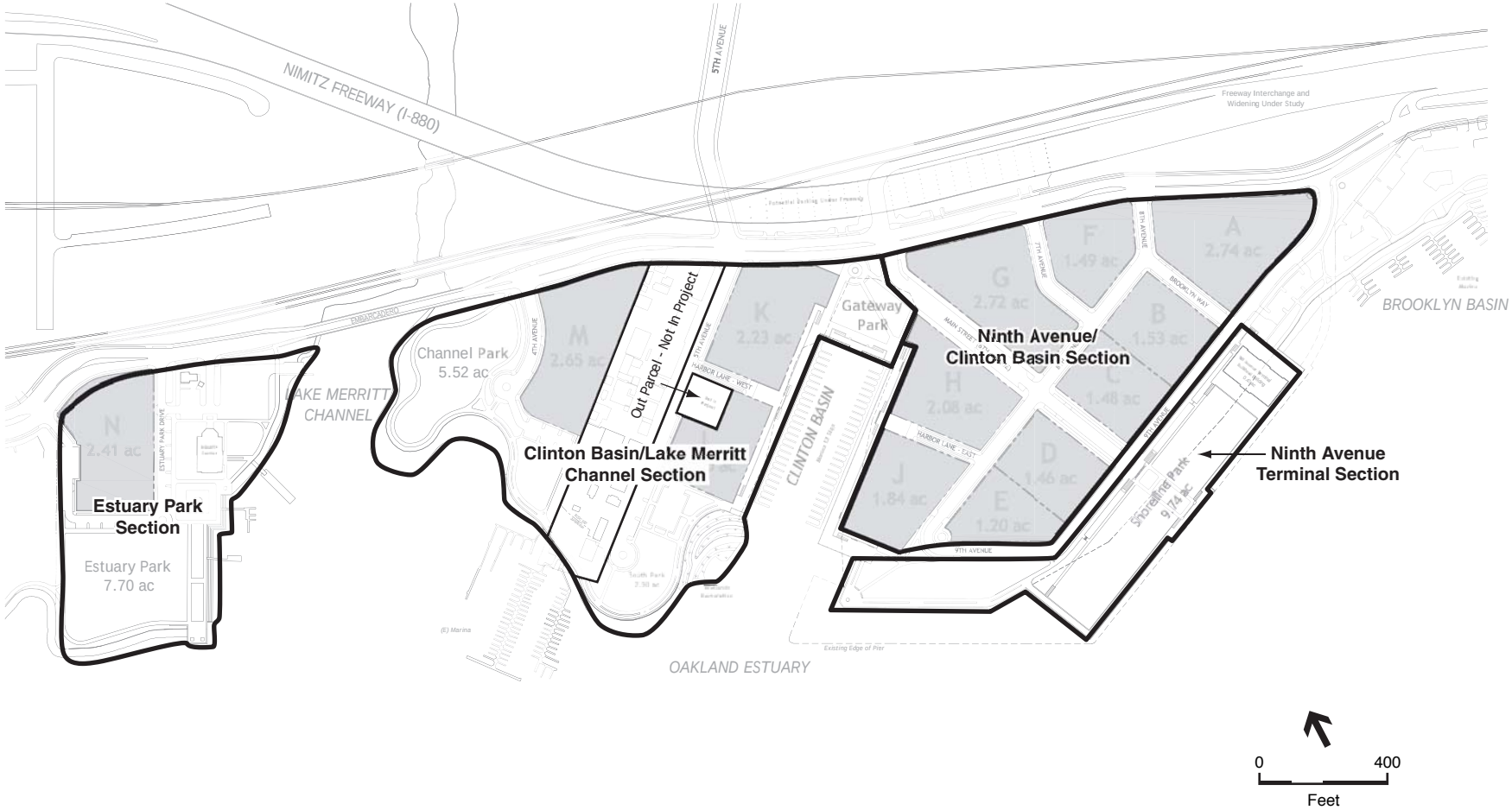
The following section provides impact analysis and discusses the thresholds used to determine the impact significance. The impacts analysis discusses the significance of the changes to the existing conditions that would result from the project. Impacts are divided into three main categories: water quality, groundwater resources, and flooding. This section discusses water quality impacts to Oakland Estuary, which is the immediate receiving water body, and San Francisco Bay depending upon the significance criteria. Construction and operational impacts of the project are discussed for each category. For the purposes of the water quality analysis, the project site is divided into four main sections depending upon the distribution of pervious and impervious or paved areas. See **Figure IV.D-2**. The four sections are:

- **Ninth Avenue Terminal section:** The section of the site that includes the Ninth Avenue Terminal is paved and impervious with runoff flowing into storm drains or directly into the estuary. The Terminal includes a pile supported structure, its wharf that partially extends over the estuary. A portion of the Terminal building and its associated wharf would be removed and the area would be converted to public open space with open green lawn, bicycle paths, and jogging trails. This would increase pervious areas facilitating greater infiltration and reducing runoff.

- **Ninth Avenue/Clinton Basin section:** The area between Ninth Avenue and Clinton Basin shows industrial use on paved areas with stormwater flowing into storm drains. Some unpaved sections cause sedimentation with storm runoff and discharges that flow into the estuary. The project would convert the heavy industrial section to residential and retail use.

- **Clinton Basin/Lake Merritt Channel section:** This partly paved and semi-pervious area between Clinton Basin and Lake Merritt Channel (includes Berkeley Oakland Ready Mix operation) would be used for residential/retail development and for South Park and Channel Parks. The area currently has industrial uses with storm runoff and discharges from the ready mix plant flowing directly into the estuary and the Lake Merritt Channel. The project would develop residential and commercial uses in this area, provide new public open space, and improve the existing shoreline.

- **Estuary Park section:** The portion of the site west of the Lake Merritt Channel includes Estuary Park, Jack London Aquatic Center, and the Cash & Carry wholesale grocery building. The project would improve the park, which is approximately 3.5 acres of lawn surface, and the park's connection to the Bay Trail, which forms a continuous path along the shoreline. The project would redevelop the Cash & Carry retail site and would not significantly change



SOURCE: Environmental Science Associates, 2005

Oak to Ninth Avenue . 202622

Figure IV.D-2

Water Quality Analysis Study Parcels

- the existing impervious surface acreage. No changes are proposed to the Aquatic Center and related parking areas that make up approximately three acres of impervious surface.

The existing commercial and industrial structures on the project site would be replaced by residential areas and new and improved parks and open spaces, as described in Chapter III, Project Description.

Project Impacts

Water Quality

Construction Impacts

Impact D.1: Project construction would involve activities (excavation, soil stockpiling, boring and pile driving, grading, and dredging, etc.) that would generate loose, erodable soils that, if not properly managed, could violate any water quality standards or waste discharge requirements; result in substantial erosion or siltation; create or constitute substantial polluted runoff; or otherwise substantially degrade water quality. (Potentially Significant)

Construction of the project would involve excavation, soil stockpiling, and boring along with pile driving and grading. Construction would include activities such as removal of a portion of the pile-supported pier along the southernmost edge of the Ninth Avenue Terminal section and building of a sheet pile edge and a 55-foot wide hardscape around Clinton Basin. The project would rebuild the marina in Clinton Basin and improve the Fifth Avenue Marina and include improvement of the shoreline along the project site (see **Figure IV.D-3**). The shoreline improvement activities would include installation of rock slope protection measures and a bulkhead wall with riprap at the toe of the slopes (Moffatt & Nichol, 2005a). Rock slope protection (shown as riprap in **Figure IV.D-3**) would consist of installing the following measures (Moffatt & Nichol, 2005a):

- Revetment or a type of a barricade that would consist of armor stone, geotextile fabric, geo-membrane if applicable, and a crushed rock leveling course, and

- Slope dressing that would consist of armor stone and bedding that would be placed on the slope and does not require significant excavation or foundation support.

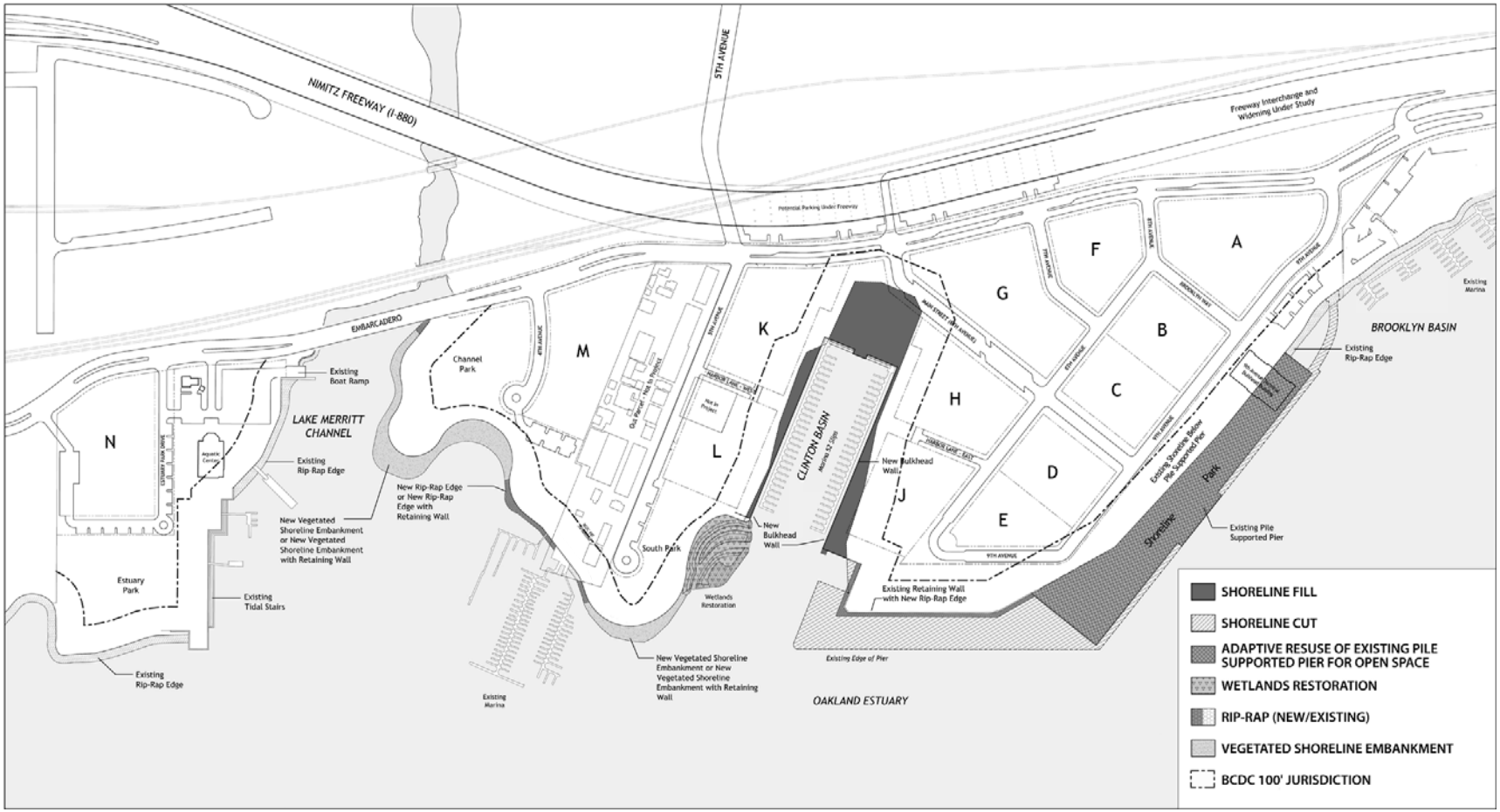
The bulkhead wall would consist of a vertical bulkhead wall made up of either steel or concrete sheet piles. The wall would retain the fill and include a revetment on the waterside that would provide structural resistance to overturning (Moffatt & Nichol, 2005a).

The proposed shoreline improvements would change along Channel Park, Clinton Basin, Shoreline Park, and Brooklyn Basin by constructing piles and shadow fills (i.e., fills that are cantilevered over into the estuary creating a shadow in the water) and by creating or restoring shoreline marshland and vegetated shoreline embankments, such as along the proposed Channel Park. Marsh improvement would occur by placing a wedge of soil between the estuary and the

excavation. The wedge would be excavated after the revetment is constructed (Moffatt & Nichol, 2005a). Shadow fills could result in fluctuation of temperature in the estuary, which may in turn affect aquatic habitat. (See Section IV.I, Biological Resources, for further discussion of impacts on aquatic habitat.).

Construction of the shoreline improvement measures is expected to involve mostly land-based operations using backhoes and cranes, except for the areas along Clinton Basin and Shoreline Park where construction would involve barges or water-based equipment such as scows, derrick barges, and tugs. Construction of riprap would require excavation that would be considered as dredging (Moffatt & Nichol, 2005a). Dredging and placement of toe rock would be typically limited to the length of the shoreline that could be covered with bedding and/or riprap. Dredging impacts are discussed in the Impacts section below. Bulkhead construction around Clinton Basin would depend on the type of the retaining wall and the contractor's preferred method of construction. Some sections, such as the Clinton Basin sections are deeper due to the required navigation related depths, therefore the excavation for the proposed bulkhead wall in the areas would extend two to three feet below the toe of the slope to place the rock (Moffatt & Nichol, 2005a).

The construction activities as discussed above would generate loose, erodable soils that, if not properly managed, could be washed into surface water by rain or by water used during grading operations. Soil erosion would cause excess sediment loads in waterways and could affect the water quality of the Oakland Estuary and eventually San Francisco Bay. However, stormwater control measures such as the installation of silt fences and hay bales would be implemented to prevent stormwater runoff into the estuary. Construction would involve use of fuel and other chemicals that if not managed properly, could get washed off into the stormwater. These construction impacts would be temporary, however would be a potentially significant, particularly due to the proximity of the project site to the estuary. Adherence to the standard City practices, and City and RWQCB requirements discussed in Mitigation Measure D-1 would reduce the impact to a less-than-significant level.



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SOURCE: Oakland Harbor Partners, 2005

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Figure IV.D-3
Shoreline Reconfiguration and Stabilization Plan

Mitigation Measure D.1: The project sponsor shall comply with all NPDES requirements, RWQCB General Construction Permit requirements, and all City regulations and Creek Protection Permits requirements.

Specific requirements are as follows:

NPDES Requirements

- The project sponsor shall comply with the ACCWP NPDES permit and the RWQCB General Construction Permit. According to the permit requirements, the project sponsor shall prepare a SWPPP that would outline construction stormwater quality management practices based on the ACCWP *Stormwater Quality Management Plan* and coordinate the SWPPP with the preparation of the grading plan. The SWPPP shall describe erosion control measures as recommended in the *California Stormwater Best Management Practice Handbook* (Stormwater Quality Task Force, 2003).

    - The project sponsor shall prepare the SWPPP and submit a notice of intent application to the RWQCB prior to construction activities, as required by the RWQCB. Implementation of the SWPPP shall start with the commencement of construction and continue though the completion of the project.

    - At a minimum, the SWPPP shall include a description of construction materials, practices, and equipment storage and maintenance, a list of pollutants likely to contact stormwater, site specific erosion and sedimentation control practices, list of provisions to eliminate or reduce discharge of materials to stormwater, and BMPs for fuel and equipment storage.

    - The project sponsor shall develop and implement a monitoring program as required under the General Permit. The project sponsor shall require the contractor to conduct inspections of the construction site prior to anticipated storm events and after the actual storm events. During extended storm events, inspections shall be conducted after every 24-hour period. The goals of these inspections are:

        - to identify areas contributing to stormwater discharge,

        - to evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly installed and functioning in accordance with the General Permit, and

        - whether additional control practices or corrective maintenance activities are needed.

    - Equipment, materials, and workers shall be available for rapid response to failures and emergencies. All corrective maintenance or BMPs shall be performed as soon as possible, depending upon worker safety.

- Upon project completion, the project sponsor shall submit a notice of termination to the RWQCB.

City of Oakland Requirements

- The City of Oakland Municipal Code Sections 15.04.780 and 13.16 require that project applicants prepare a grading plan for the project. The required grading plan includes drainage, erosion, and sediment control measures, and incorporates construction BMPs to prevent pollutants from entering the storm sewer to the maximum extent practicable. The plan discusses existing, temporary, and final drainage facilities. Erosion and sediment control combine interim and permanent measures to minimize erosion, stormwater runoff, and sedimentation. Measures may include inlet protection using rock media filters, filter fabrics and bags, installation of straw waddles, silt fences, covering, and hydroseeding of open areas to prevent erosion and migration of sediment to the storm drain system or directly to the estuary. After construction is complete, the storm drain system would be inspected and cleared of any debris or sediment. Preparation and implementation of the grading plan shall include the preparation of the construction SWPPP as discussed above.

  The project sponsor shall obtain a Creek Protection Permit under Category III or IV due its proximity to the estuary. The permit application shall include the following:

  - A site plan that illustrates the relationship and distance of the project to the creek centerline and top of the creek bank.
  - Posting of public notices within a 300 foot-radius of the project location.
  - Environmental documents as required under CEQA,
  - A Creek Protection Plan that describes how the project sponsor would protect the creek, its banks, riparian vegetation, wildlife, surrounding habitat, and the creek's natural appearance during and after construction. The plan may be prepared by the owner of the property, an architect, engineer, or contractor. The project sponsor shall be obligated to implement the approved provisions of the plan. The plan shall be reviewed and approved by the City prior to issuance of the Creek Protection Permit. The plan may include but is not limited to the following elements:
    - Education on creek protection provided to workers on the site;
    - Litter prevention measures, (for example, how is debris, loose dirt. etc. stored);
    - Dust control measures;
    - Methods of cleaning tools and equipment;
    - Construction site fencing;

  - Future and ongoing sediment and erosion control measures;
  - Wet weather protection;
  - Special circumstances/additional information; or
  - Emergency preparations for construction related spills.

- Submittal of a Hydrology report (For Category 4): A Hydrology report shall be prepared by a licensed engineer with creek hydrology expertise. The report shall be reviewed and approved by the City prior to issuance of a Creek Protection Permit. A hydrology report may include, but is not limited to the following elements:
  - Flows and water surface levels;
  - Address how future development in the area (unrelated to the proposed work) may impact flows;
  - Creek bank stability, before and after the project;
  - Impact of proposed work with regard to direction, as well as quantity of flow in the Creek;
  - Upstream and downstream conditions, before and after project construction;
  - Location of major drainage facilities (e.g. trash racks, culverts, discharge points, etc.);
  - Profiles of the stream;
  - Cross sections;
  - Proposed improvements to the Creek; including any vegetative or other natural screening enhancements utilized;
  - Impacts of project on existing vegetation or wildlife within the affected riparian corridor;
  - Required permits or approvals from regulatory agencies such as the California Department of Fish and Game, Army Corps of Engineers, and the State Regional Water Quality Control Board; and
  - Any additional information deemed reasonable by the Director of Building Services.

Implementation of Mitigation Measure D.1 would reduce soil erosion and release of hazardous materials into watercourses, therefore construction of the project would not cause degradation of

water quality in the estuary or other waterways or violate any water quality standards. The impact would be less than significant.

Significance after Mitigation: Less than Significant

Impact D.2: Project construction activities would include dredging in Clinton Basin, which could require disturbance, removal, and disposal of contaminated sediment that may result in adverse impacts to aquatic organisms and water quality. (Potentially Significant)

Construction activities would involve dredging as a part of shoreline improvements at Clinton Basin. A vertical bulkhead wall (see **Figure IV.D-3**) would be constructed around the edge of the basin, which would allow a promenade type of public access with proximity to the water's edge. This would be a combination of a low-height retaining wall on a riprap embankment (see Impact D.1 for discussion). In addition to the promenade along the edge of Clinton Basin, approximately 17-foot boat long slips would be built within the basin. Construction of the embankment with riprap would require excavation that would constitute dredging.

As discussed previously, the project would involve dredging at a design water depth of -8 feet MLLW with about 20,000 cubic yards of dredged material. The type of dredging and the equipment used for dredging would be strongly influenced by desired depths and the quality of material (Moffatt & Nichol, 2005b). The dredging activities are expected to continue for about a month, assuming that offsite facilities would be used to process the material. Dredging would occur between June 1 and November 30 (Moffett & Nichol, 2005b).

Dredging would cause bottom disturbance, loading of suspended solids, reduction in dissolved oxygen, mobilization of toxicants that are adsorbed to the sediments, and release of substances such as nitrogen, phosphorus, and ammonia. Such phenomena could result in adverse impacts to aquatic organisms in Clinton Basin and the estuary. Impacts include smothering of organisms living in or on the bottom of the basin or the estuary, impaired respiration, reduced oxygen intake, and stimulation of algal growth (RWQCB, 1995). In addition to the actual dredging activity, disposal of the dredged material could cause a significant adverse impact depending upon the sediment quality. The impact would be minimized by implementing Mitigation Measure D.2.

Mitigation Measure D.2: The project sponsor shall obtain and comply all water quality certification and requirements required for dredging activities, which shall include a Section 404 permit process pursuant to the Army Corps of Engineers (Corps) and pursuant to the oversight, permitting, and approval of the Dredged Material Management Office (DMMO).

Specific requirements are as follows:

Water Quality Certification

As a part of the Section 404 permit process to obtain approval for the dredging activity, the project sponsor shall apply for water quality certification under Section 401 of the CWA. See discussion for dredging permitting under *Regulatory Setting* above and *Section IV.I, Biology,* for details on the 401 certification process.

Dredging Permit

The project sponsor shall obtain dredging approval by adhering to the following three-phased process (USACE, 2001):

1. Suitability determination: The project sponsor shall obtain a recommendation from DMMO on whether the sediments to be dredged are appropriate in terms of potential for environmental impacts for the proposed disposal or reuse site. The recommendation is typically based upon sediment testing.

    - *Material Quality:* Preliminary sampling and testing performed by the Port of Oakland indicated that the material to be dredged at the project site is not suitable for in-bay disposal at a designated site in San Francisco Bay. Assuming that additional testing does not change this assumption, the material within Clinton Basin shall potentially occur in one of the three types of classifications listed below in increasing levels of contaminants (Moffatt & Nichol, 2005b):

        - <u>Wetland Foundation Class Material:</u> This material is defined as the dredged material that is capped with wetland cover type of material. It is the beneficial reuse material, as defined by the RWQCB, which should meet wetland non-cover guidelines. Dredged material that is reused for levee maintenance, construction fill, and daily landfill cover typically falls under the wetland foundation screening criteria. The Long Term Management Strategy (LTMS) Plan defines beneficial reuse as dredged material that is used for wetland creation, construction fill, levee maintenance and daily landfill cover.

            All dredged material shall be tested to determine whether it is suitable for a proposed disposal site or beneficial reuse environment. Currently, screening guidelines developed by the RWQCB are used by the DMMO (see Dredging Permitting under *Regulatory Setting* above) to help identify dredged material suitability for beneficial reuse. This material could also be construed to be "mostly clean" with little to no impact on groundwater quality. Approved sites which accept this type of material include the Montezuma site in Solano County and landfills for daily cover.

        - <u>Designated Waste (Class III Landfill):</u> This material does not meet the screening criteria established by the RWQCB for wetland cover or non-cover, however is acceptable at a Class III type of landfill.

- Designated Waste (Class II or I Landfill): This material cannot be accepted at a Class III landfill, and needs to be disposed at a Class I or II Landfill.

2. Permit process: The DMMO shall develop a consolidated permit application for dredging and disposal projects. The project sponsor shall submit a completed application form along with the supporting documentation[7].

3. Episode approval: The DMMO shall issue dredging episode approvals as appropriate. Because the approvals occur in conjunction with a suitability determination for the sediments proposed for dredging, the DMMO serves as a main portal for the permitting process.

The dredged material from the Bay is either disposed of at in-bay disposal sites[8] or Ocean Disposal sites or can be reused for a variety of beneficial purposes such as habitat improvements at diked baylands, to stabilize levees, etc. It could be necessary to permanently confine the dredged material from the aquatic environment due to certain contaminant levels (USACE, 2001).

Given the depth of dredging and quantity of the dredged material, the project sponsor shall obtain the dredging permit under Group 1 projects (see regulatory discussion above). The project sponsor shall submit to the DMMO either a sediment Sampling and Analysis Plan (SAP) or a written request (with supporting information) requesting a "Tier I"[9] exclusion from testing requirements based on the factors such as previous testing history and physical characteristics of the material proposed for dredging. A Tier I determination constitutes a recommendation by the DMMO that the sediments are suitable for the proposed disposal environment and that the project applicant may proceed with the next phase of project authorization (USCAE, 2001).

As part of the permitting process, the project sponsor shall pursue the following steps (Moffatt & Nichol, 2005b):

1. Prepare a SAP as described by the USACE in Public Notice (PN) 99-4.

2. Obtain approval of the SAP from the DMMO.

3. Sample and test the material to be dredged as per the established guidelines in the *Inland Testing Manual* published by USEPA, PN-01-01 published by the USACE, and the *Draft Sediment Screening and Testing Guidelines* published by the RWQCB.

4. Complete the permit application as per the DMMO instructions. This includes proposing a disposal location based on the results of the sediment testing and conducting an alternatives analysis for disposal of the dredged material.

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7 Because permits are issued by the individual DMMO agencies, any necessary enforcement activities are also carried out by the individual agencies, although the DMMO may serve as a forum for initial discussion of problems (USACE, 2001).

8 In-Bay disposal sites include the three federally designated open-water sites: one located near Alcatraz Island, second in San Pablo Bay, and third in Carquinez Strait. Some projects are designated to dispose materials in the Suisun Bay Channel (USACE, 2001).

9 Tier I is one of the different tiers of information needed for decision-making, based on the degree of potential environmental risk associated with the proposed project (USACE, 2001).

The project sponsor shall submit completed applications and any additional required documentation for 401 certification and the dredging permit. Therefore, implementation of Mitigation Measure D.2 would address the related water quality impacts and reduce the dredging and disposal impacts to a less-than-significant level.

Significance after Mitigation: Less than Significant

Operational Impacts

Impact D.3: Development of the project would result in a substantial decrease in impervious area. The project would implement post-construction BMPs to increase stormwater infiltration; to treat and direct stormwater runoff or discharge into a stormwater system and the estuary; and to prevent illicit discharge. Therefore, the project would not violate regulatory water quality standards or waste requirements. (Less than Significant / Beneficial)

The majority of the project site is currently covered with impervious surfaces. Stormwater from the existing site is discharged either overland or through the existing piped storm drain system directly into the estuary without treatment. Implementation of the project would increase open space areas and reduce impervious surface areas facilitating infiltration and reducing storm runoff. The water would infiltrate into the subsurface soils and eventually flow into the estuary and the Bay through groundwater seepage. As part of the project, selected post-construction stormwater BMPs such as hydrodynamic separators, grass swales, pervious pavements, and infiltration basins would be installed where practicable to treat runoff from impervious surface areas. Other administrative BMPs would include signage at inlets to prevent illicit discharge to storm drains, street sweeping, public education, and household hazardous waste disposal programs. The project site would be landscaped with lawns and pervious areas and would involve reduced hazardous material use and storage as compared to the existing conditions. Further implementation of the BMPs would improve the water quality seeping into the subsurface soils and into the estuary. The project would also provide grading and a storm drain system to limit direct storm runoff or discharge into the estuary. Therefore, the long-term water quality impact resulting from the increased pervious area therefore would be less than significant and beneficial.

Mitigation: None Required.

Impact D.4: Project operation would involve increased use of the marinas at the project site. As required by the RWQCB, the project design would incorporate post construction BMPs to treat stormwater and control discharge of wastes from the vessels used at the marinas. Therefore, the project would not violate water quality standards or waste discharge requirements. (Less than significant impact)

The proposed project would consist of increasing slips at the marinas in Clinton Basin and at the end of Fifth Avenue. There would be an increase of approximately 17 marina slips in Clinton Basin and 52 slips at the Fifth Avenue marina, and a maximum number of 170 total slips. The project is expected to enhance public opportunities for recreational boating, such as sailing, rowing, canoeing, and kayaking. This increased use of the marinas would mean greater number of boats or vessels that would be cleaned and/or used at the site. These activities could cause the chemicals used such as the cleaning agents, to flow into the estuary and result in a significant water quality impact.

The project sponsor shall ensure that marina operations include implementation (as a part of the project) the following BMPs, which shall include, but not be limited to, the following:

- Grade the site to prevent stormwater entering the sediment pits and oil/water separators;
- Prohibit engine cleaning in vehicle wash bay areas because solvents remove oil and dirt from the engines that could enter the sewer;
- Prohibit pouring of wastes into drains, into surface water, or onto the ground;
- Prohibit hosing down of spills with water;
- Erect signs that state that the wash area is for washing vehicle exteriors only and that other maintenance or cleaning activities such as oil changes and engine cleaning is prohibited.

The project sponsor shall ensure that marina operations enforce rules and regulations for boat users that shall include, but not be limited to, the following:

- Use only biodegradable, low-phosphate content, water-based cleaners, whenever possible;
- Avoid the use of halogenated compounds, aromatic hydrocarbons, chlorinated hydrocarbons, petroleum-based cleaners or phenolics. (The presence of these substances can be checked in the material safety data sheet sheets for each cleaning agent.)
- Implementation of these measures would control the flow of chemicals into the estuary and reduce the water quality impacts to the estuary to a less-than-significant level.

Mitigation: None Required.

Impact D.5: Site development under the project would involve new landscaping and open lawns. If not properly handled, chemicals used to establish and maintain landscaping and open lawn areas, such as pesticides and fertilizers, could flow into the waterways and result in water quality impacts to the Oakland Estuary, and eventually San Francisco Bay. (Potentially Significant)

The project would redevelop an underutilized, maritime, and industrial area into a mixed-use neighborhood with approximately 28.4 acres of open space (approximately 44 percent of the project area), most of which would be parks (pervious lawn) with paved pathways. New pervious area would replace areas that are currently impervious surface (Shoreline Park, Gateway Park, and portions of Channel Park on land currently occupied by the sand and gravel operation). (See Chapter III, Project Description, and Section IV.L, Public Services and Recreation, for details). The increase in pervious areas on the project site could increase the amount of nonpoint-source pollutants particularly nutrients from pesticides and fertilizers typically used in parks. Implementation of Mitigation Measure D.4 would control the contaminants from flowing into the stormwater runoff before their transport into the Bay, therefore the impact would be minimized.

The City of Oakland is a participating agency in the ACCWP that protects water quality through implementation of various source control and monitoring measures outlined in the NPDES permit and the *Stormwater Quality Management Plan*. Under the ACCWP *Stormwater Quality Management Plan* (2001), new development is required to comply with existing stormwater runoff controls (e.g., hazardous materials storage requirements, elimination of illicit discharges, etc.). The project would be required to comply with these control requirements. The ACCWP NPDES permit requires the City of Oakland as a permittee, to address pesticides, which have been found by the RWQCB to have the reasonable potential to cause or contribute to exceedances of water quality standards. The pesticide program has submitted a proactive Diazinon Pollutant Reduction Plan or the "Pesticide Plan". The goals of the Pesticide Plan and of its resulting implementing actions are to reduce or substitute pesticide use (especially diazinon use) with less toxic alternatives. In addition, compliance with the existing water quality protection requirements and ordinances implemented through the City, the RWQCB, and Alameda County (see construction impacts discussion), in addition to implementation of Mitigation Measure D.4, above, would effectively reduce surface water pollutants and ensure that potential project impacts to water quality would remain less-than-significant. (See also Section IV.F, Hazards and Hazardous Materials, for discussion of site contaminants.)

Mitigation Measure D.5: The program sponsor shall prepare a landscape management plan (LMP) for all public open spaces that includes, but is not necessarily limited to, a description of application, storage, and safety measures involving the use of pesticides and fertilizers.

The LMP shall include, but not be limited to, the following:

- **Transportation and storage: Pesticides and fertilizers shall be transported and stored as per state and federal guidelines. They shall be stored in designated bermed areas onsite.**

- **Pesticide Application: Pesticides and fertilizers shall be handled and applied according to the procedures set by the manufacturer. The LMP shall address methods to optimize and reduce the use of pesticides and fertilizers and present strategies to incorporate environmentally-safe (organic) pest and growth enhancement materials. These strategies shall address eventually eliminating the use of chemicals such as**

diazinon that harm water quality. The RWQCB has found that the pesticides have a reasonable potential to cause or contribute to exceedances of water quality standards. Therefore, the NPDES permit requires the City of Oakland (as a permittee) to address pesticides. The project sponsor shall adhere to the Diazinon Pollutant Reduction Plan or the Pesticide Plan submitted by the ACCWP to the RWQCB. The goals of the Pesticide Plan and of its resulting implementing actions are to reduce or substitute pesticide use (especially diazinon use) with less toxic alternatives (ACCWP, 2003).

- **Pesticide and fertilizer application schedules.**

- **Container Disposal: The contractor shall dispose of empty containers carefully. The containers shall never be disposed at locations that would contaminate natural waterways.**

The LMP and its recommendations for use, control, and eventual reduction of nonorganic pesticide and fertilizer use shall be approved by the City prior to installing the landscape and shall be implemented throughout the life of the project.

Significance after Mitigation: Less than Significant

Groundwater Resources

Construction Impacts

Impact D.6: The project sponsor could deplete groundwater supplies or interfere with groundwater recharge and cause contamination of surface. (Potentially Significant)

Excavation and construction of structures with subsurface foundations or open trenches, such as building foundations or pipelines, can often intercept shallow groundwater and require dewatering (removal of groundwater by pumping) to lower groundwater levels and dry the area for construction. Depending on the nature of construction activities and given the shallow subsurface water levels, groundwater could flow into excavations that extend below the groundwater table. However, there are no supply wells at the project site, and therefore dewatering would not deplete the groundwater supplies from the deeper aquifer recharge areas. Common practices employed to facilitate construction include either dewatering the excavation or shoring the sides of the excavation to reduce groundwater inflow. If dewatering methods are used, groundwater would be pumped out of the excavation to the surface and then discharged, typically to either the storm drain or sanitary sewer. Water extracted during dewatering could contain chemical contaminants (either from pre-existing sources or from equipment), particularly given the existing contamination underlying the site (see Section IV.H, Hazards and Hazardous Materials for discussion of site contaminants), or could become sediment-laden from construction activities. Depending on the quality of the groundwater, the discharge could potentially contaminate the estuary. Implementation of Mitigation Measure D.6 would minimize the impact to groundwater resources to a less-than-significant level.

Mitigation Measure D.6: **The project sponsor shall comply with NPDES permit requirements by the RWQCB for dewatering activities.**

- **The RWQCB could require compliance with certain provisions in the permit such as treatment of the flows prior to discharge. The project sponsor shall discharge the groundwater generated during dewatering to the sanitary sewer or storm drain system with authorization of and required permits from the applicable regulatory agencies, in this case EBMUD and/or the City of Oakland Public Works Agency.**

- **The project sponsor shall comply with applicable permit conditions associated with the treatment of groundwater prior to discharge.**

- **If necessary a dewatering collection and disposal method shall be identified at stream and channel crossings.**

With implementation of Mitigation Measure D.6, the project would not contaminate surface waters and violate any water quality or waste discharge standards.

Significance after Mitigation: Less than Significant

Flood Hazards

Impact D.7: The project would not result in flooding due to its proximity to a 100-year flood hazard area, or expose people or property to other substantial risks related to flooding, seiche, tsunami, or mudflow. (Less than Significant)

The project site is located in an area designated as Flood Hazard Area C (areas of minimal flooding) and not within the 100-year or 500-year floodplain (FEMA, 1982). The project site does not lie in a 100-year flood area. Further the likelihood of flooding in the project area from tsunamis, seiches, or mudflows is negligible in areas along Oakland's Inner Harbor, Brooklyn Basin and the tidal channel, which would be sheltered by the island of Alameda. In addition, the likelihood of large scale devastation in Oakland resulting from seiches appears to miniscule (City of Oakland, 2004a). Therefore the project would not expose people or structures to the risk of loss due to flooding.

Mitigation: None Required.

Impact D.8: The project would result in a net decrease in impervious surfaces and would reconfigure and stabilize the shoreline along the project site, thereby decreasing the volume of stormwater runoff. Therefore the project would not increase runoff and result in substantial flooding on or offsite, or exceed the capacity of the existing stormwater drainage system. (Less than Significant / Beneficial)

The project site is predominantly paved with runoff flowing into storm drains onsite or directly into Oakland Estuary and Lake Merritt Channel. The project would improve these conditions by replacing existing industrial and manufacturing uses with new residential and retail uses, and by introducing improved pervious open spaces (parks). The shoreline would be graded and stabilized to allow stormwater discharge to the proposed onsite stormwater system rather than flowing overland into the Oakland Estuary.

The project proposes to reduce the overall impervious area onsite by approximately 10 percent with the introduction of pervious area within open space, therefore reducing peak runoff discharges to the estuary. The project will install new storm drain throughout the proposed project size in conformance with City of Oakland design criteria. Storm drain will be discharged to the Oakland Estuary through existing and new outfalls permitted through RWQCB, the USACE and BCDC. New storm drain will be designed to accommodate drainage from the Embarcadero. The existing storm drain system would be replaced with a new system that would convey runoff via controlled discharge points (onsite) to the Oakland Estuary and would be capable of conveying 100-year. (See also Section IV.M, Utilities and Service Systems.) Further the project would be required to comply with the C.3 provision in the NPDES permit by including specific site design features, such as minimizing land features and impervious surfaces, including minimum impact site design standards, and adopting source control measures such as indoor mat/equipment wash racks for restaurants, sanitary drained outdoor covered wash areas for vehicles, equipment, and accessories. Therefore, the project would adhere to the regulatory requirements and manage the operational runoff. The impact would be less-than-significant.

Mitigation: None Required.

Cumulative Impacts

Cumulative Context

The geographic context used for the cumulative assessment of water quality and hydrology impacts is the East Bay Plain of the San Francisco Bay Basin. This includes the city of Oakland and its surrounding areas (per the Oakland Cumulative Growth Scenario as refined for this EIR).

Hydrology and Water Quality

Impact D.9: The increased construction activity and new development resulting from the project, in conjunction with population and density of other foreseeable development in the city, would not result in cumulative impacts with respect to hydrology and water quality. (Cumulative Impact: Less than Significant)

Implementation of the project, with other reasonably foreseeable future projects in the vicinity, would not result in adverse cumulative effects to hydrology and water quality. These effects could include increases in stormwater runoff and pollutant loading to the Oakland Estuary and San Francisco Bay. The project and other future projects in the vicinity would be required to comply with drainage and grading ordinances intended to control runoff and regulate water quality at each development site. Additionally, new projects would be required to demonstrate that stormwater volumes could be managed by downstream conveyance facilities. New development projects in Oakland would also be required to comply with City of Oakland ordinances regarding water quality, and ACCWP NPDES permitting requirements. Therefore, the effect of the project on water quality and hydrology, in combination with other foreseeable projects would not be significant. Additionally, the project itself would reduce impervious surfaces in the project and improve shoreline conditions, thereby decreasing the runoff from the site, which is a beneficial impact.

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E. Cultural Resources

This section examines the potential impacts of the Oak to Ninth project on cultural resources. Specifically, archaeological, paleontologic, and historic resources in the project vicinity and on the project site are described and evaluated, and appropriate mitigation measures are identified where necessary.

Setting

Archaeological and Historic Resources

Prehistoric Setting

Although the project area is urbanized with a history of industrial and maritime uses since the early 20th century, prehistorically it was a biologically rich tidal marsh environment. Natural marshland biotic communities along the edges of bays and channels were the principal source for subsistence and other activities from the middle Holocene[1] until the contact period in the San Francisco Bay region. Efforts to reconstruct prehistoric times into broad cultural stages, e.g., Early Period, Middle Period, allows researchers to describe a wide number of sites with similar cultural patterns and components during a given period of time, thereby creating a regional chronology.

Many of the original surveys of archaeological sites in the Bay region were conducted between 1906 and 1908 by N.C. Nelson and yielded the initial documentation of nearly 425 “earth mounds and shell heaps” along the littoral zone of the Bay (Nelson 1909). From these beginnings, the most notable sites in the Bay region were excavated scientifically, like the Emeryville shellmound (Ala-309), the Ellis Landing Site (Cco-295) in Richmond, and the Fernandez Site (CC0-259) in Rodeo Valley (Morrato 1984). These dense midden sites are vast accumulations of domestic debris, which have been carbon 14 dated to be 2310 ± 220 years old, such as Ala-309, but other evidence from around the Bay suggests that human occupation in the region is of greater antiquity, or ±5000 B.C. (Jones 1992). While many interpretations exist as to the function of the shellmounds, much of the evidence suggests that they served as sociopolitical landmarks on the cultural landscape and may have served as ceremonial features as well.

Early urbanization of the Bay Area and massive amounts of filling along the Bay shores has, in many cases, destroyed or at least obscured the archaeological record. Indeed, much of the subsequent excavation work done after Nelson’s (1909) investigations have been salvage operations. Some of the evidence for initial human occupation of the area is represented by what are commonly referred to as the Civic Center BART and Sunnyvale skeletons (Moratto 1984). We now know that these date to just 5000 years ago. Sea-level changes and post-Gold Rush sedimentation have obscured older materials. Indeed, recent evidence indicates that the lowest level strata of several of the oldest bay mounds are now 6 m below sea level, while virtually all

[1] 10,000 years ago to present day.

other major estuarine environments along the California coast yield significant archaeological materials older than 5000 years (Broughton 1999; Jones 1992). Therefore, although the earliest known bay shore mounds date to 3800 years ago, it is difficult to generalize about the time frame since the samples are from shellmounds only above the current bay water level. The majority of the earliest Bay Area sites are well inland along inland lakes and estuaries (e.g., Jones, 1991). Perhaps for this reason, the Early Period (c. 3000–500 BC) is generally characterized as having less emphasis on shellfish than the later midden sites and instead were focused on hunting and vegetal food processing, or terrestrial subsistence.

The Early Period or the so-called "Berkeley Pattern" is characterized by almost exclusive use of cobble mortars and pestles, which is often associated with a heavy reliance on acorns in the economy (Moratto 1984). Such unusually intensive reliance on one foodstuff indicates that a shift away from the earlier reliance on a broad spectrum of dietary sources to supply demand was needed by around 1,000 B.P. The Late Pleistocene/Early Holocene profusion of food availability along lakeshores and estuaries likely led to an overexploitation of the resources that led, initially, to population increases, which may explicate the shift toward exploiting a readily available, yet lower ranked resource like acorns or seeds (Jones 1991). Nevertheless, given the burgeoning size of Early Period settlements, it is probable that the populations were denser and more sedentary, yet continued to exploit a diverse resource base—from woodland to grassland and marshland, to Bay shore resources throughout the San Francisco Bay Area (King 1974). Many of the Berkeley traits diffused throughout the region and spread to the interior areas of central California during this time period.

The population increases and larger, more complex settlements that began in the late-Early Period typify the Middle Period (ca. 500 BC – AD 1000), which is sometimes referred to as the "golden age" of shellmound communities (Arnold et al. 2004). The sociopolitical landscape also appears to become more elaborate with clear differentiations in wealth and evidence of aggrandizing. During the Late Period (ca. AD 1000 – 1700), however, new sites start to decline in the record and the large shellmounds were abandoned. The Late Period also showed population declines and concomitant changes in resource use—likely due to human-caused depletions in some terrestrial food sources during the Middle Period (Broughton 1994). Broughton (1997; 1999) determined that vertebrate fauna discovered in the Emeryville shellmound showed clear changes in the Middle Period from preferred terrestrial species to expensive (or less efficiently pursued prey per unit of energy) marine mammals, and significant changes in body size in both terrestrial and marine animals, which suggests overexploitation.

A record search at the files of the Northwest Information Center in October, 2004 revealed that there were no recorded archaeological sites within one-quarter mile from the project boundary (NWIC, 2004).

Ethnographic Setting

Prior to Euro-American contact, the area of present-day Alameda County was occupied by the Ohlone (also known by their linguistic group, Costanoan[2]). Politically, the Costanoan were organized into groups called tribelets. A tribelet constituted a sovereign entity that held a defined territory and exercised control over its resources. It was also a unit of linguistic and ethnic differentiation. Oakland, and a large area of the East Bay, is located within the territory of a people that spoke Chochenyo, one of several Costanoan languages.

The Ohlone economy was based on fishing, gathering, and hunting, with the land and waters providing a diversity of resources including acorns, various seeds, salmon, deer, rabbits, insects, and quail. The acorn was the most important dietary staple of the Costanoan, and the acorns were ground to produce a meal that was leached to remove the bitter tannin. Technologically, the Costanoan crafted tule balsa, basketry, lithics (stone tools) such as mortars and metates (a mortar-like flat bowl used for grinding grain), and household utensils. The Costanoan, like many other Native American groups in the Bay Area, likely lived in conical tule thatch houses.

In 1770, the Costanoan-speaking people lived in approximately 50 separate and politically autonomous nations or tribelets, and the number of Chochenyo speakers reached 2,000, substantially more than the typical size of a tribelet, which ranged from 40 to 200 members.

During the Mission Period (1770-1835), native populations, especially along the California coast, where brought—usually by force—to the missions by the Spanish missionaries to provide labor. The missionization caused the Costanoan people to experience cataclysmic changes in almost all areas of their life, particularly a massive decline in population due to introduced diseases and declining birth rate, resulting in large part from colonization by the Spanish missionaries. Following the secularization of the missions by the Mexican government in the 1830s, most Native Americans gradually left the missions to work as manual laborers on the ranchos that were established in the surrounding areas.

Native American archaeological sites that could shed light on the Costanoan ways of life in the pre-mission era tend to be situated near the historic extent of the Bay tidal marshland.

Historic Setting

The project site is within the Rancho San Antonio land grant that was granted to Luis Maria Peralta on August 3, 1820 for his service to the Spanish government. The 43,000-acre rancho included the present-day cities of Oakland, Berkeley, Alameda, and parts of San Leandro and Piedmont. Peralta's land grant was confirmed after Mexico's independence from Spain in 1822, and the title was honored when California entered the Union by treaty in 1848. Despite the title, by the middle of the 19th century, squatters had moved in to use portions of Peralta's undeveloped land. The Gold Rush and California statehood brought miners, businessmen,

[2] "Costanoan" is derived from the Spanish word Costanos meaning "coast people." No native name of the Costanoan people as a whole existed in prehistoric times as the Costanoan were neither a single ethnic group nor a political entity.

lumbermen and other speculators to the area in search of opportunities. Early settlers of that period include Edson Adams, Andrew Moon, and Horace Carpentier, who squatted on 480 acres of Vicente Peralta's (one of Luis Peralta's sons) land. Adams, Moon, and Carpentier subsequently hired Jules Kellsersberger, an Austrian-educated Swiss military engineer, to plot a new city – Oakland, which was incorporated in 1852.

The city of Oakland originally encompassed the area roughly bordered by the estuary (formerly called San Antonio Creek), Market Street, 14th Street and the Lake Merritt Channel. Broadway served as the main street. The majority of the early city dwellers, numbering under one hundred, lived near the foot of Broadway in proximity to the estuary. From there, city development moved towards the Oakland hills and ultimately towards East Oakland and along the waterfront.

The project area lay southeast of the city of Oakland and was considered part of the town of Brooklyn prior to annexation by the city in 1872. The project area is also southeast of the former San Antonio Creek and the Estuary of San Antonio, later renamed Brooklyn Basin. Brooklyn Basin became the Oakland Inner Harbor and which is currently part of the Oakland-Alameda Estuary.

The geography of the area has been altered over the last century through both man-made changes in the form of dredging and by annexation. The construction of the railroad and the reclamation of the waterfront drove the development of the project area along Oakland's Inner Harbor. The transcontinental railroad was completed to the San Francisco Bay in 1869 along the so-called Niles Route which ran along the north side of Embarcadero, bordering the project area. Reclamation of the waterfront occurred in stages during the decades following completion of the transcontinental railroad. In 1878 the area south of the tracks and east of the entrance into Lake Merritt was still separated from the mainland by water and marshes. By 1893, this area had been formed to create the Brooklyn Basin and was connected to the shore. Further work by the Army Corps of Engineers in the 1910s created a wider channel, making it more accessible to large merchant ships.

As a result of its location between the railroad tracks and waterfront, the project area developed into an industrial and warehousing center, serving the shipping needs of lumber and manufacturing industries. In 1925, voters approved a bond to fund harbor improvements, which stimulated development by the Port of Oakland. Control of the port area was transferred to the Board of Port Commissioners in 1926, and the first permanent Board of Port Commissioners was assembled in 1927. The bond funded the construction of the Ninth Avenue Terminal, which was begun in 1929 and completed in 1930.[8] It was one of three municipal terminals funded under the harbor bond; the others were the Grove Street Terminal and Outer Harbor Terminal, neither of which exists today.

In 1935 further waterfront improvements were made using over 500 laborers supplied through the Public Works Administration (PWA) and Works Progress Administration (WPA), work relief

programs created under Franklin Delano Roosevelt's New Deal policies during the Great Depression. More improvements followed during the 1930s, including the purchase of 20 acres of waterfront land adjacent to the Ninth Avenue Terminal (1936), a 506-foot wharf extension and other additional projects completed by the WPA with a PWA grant (1937), and more improvements funded by the PWA in 1938, such as construction of roadways and installation of sewer lines.

During World War II, the Terminal was used in the war effort for shipping and was controlled by the Pacific Naval Air Base Command. After World War II, the first freeway in Oakland, known as the Nimitz (after Admiral Chester W. Nimitz who commanded the Pacific Fleet during the war), was opened to traffic from Oak Street to 23rd Avenue in 1949. The Terminal building received an addition in 1951 which nearly doubled the size of the original 1930 building. Today, the building is surrounded by light industrial and warehouse buildings constructed in the mid-to-late 20th century, as well as paved yards.

Paleontologic Resources

Paleontologic resources are the fossilized evidence of past life found in the geologic record. Despite the prodigious volume of sedimentary rock deposits preserved worldwide, and the enormous number of organisms that have lived through time, preservation of plant or animal remains as fossils is an extremely rare occurrence. Because of the infrequency of fossil preservation, fossils – particularly vertebrate fossils – are considered to be nonrenewable resources. Because of their rarity, and the scientific information they can provide, fossils are highly significant records of ancient life. Paleontologic resource localities are those sites where the fossilized remains of extinct animals and/or plants have been preserved.

Rock formations that are considered of paleontologic sensitivity are those rock units that have yielded significant vertebrate or invertebrate fossil remains. This includes, but not limited to, sedimentary rock units that contain significant paleontologic resources anywhere within its geographic extent.

The project area consists of artificial fill (Af) and undivided surficial deposits (Helley & Greymer 1997). These types of sediments would not likely yield significant paleontologic remains because they are surface or artificial deposits that are not considered fossil-bearing rock units. However, significant paleontologic resources can be discovered even in areas of low sensitivity.

Regulatory Framework

City of Oakland Historical and Architectural Survey Ratings

Since 1979, the Oakland Planning Department has conducted the Oakland Cultural Heritage Survey (OCHS), a project that provides an inventory of historic resources throughout the city. The OCHS uses a five tier rating system for individual properties, ranging from "A" (highest importance) to "E" (of no particular interest). A rating of "*" or "F" indicates that the property is less than 45 years old or modernized. The ratings are based on visual quality and design,

including the importance of the designer; history and association with persons and events; context; and integrity and reversibility of any changes.[3] The OCHS has also identified historic districts, designated as Areas of Primary Importance and Areas of Secondary Importance. Areas of Primary Importance (API) appear eligible for the National Register of Historic Places (see below), while Areas of Secondary Importance do not qualify as APIs, but appear eligible for designation as a local Preservation District. The OCHS ratings use a plus (+) or minus (-) sign attached to the API and ASI indicators to indicate whether a building contributes to an historic district.[4,5] The full list of ratings is:

A: Highest Importance: Outstanding architectural example or extreme historical importance (about 150 properties total). These properties are considered clearly eligible for individual listing on the National Register of Historic Places.

B: Major Importance: Especially fine architectural example, major historical importance (about 600 total). Most of these properties are considered individually eligible for the National Register of Historic Places, although some may be "marginal" candidates.

C: Secondary Importance: Superior or visually important example, or very early (pre-1906). C buildings "warrant limited recognition" (about 10,000 total). These properties generally are not considered eligible for the National Register of Historic Places.

D: Minor Importance: Representative example of an important style, type, convention, or historical pattern, but "not individually distinctive." About 10,000 D-rated buildings are Potential Designated Historic Properties (PDHPs),[6] either because they have a higher contingency rating ("Dc") or because they are in districts ("D2+").

E: Of no particular interest. Some E-rated buildings are also PDHPs because they have higher contingency ratings or are in districts.

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3 Properties with conditions or circumstances that could change substantially in the future are assigned both an "existing" and a "contingency" rating. The existing rating, denoted by a capital letter, describes the property under its present condition, while the contingency rating, denoted by a lower-case letter, describes it under possible future circumstances. Buildings receiving contingency ratings include those whose character-defining elements have been altered but that could become more important if the alterations were reversed; certain post-1945 buildings that are too new to be historically important; and properties believed to have historical importance but for which more research is required to document the importance. Thus, a building with a rating of "Eb" is currently of "no particular interest," but could be of "major importance" if, for example, it is restored.

4 Thus, a rating of "A1+" denotes a building of the highest importance [A] that is within an historic district that is an Area of Primary Importance [1] and is a contributor to the district [+], while a rating of "Db2-" denotes a building that is of minor importance [D], potentially of major importance [b], that is within an historic district that is an Area of Secondary Importance [2] and is not a contributing resource within the district [-].

5 According to National Register Bulletin 16A, "How to Complete the National Register Registration Form," a building is contributory to an historic district, and is thus a contributing resource, if it "adds to the historic associations [or] historic architectural qualities" for which the district is recognized. A building generally is identified as a contributing resource if it was built during the district's period of significance (the period for which the district's importance is recognized, generally being the period during which most of the buildings in the district were constructed), relates to the documented significance of the district, and possesses historic integrity. A building may also contribute to the significance of a district if the building individually meets National Register Criteria for listing.

6 PDHPs are properties that have an existing or contingency rating of "A" (highest importance), "B" (major importance), or "C" (secondary importance) in either the OCHS or the Reconnaissance Survey, or have been determined by the surveys to contribute (or potentially contribute, based on contingency rating) to an Area of Primary Importance or Area of Secondary Importance. PDHP is the broadest definition of "historic" in the Preservation Element.

* or F: Less than 45 years old or modernized. Some *-rated and F-rated buildings are also PDHPs because they have higher contingency ratings or are in districts.

All areas of the City that are not yet intensively surveyed by the OCHS have been evaluated through "windshield" surveys in 1985-1986 and 1996-1997. This Preliminary Citywide Historical and Architectural Inventory, known as the Reconnaissance Survey, employs the same A-B-C-D-E-F rating system as the OCHS, but is not as thorough and is intended to be confirmed or modified over time by the OCHS.

Of the 15 buildings and structures located on the project site, nine were evaluated by OCHS for their potential historic significance on the national and local levels. Of the nine evaluated buildings, eight were assigned preliminary ratings based on the city-wide reconnaissance survey completed in 1985-1986, and one was assigned an intensive survey rating (the Ninth Avenue Terminal) in 1997. OCHS formally evaluated the Terminal in 2004 as part of the City's consideration to designate the Terminal a City Landmark. The remainder of the buildings on the project site was surveyed by OCHS, but not assigned letter ratings.[7] All buildings or structures on the project site were resurveyed and reevaluated by Carey & Co., Inc., an historic preservation consultant, in April 2005, to evaluate their potential historic significance on national, state, and local levels. **Table IV.E-1** includes and summarizes the status of each of the 15 buildings and structures on the project site.

National and State Registers

The National Register of Historic Places ("National Register" or "NRHP") is the official U.S. government list of properties that have architectural, historical, or cultural significance at the national, state or local level. The Register is administered by the National Park Service, an agency of the Department of the Interior. The National Register includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. Listing of a property in the National Register does not prohibit demolition or alteration of that property, but does denote that the property is a resource worthy of recognition and protection. The National Register includes four criteria under which a structure, site, building, district or object can be considered significant for listing on the Register. These include:

Criterion A (Event): Resources that are associated with events that have made a significant contribution to the broad patterns of our history;

Criterion B (Person): Resources that are associated with the lives of persons significant in our past;

Criterion C (Design/Construction): Resources that embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that

7 A= Primary (historical) Importance, F = less than 45 years old or modernized, NR = surveyed, but not rated as a Preliminary Designated Historic Property (PDHP) by OCHS, and presumed to be of little or no historical value at the time of the survey, as evidenced by check marks on the survey maps.

possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and

Criterion D (Information Potential): Resources that have yielded, or may be likely to yield, information important in prehistory or history.

The State Office of Historic Preservation (OHP) maintains the California Register of Historical Resources ("California Register"). The California Register includes properties that are listed or are formally determined eligible for listing in the National Register of Historic Places; certain State Historical Landmarks; and eligible Points of Historical Interest. Other resources that may be eligible for the California Register, and which require nomination and approval for listing by the State Historic Resources Commission, include resources contributing to the significance of a local historic district, individual historical resources, historical resources identified in historic resources surveys conducted in accordance with OHP procedures, historic resources or districts designated under a local ordinance consistent with the procedures of the State Historic Resources Commission, and local landmarks or historic properties designated under local ordinance. A resource may be listed in the California Register under criteria that are similar to those of the National Register, except that California Register criteria include specific references to California's history and cultural heritage. In addition to historic significance, a National Register or California Register evaluation includes a determination of physical integrity, or the authenticity of an historic resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Integrity consists of seven aspects: location, design, setting, materials, workmanship, feeling, and association.

Resources evaluated for listing on the National Register are assigned a status code from 1 to 7; until 2003, the codes were as follows:

1. Listed in the National Register
2. Determined eligible for the National Register in a formal process involving federal agencies
3. Appears eligible for the National Register in the judgment of those completing an evaluation of an historic resource
4. Might become eligible for listing (if restored, when older, or depending on further research)
5. Ineligible for the National Register but of local interest
6. Not eligible for the National Register
7. Undetermined.

Categories of Historic Properties

The Oakland General Plan Historic Preservation Element, adopted in 1994 and revised in 1998, provides a strategy to promote preservation of a wide range of historically significant, older properties and districts throughout the city, and a preservation strategy that reasonably balances other City goals, policies, and objectives. The Element identifies several categories of historic properties: Designated Historic Properties (DHPs) include City Landmarks, Preservation Districts, and Heritage Properties, which are designated by the Landmarks Preservation Advisory

Board, Planning Commission, and City Council.[8] The Element also defines a broad category of Potential Designated Historic Properties (PDHPs),[9] which are all those properties that have an existing or contingency rating of "A" (highest importance) or "B" (major importance) in either the OCHS or the Reconnaissance Survey, or those properties that have been determined by the surveys to contribute (or potentially contribute, based on contingency rating) to an Area of Primary Importance or Area of Secondary Importance. PDHP is a status based on survey rating, not a formal designation by any City body. The highest rated PDHPs, plus all DHPs, are defined as Oakland's Local Register of Historical Resources for such purposes as environmental review and use of the State Historical Building Code.

Oakland General Plan Goals and Policies

City goals and policies that pertain to cultural resources are provided in following elements of the Oakland General Plan: the Historic Preservation Element (HPE) (1994), the Land Use and Transportation Element (LUTE) (1998), and the Estuary Policy Plan (EPP) (1999). As discussed in detail in Section IV.A, Land Use, Plans, and Policies, policies are discussed in the EIR solely for the benefit of the decision-makers who will, as a policy matter, consider and apply them for consistency prior to issuing discretionary permits for the project. In doing so, the City must "balance" potentially competing General Plan policies (City of Oakland, 2005a).

Many goals and policies in these General Plan elements are relevant to cultural resources citywide, and others specifically address the project area or specific resources in the project area or on the Oak to Ninth Project site. Additionally, some General Plan policies do not involve CEQA issues, but do provide thresholds of significance for CEQA purposes (as they apply to a much wider range of properties, not just those that meet the CEQA standards set forth above).

Section IV.A (Land Use) lists and discusses the goals and policies that pertain to cultural resources citywide, that are particularly relevant to the discussion of the project's consistency with land use plans and policies, or that have emerged as a point of controversy during the public input and review process. Detailed descriptions of each General Plan element are also provided in Section IV.A. A complete list of General Plan policies (or policies in other relevant plans not part of the General Plan) that pertain to the project is provided in **Appendix F**.

The goals and policies outlined below are provided in this cultural resources analysis section because they are most directly relevant to the Oak to Ninth Project site or provide CEQA thresholds of significance.

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8 Eligibility requirements for designation as a Heritage Property include an existing or contingency OCHS rating of A, B, or C; an existing or contingency Reconnaissance Survey rating of A or B; or a contributor (or potential contributor based on contingency rating) to a potentially eligible Preservation District (Area of Primary or Secondary Importance). The Heritage Property category was developed in the Historic Preservation Element to replace the City's Preservation Study List. However, as of 2003, the City has not initiated designation of a list of Heritage Properties.

9 In accordance with Policy 1.2 of the General Plan Historic Preservation Element, PDHPs "warrant consideration for possible preservation"; thus, according to the OCHS, a PDHP is "of local interest" and therefore warrants a National Register status code of 5. They are also eligible to be Heritage Properties; see Footnote 8.

Historic Preservation Element (HPE)

HPE Goal 2: To preserve, protect, enhance, perpetuate, use, and prevent the unnecessary destruction or impairment of properties or physical features of special character or special historic, cultural, educational, architectural or aesthetic interest or value. Such properties or physical features include buildings, building components, structures, objects, districts, sites, natural features related to human presence, and activities taking place on or within such properties or physical features.

- **HPE Policy 3.1:** *Avoid or Minimize Adverse Historic Preservation Impacts Related to Discretionary City Actions.* The City will make all reasonable efforts to avoid or minimize adverse effects on the Character-Defining Elements of existing or Potential Designated Historic Properties which could result from private or public projects requiring discretionary City actions.

- **HPE Policy 3.5**: *Historic Preservation and Discretionary Permit Approvals.* For additions or alterations to Heritage Properties or Potential Designated Historic Properties requiring discretionary City permits, the City will make a finding that: (1) the design matches or is compatible with, but not necessarily identical, to the property's existing or historical design; or (2) the proposed design comprehensively modifies and is at least equal in quality to the existing design and is compatible with the character of the neighborhood; or (3) the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.

  For any project involving complete demolition of Heritage Properties or Potential Designated Historic Properties requiring discretionary City permits, the City will make a finding that: (1) the design quality of the proposed project is at least equal to that of the original structure and is compatible with the character of the neighborhood; or (2) the public benefits of the proposed project outweigh the benefit of retaining the original structure; or (3) the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.

- **HPE Policy 3.7**: Property Relocation Rather than Demolition. As a condition of approval for all discretionary projects involving demolition of existing or Potential Designated Historic Properties, the City will normally require that reasonable efforts be made to relocate the properties to an acceptable site.

- **HPE Policy 3.8**: *Definition of "Local Register of Historical Resources" and Historic Preservation "Significant Effects" for Environmental Review Purposes.* For purposes of environmental review under the California Environmental Quality Act, the following properties will constitute the City of Oakland's Local Register of Historic Resources:

  1) All Designated Historic Properties, and

  2) Those Potential Designated Historic Properties that have an existing rating of "A" or "B" or are located within an Area of Primary Importance.

  3) Until complete implementation of Action 2.1.2 (Redesignation), the "Local Register" will also include the following designated properties: Oakland Landmarks, S-7 Preservation Combining Zone properties, and Preservation Study List properties.

As discussed in Section IV.A, Land Use, Plans, and Policies, the General Plan policies in the Historic Preservation Element generally, encourage, but do not mandate, the preservation of Oakland's historic resources, within the context of and consistent with other General Plan goals, objectives, and policies. So, for example, the admonition in HPE Goal 2 against "the unnecessary destruction" of historic buildings and the direction in HPE Policy 3.1 to employ "all reasonable efforts to avoid or minimize adverse effects" on historic resources must be considered with competing policies, such as the proposed project's provision of substantial new housing in Oakland, which is encouraged by General Plan policies in the LUTE and the Housing Element, or the fulfillment of providing shoreline access and parkland as set forth in the Estuary Policy Plan.

As further stated in Section IV.A, a determination of consistency with the above policies by the Planning Commission and City Council must be predicated upon a finding specified in HPE Policy 3.5, and which are discussed in the "Impacts" section below.

HPE Policy 3.8 defines the City's "Local Register of Historical Resources" for CEQA purposes and identifies the changes that constitute significant effects under CEQA. This policy forms part of the basis for the impact evaluation in this section of the EIR (see "Significance Criteria," below).

Estuary Policy Plan (EPP)

(The complete Oak-to-Ninth District chapter of the Estuary Policy Plan is provided in **Appendix F**.)

- **EPP Policy OAK-2.4**: Establish a large park in the area of the existing Ninth Avenue Terminal to establish a location for large civic events and cultural activities. The discussion of this policy also states, "Recognize that the Ninth Avenue Terminal shed, or portions thereof, may be suitable for rehabilitation and adaptive reuse. However, the terminal building impedes public access to and views of a key area of the Estuary."

- **EPP Policy OAK-11**: Preserve and expand the existing Fifth Avenue Point community as a mixed-use district of artists and artisan studios, small businesses, and water-dependent activities.

Land Use and Transportation Element (LUTE)

- **LUTE Policy D6.2**: *Reusing Vacant or Underutilized Buildings.* Existing vacant or underutilized buildings should be reused. Repair and rehabilitation, particularly of historic or architecturally significant structures, should be strongly encouraged. However, when reuse is not economically feasible, demolition and other measures should be considered.

Consultation and Resources

Native American Consultation

The Native American Heritage Commission (NAHC) was contacted on April 21, 2005, in order to request a database search for sacred lands or other cultural properties of significance to local

Native Americans. The sacred lands survey did not find any presence of cultural resources in the project area. On April 22, 2005, the NAHC provided a list of Native American contacts who may have further knowledge of the project area with respect to cultural resources and potential impacts to those resources that could occur as a result of the project. Each person or organization listed on the NAHC list was contacted by letter on May 8, 2005, requesting information about locations of importance to Native Americans. No response has been received as of the publication of this EIR.

Northwest Information Center Records Search

A records search at the Northwest Information Center (NWIC) at Sonoma State University, which is a member of the California Historical Resources Information System (CHRIS), revealed that there were no recorded archaeological or historic sites within or adjacent to the property boundary (NWIC, 2004). No properties on or near the project site are listed in the State Office of Historic Preservation (OHP) Historic Properties Directory for Alameda County, or listed in the California Inventory of Historical Resources. The records search did, however, identify a number of historic-period maps of the area, including an 1857 map of San Antonio Creek, an 1870 Government Land Office (GLO) plat map, an 1871 map of Rancho San Antonio Plat Map, and a 1915 USGS quadrangle map.

Archaeological Resources

Given the high level of fill deposits and general urbanization of the entire project area, no systematic pedestrian survey of the project area was conducted for the purposes of this EIR. Moreover, no prehistoric resources have been identified within or adjacent to the project boundary. Nelson's (1909) shellmound survey and excavations did not identify midden sites within this area of the East Bay. The area was prehistorically subject to tidal flows and was likely not a suitable habitation locality. However, in April 2005 a Registered Professional Archaeologist conducted a reconnaissance level survey of the project site to determine if undisturbed soils or areas suitable for survey exist. No archaeological features or exposed native soils were identified.

Historic and Paleontologic Resources

Resources used to describe and evaluate the historic resources in this EIR include an historic Resources Evaluation report for the project site and vicinity, prepared by Carey & Co. Inc., an historic preservation consultant, (2005) for purposes of this EIR; the OCHS report for the Ninth Avenue Terminal (1997) and direct consultation with OCHS staff; the Oakland Landmark and S-7 Preservation Combining Zone Application Form for the Ninth Avenue Terminal (2003); archival research at the California Historical Resources Information System's Northwest Information Center (NWIC) (2004); and several resources pertaining to paleontology.

Historic Resources on the Project Site

Light industrial buildings and warehouses, large paved areas, open space along the shoreline, and numerous temporary structures characterize the project area. Smaller warehouses, clad in corrugated metal, are most concentrated along 6th Avenue. Fewer buildings, but of greater size,

occupy an area east of 8th Avenue. The majority of structures on the project site were constructed in the middle of the 20th century or later. Overall, the architectural style of these simple, functional structures can be classified as industrial vernacular.

For purposes of this analysis, the project site includes 15 buildings. OCHS evaluated nine of the 15 buildings on the project site for potential historic significance on national and local levels, and assigned either existing or preliminary ratings to each of the nine buildings. OCHS did not assign ratings to the remaining six buildings because they were recently built or of little historic or architectural interest, and therefore, non-historic. In 2005, Carey & Co. Inc. surveyed and evaluated all 15 buildings and related structures on the project site and assigned ratings to them based on the NRHP codes 1-7. Carey & Co. also identified whether or not any properties within the project vicinity are included in, or appeared eligible for, national, state, or local listings. The findings are summarized in **Table IV.E-1**, on the following page, and described in detail below.

Buildings Considered Historical Resources for Purposes of CEQA

The Oakland General Plan Historic Preservation Element (Policy 3.8) defines the City's "local register of historical resources" (the term used in CEQA Section 21084.1 as part of the definition of "historical resource") as including all Designated Historic Properties and Potential Designated Historic Properties that have an existing OCHS rating of "A" or "B" or are located within an Area of Primary Importance (API). In addition, until complete implementation of Action 2.1.2 (re-designation of existing landmarks and Preservation Districts into the Historic Preservation Element's classification system, and Preservation Study List properties, where warranted, as Heritage Properties[10]), the Local Register of Historical Resources also includes Oakland Landmarks, S-7 Preservation Combining Zone properties, and Preservation Study List properties.

Only one of the buildings on the project site, the Ninth Avenue Terminal at One Ninth Avenue, meets the Oakland Historic Preservation Element and CEQA definition of an historical resource, because it has an existing OCHS rating of "A." The building therefore meets the HPE Policy 3.8 definition of a property on the City of Oakland's Local Register of Historic Resources. In addition, the building has been recommended eligible for listing in the National Register as an individual resource, and recommended eligible as a City of Oakland Landmark by the Oakland Landmarks Preservation Advisory Board. The building's description, history, and historical significance are described below.

[10] As of 2003, the City has not undertaken the zoning revisions that will be necessary to reclassify landmarks and Preservation Districts, nor has it initiated re-designation of study list properties as Heritage Properties.

TABLE IV.E-1

HISTORIC SIGNIFICANCE RATINGS FOR BUILDINGS ON THE PROJECT SITE

	Property Address/Port Building Number (Common Identifier)	Built Date	OCHS Rating [a]	Carey & Co. Rating [b]	CEQA Historic Resource (yes/no) [a]
1	One Ninth Avenue / Bldg # H-309 *(Ninth Avenue Terminal and Wharf)*	1930/1951	A	3S	Yes
2	105 Embarcadero / Bldg # G-203 *(Jetro Cash & Carry)*	c. 1955	NR	6Z	No
3	351 Embarcadero / Bldg # G-309 *(Golden State Diesel Marine)*	c. 1955	F	6Z	No
4	603 Embarcadero / Bldg # H-103 *(Philbrick Boat Works)*	c. 1947	NR	6Z	No
5	845 Embarcadero / Bldg # H-232 *(National Furniture Liquidators, Inc.)*	c. 1930/1979	F	6Z	No
6	296 5th Avenue / Bldg # H-108	c. 1955	NR	6Z	No
7	295 6th Avenue / Bldg # H-101 *(Thunderbird Properties)*	c. 1925/1950	NR	6Z	No
8	296 6th Avenue / Bldg # H-110 *(Jal vue Windows)*	1966	F	6Z	No
9	280 6th Avenue / Bldg # H-112 *(Shipshape Marine; previous Seabreeze Yacht Center and Boat Repair)*	1948	NR	6Z	No
10	280 6th Avenue / Bldg # H-113 *(Previous Seabreeze Café)*	c. 1985	F	6Z	No
11	305 6th Avenue / Bldg # H-104	1962	F	6Z	No
12	370 8th Avenue / Bldg # H-228	c. 1970	F	6Z	No
13	455 9th Avenue / Bldg # H-314 *(Lakeside Metals)*	1965	F	6Z	No
14	101 10th Avenue / Bldg # H-318	c. 1960	F	6Z	No
15	115 Embarcadero East/ Jack London Aquatics Center/Estuary Channel Park	2000	NR	6Z	No

[a] A= Primary (historical) Importance, F = less than 45 years old or modernized, NR = surveyed, but not rated as a Preliminary Designated Historic Property (PDHP) by OCHS, and presumed to be of little or no historical value at the time of the survey, as evidenced by check marks on the survey maps.

[b] Based on Carey & Co. evaluation for this EIR (2005). "3S" = eligible for the National Register as an individual resource. "6Z" = ineligible for the National Register, California Register, or Local listing.

SOURCE: Carey & Co., Inc.

One Ninth Avenue / Bldg # H-309 (Ninth Avenue Terminal and Wharf)

Description and History.

The Carey & Co. report generally concurs with the description and history of the Ninth Avenue Terminal as written in the Oakland Landmark and S- 7 Preservation Combining Zone Application Form (referred to throughout as "landmark application") for this structure, prepared by Cynthia L. Shartzer in 2003, and accepted by the City of Oakland's Landmark Preservation Advisory Board on 10 May 2004. This description states the following:

> "The Ninth Avenue Terminal consists of a five-berth quay wharf, transit shed, paved storage yards and land for industrial tenants……The 9th Avenue Terminal, located in Brooklyn Basin at the foot of 9th Avenue, is a Beaux-Arts derivative freight wharf and warehouse. It is high one story, long rectangular plan, with a curved and angled far end. It is about 1000' long, with the transit shed about 180' wide, railroad spur tracks on either side, and extensive open platform space along the west side. It has long bands of steel windows along the sides and a metal awning over a series of loading doors on the side, and a vast open interior. The outer 500' appears to have been added after 1951. The head house[11] at the inland end, containing a small office, has a stepped and peaked parapet highest in the middle, and a monumental entry with tall paneled concrete pilasters and massive plain cornice. Exterior walls are concrete and steel-sash. Roof is composition. Structure is reinforced concrete with steel trusses. Designed for break-bulk cargo, the building is now little used. Visible alterations include some windows covered. The building is in good condition; its integrity is excellent.[12] Its preliminary rating of B+3[13] reflects its interest as a fine and rare surviving example of a Beaux Arts derivative pier from the Port of Oakland's harbor improvement program of the 1920s: the similar Grove Street and Outer Harbor Terminals no longer exist.[20]

The landmark application also includes a verbal description of the wharf, "[The] marginal type wharf has a lower side in Clinton Basin of 312 feet, a main channel face of 952 feet and a Brooklyn Basin north channel face of 1,100 feet." Port of Oakland documentation indicates that the wharf's type of construction is concrete pile and decking with a "timber pile fender system." A "concrete bulkhead with asphalt-surfaced solid fill" is also noted. Carey & Co. identifies the proposed historic resource boundary in its Historic District Boundary Technical Memorandum and Map prepared for this EIR (**Appendix G**).

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11 Also referred to as the "Bulkhead Building" elsewhere in this document.

12 Interpreted to refer to the building's historical integrity (discussed under "Federal and State Registers," above), as opposed to its structural/seismic integrity.

13 The preliminary rating was revised to an existing rating of "A" in May, 2004, as part of the LPAB evaluation for landmark eligibility.

Construction began on the Ninth Avenue Terminal in 1929, and it was completed in October 1930. It was one of three municipal terminals funded under a 1925 voter-approved harbor bond; the others were the Grove Street Terminal and Outer Harbor Terminal, both of which have since been demolished. Initially the Ninth Avenue Terminal was 504 feet long, then a 500-foot addition in 1951 extended the length to 1004 feet. The interior floor space is measured at 178,530 square feet (about four acres), and the ceiling height is 47 feet at the center and 27 feet at the sides.

Design of the terminal has been attributed to Arthur A. Abel, who served as Assistant Chief Engineer and Assistant Port Manager from 1926 to May 1932, and Chief Engineer and Port Manager from May 1932 to 1952. According to the landmark application:

> "The Beaux-Arts style of the building, while very simple stylistically, represents an important phase in Oakland architecture and city planning during this period. ….. The Ninth Avenue Terminal in its simple paneled pilasters, symmetrical façade, and other detailing represents these ideals very well. Other notable examples of this style and movement are Oakland City Hall, the bulkhead buildings along San Francisco's waterfront, and the Courthouse on St. James Park in San Jose."

As noted in the landmark application, the Terminal is an "amalgamation of water, rail and land transportation capability in one facility" and "an early example of an inter-modal transportation complex." With its location at the waterfront, proximity to the railroad, and easy road access, the Terminal was well-suited to its purpose. As further elaborated in the landmark application, "Significant features of the Terminal's operation were easy, twenty-four hour access by water, land, and rail and a facility tailor-made to enhance the Port of Oakland's ability to load, unload, and store cargo in the most efficient manner, in the least amount of time, with the least amount of damage."

Historical Significance

According to the Oakland Landmark and S-7 Preservation Combining Zone Application Form for this structure, prepared by Cynthia L. Shartzer and accepted by the City of Oakland's Landmark Preservation Advisory in May, 2004, the Ninth Avenue Terminal is historically significant for the following reasons:

> "The Ninth Avenue Terminal is…an intact, original wharf and transit shed constructed 1929-1930 as part of the Port of Oakland's state of the art harbor improvements during the period 1925-1931; it is the only surviving municipal terminal constructed from the 1925 harbor bond and the prewar period; and it has been in continual use from October 1930 to the present day; it is still leased by tenants as a break-bulk cargo facility.
>
> …The transit shed as a whole – [is] the only existing utilitarian, industrial municipal building on which the Beaux-Arts derived architectural style was applied to create monumental imagery."

The landmark application also states that the building appears eligible for individual listing in the NRHP at the local level. Local designation was based on significance of the building in the areas of Architecture, Commerce, Maritime Commerce, and Harbor Terminal. These correspond to NRHP Criterion A/CRHR Criterion 1, indicating an association with significant historic events, and NRHP Criterion C/CRHR Criterion 3, indicating that it embodies the distinctive characteristics of the style, type, or period.

The Carey & Co. report concurs with the argument for historical significance included in the Oakland Landmark and S-7 Preservation Combining Zone Application Form for this structure. In terms of integrity, Carey & Co. also concurs that that major additions to the structure in 1951 were in keeping with the original design and intent, and that the building retains an overall high level of integrity. Therefore, both the original portion of the building constructed in 1930, as well as the 1951 addition, qualify as an historic resource under federal, state, and local criteria.

The Ninth Avenue Terminal is a potentially designated historic property (PDHP) with an existing rating of "A" (highest importance), and is therefore considered to be listed on the City of Oakland's Local Register of Historic Resources. The City of Oakland's Landmark Preservation Advisory Board recommended that the Ninth Avenue Terminal be designated as a City Landmark in 2004. In addition, the Ninth Avenue Terminal appears to be individually eligible for listing on the NRHP and CRHR. Since the building appears to be eligible for inclusion on federal and state lists, and is considered to be listed on the City of Oakland's Local Register of Historic Resources by virtue of its "A"-rated status, the property is considered an historic resource under CEQA Guidelines Section 15064.5(a)(1).

Buildings Not Considered Historic Resources for Purposes of CEQA

As indicated in **Table IV.E-1**, none of the remaining 14 buildings on the project site are considered historic resources for purposes of CEQA. None of them are listed in, or determined eligible for listing in, the NRHP, the CRHR, nor are any included in the City of Oakland's Local Register of Historical Resources (pursuant to Policy 3.8 of the Historic Preservation Element). Seven of these buildings have been assigned a preliminary rating of "F" (less than 45 years old or modernized) by OCHS, and all of them assigned a rating by Carey & Co. of "6Z" (ineligible for NRHP, CRHR, or local designation.) The entire Historic Resources Evaluation report prepared by Carey & Co., Inc. (2005) includes detailed description, history, and evaluation of each building, regardless of CEQA status (not considered historic resources), and is included in **Appendix G** of this EIR.

Project Site as a Potential Historic District

According to the Carey & Co. report, the project site does not appear to be eligible for listing as an historic district in the NRHP or CRHR and does not appear to be eligible for inclusion on the Local Register of Historic Resources as a local Preservation District ("S-7 Zone").[14] Since it is

[14] The nomination form and associated LPAB staff report suggests that the S-7 Preservation Combining Zone would only apply to the Terminal and wharf, but would not apply to the entire Oak to Ninth Project site. Carey & Co.

not listed or eligible for inclusion on federal, state, or local lists, the area is not considered an historic resource under CEQA Guidelines Section 15064.5(a)(1).

As described in the Carey & Co. report, an historic district is defined as a unified entity that "possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development." To be potentially eligible for listing on the NRHP, an historic district must usually be over 45-50 years old, must have historic significance, and must retain its physical integrity. The project area possesses a concentration of light industrial style buildings, all built between 1930 and 1979, with the majority of buildings constructed in the mid-to-late 20th century. Because the period of significance for this area would be 1930 to 1979 (reflecting the construction span of the buildings), most of the buildings are less than 45-50 years old. Therefore, the project area would have to be exceptionally significant to qualify for listing on the NRHP. In Carey & Co.'s opinion, archival research yielded no information indicating an association with exceptionally significant historic events or people (Criteria A & B). Moreover, while together these buildings are an example of 20th century industrial vernacular architecture, the grouping does not exceptionally embody the distinctive characteristics of its style, type, or period (Criterion C). Archival research provided no indication that there is the potential to yield exceptionally important information (Criterion D).

In Carey & Co.'s professional opinion, the project site does not qualify for inclusion on the Local Register of Historic Resources as a Preservation District because the buildings as a group do not exhibit sufficient historic, cultural, educational, aesthetic, or environmental value. Although the project area is historically and culturally associated with the development of Oakland's waterfront, in Carey & Co.'s opinion, the area lacked sufficient integrity and historical significance required for designation as a potential historic district under CEQA criteria.[15]

Designation of the Ninth Avenue Terminal as a potential City Landmark would generally conform to the verbal boundary description of the resource as defined in the Oakland Landmark and S-7 Preservation Combining Zone application, and not to the map provided in the Oakland City Planning Commission Staff Report regarding landmark designation of the Ninth Avenue Terminal (June 2004), which identified a much larger boundary conforming to existing parcel lines. The application states the boundary as: "Ninth Avenue Terminal's marginal type wharf has a lower side in Clinton Basin of 312 feet, a main channel face of 952 feet and a Brooklyn Basin north channel face of 1,100 feet." The application further describes the potential landmark area bound as follows:

- East: Transit Shed Main Entrance - Defremery Avenue
- Northwest: Transit shed rear entrance; open wharf on Inner Harbor Channel waterfront and paved storage yard to Clinton Basin waterfront

identifies the proposed historic resource boundary in its Historic District Boundary Technical Memorandum and Map prepared for this EIR (Appendix G).

15 Carey & Co. Historic District Boundary Technical Memorandum, Ninth Avenue Terminal EIR, July, 2005, provided in Appendix G.

- North: Transit shed land-side elevation - 10th Avenue
- South: Brooklyn Basin waterfront

The verbal boundary description draws the north boundary of the historic resource along 10th Avenue, bisecting the parcel upon which the building sits. This indicates that the portion of the parcel to the north of 10th Avenue would not be part of the Ninth Avenue Terminal historic resource. Carey & Co. agrees with this assessment in a technical memo prepared for this EIR and has included a map identifying a proposed historic resource boundary (see **Appendix G**).[16]

Potential Historic Resources in the Project Vicinity

For the historic resources survey prepared for this analysis, the project vicinity was defined as approximately one city block surrounding the project site. The north boundary was the Union Pacific Railroad tracks, while the west boundary was Oak Street and the east boundary was the location of 12th Avenue if it were to be extended southward across the railroad tracks. The project vicinity also included the property bounded by 1st Street on the north, Madison Street on the west, and Fallon Street on the east as well as the Fifth Avenue Point community, a work-live artist community and a collection of primarily light industrial, commercial, marina uses, and work-live buildings along 5th Avenue, between the Embarcadero and the estuary.

Within this project vicinity, there are no buildings/structures listed or previously determined eligible for the NRHP, CRHR, or the City of Oakland's Local Register of Historic Resources. Excluding the Fifth Avenue Point community, whose status is described in more detail below, there are 16 buildings/structures that have been assigned ratings by OCHS: eight have an "F" rating (indicating that they are "less than 45 years old or modernized"), six have an "F3" rating (indicating that they are "less than 45 years old or modernized" and not located in an Area of Primary or Secondary Importance), and two have a "D3" rating (indicating minor importance and not located in an Area of Primary or Secondary Importance).

Fifth Avenue Point

The project vicinity also includes the Fifth Avenue Point, a mixed use artist's community with about six light industrial and commercial buildings (plus outbuildings and additions) and marina uses on a six-acre parcel, most of which date to the early to mid 20th century (1900s – 1940s). (Generally, the few parcels east of 5th Avenue and closest to the Embarcadero are part of the project site.) This Fifth Avenue Point area is the physical remains of the Hurley Marine Works, an early 20th century shipyard that is no longer intact. In 1998, OCHS evaluated this area as a part of a reconnaissance survey, and assigned the following preliminary building ratings to four buildings; "D2+" (20-28 – 5th Avenue), "D2+" (50 - 5th Avenue), "F3" (375 – 8th Avenue) and "C2+" (471-499 Embarcadero), none of which are on the project site portion. The remaining buildings in the Fifth Avenue Point area were not rated as Preliminary Designated Historic Properties (PDHPs) because OCHS deemed them to be too recently constructed or of too little

[16] Ibid.

historic or architectural interest to assign them a rating.[17] Therefore, they were presumed to be of little or no historic value at the time of the survey. The OCHS also assigned Fifth Avenue Point a preliminary rating of "ASI" (Area of Secondary Importance), and three of the four rated properties (75 percent) appear to contribute (indicated by "+" in the rating) to the local historic district.[18] Although as mentioned above, none of the four rated buildings are on the project site, the project site does include portions of the preliminarily-rated ASI that lie east of 5th Avenue.

The Historic Preservation Element of the City of Oakland General Plan defines an API (Area of Primary Significance) as "historically or visually cohesive areas or property groups which usually contain a high proportion of individual properties with ratings of "C" or higher….and at least two thirds of the properties must be contributors." The Preservation Element also states that ASIs are similar to APIs, but do not appear eligible for the National Register. Finally, ASIs are not considered to be listed on City of Oakland's Local Register of Historical Resources, and are not considered historic resources for CEQA purposes, as defined by Policy 3.8.

Although more than two-thirds of the properties located at the Fifth Avenue Point ASI are contributors, only one out of four of the rated buildings (25 percent) is assigned a preliminary rating of "C," (Secondary Importance; generally not considered eligible for NRHP), which would not be considered a high proportion. As such, this area would not qualify as an API, and may not qualify as an ASI, as defined by the Preservation Element. While the Fifth Avenue Point area has been identified as a potential local historic district of secondary interest (ASI) by OCHS, it is not on the LRHR, and consistent with Policy 3.8 of the Preservation Element, Fifth Avenue Point is not considered an historic resource for CEQA purposes.

Cultural Resources Impacts Discussion

Significance Criteria

Based on Appendix G of the CEQA Guidelines and the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines, a cultural resource impact would be considered significant if the project would result in any of the following:

- Cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Disturb any human remains, including those interred outside of formal cemeteries; or
- Cause a substantial adverse change in the significance of an historic resource, as defined in Section 15064.5

[17] As evidenced by the check marks over each building on the OCHS survey maps.
[18] The ASI is entitled "Fifth Avenue Marina District."

"Historical Resource" Defined by CEQA

CEQA Section 21084.1 states that "a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." A "historical resource" is defined as one that is listed in, or determined eligible for listing in, the California Register of Historical Resources. A resource that is officially designated or recognized as significant in a local register of historical resources or one that is identified as significant in an historical resources survey meeting the requirements of Public Resources Code Section 5024.1(g), is presumed to be significant under CEQA "unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant." In addition, a resource included in a local register of historical resources, as defined by Section 5020.1(k) of the Public Resources Code, shall be presumed to be historically or culturally significant. A "substantial adverse change" is defined in Section 15064.5(b)(1) of the CEQA Guidelines as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." The significance of an historical resource is "materially impaired," according to Guidelines Section 15064(b)(2), when a project demolishes or materially alters, in an adverse manner, those physical characteristics of the resource that:

- convey its historic significance and that justify its inclusion in, or eligibility for inclusion in, the California Register of Historical Resources (including a determination by the lead agency that the resource is eligible for inclusion in the California Register);
- account for its inclusion in a local register of historical resources adopted by local agency ordinance or resolution (in accordance with Public Resources Code Sec. 5020.1(k)); or
- account for its identification in an historical resources survey that meets the requirement of Public Resources Code Sec. 5024.1(g), including, among other things, that "the resource is evaluated and determined by the [State Office of Historic Preservation] to have a significance rating of Category 1 to 5 on DPR Form 523," unless the lead agency "establishes by a preponderance of evidence that the resource is not historically or culturally significant."

The state CEQA Guidelines indicate that projects that are consistent with the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings generally "shall be considered as mitigated to a level of less than a significant impact on the historic resource" (Section 15064.5(b)(3)).

Unique Archaeological Resources

Archaeological resources that are not "historical resources" according to the above definitions may be "unique archaeological resources" as defined in Public Resources Code section 21083.2, which also generally provides that "non-unique archaeological resources" do not receive any protection under CEQA. Public Resources Code Section 21083.2, subdivision (g), states that "unique archaeological resource" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological resource is neither a "unique archaeological" nor an "historical resource," the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the EIR, but they need not be considered further in the CEQA process.

"Historical Resources" and Mitigations Defined by the City

The Oakland General Plan Historic Preservation Element (Policy 3.8) defines the City's "local register of historical resources" (the term used in CEQA Section 21084.1 as part of the definition of "historical resource") as including all Designated Historic Properties and Potential Designated Historic Properties that have an existing rating of "A" or "B" or are located within an Area of Primary Importance. In addition, until complete implementation of Action 2.1.2 (re-designation of existing landmarks and Preservation Districts into the Historic Preservation Element's classification system, and Preservation Study List properties, where warranted, as Heritage Properties; not yet complete), the Local Register of Historical Resources also includes Oakland Landmarks, S-7 Preservation Combining Zone properties, and Preservation Study List properties.

Under Policy 3.8, "complete demolition" of an historical resource generally is considered to constitute a significant effect that cannot be mitigated to a less-than-significant level.

The Historic Preservation Element identifies favored mitigation, for CEQA purposes, as (1) including project modifications that avoid adversely affecting the character defining elements of the property, or (2) relocation of the affected resource to a location consistent with its historical or architectural character. If these measures are not feasible, the Element identifies a menu of other potential measures, including:

- restoration of the remaining historic character of the property;
- incorporating or replicating elements of the building's original architectural design;
- salvage and display of significant features in a local museum or as part of the project;
- measures to protect the resource from effects of construction activities;
- preparing historic documentation of the resource;
- placement on-site of a display providing information on the historical resource; or
- contribution to an historic preservation program appropriate to the resource.

The Element states that "determination of whether mitigations are adequate to reduce a significant effect to an Historical Resource to a level less than significant will be determined by the lead agency on a case by case basis." (Historic Preservation Element, Action 3.8.1)

In summary, CEQA requires that if a project results in an effect that may cause a substantial adverse change in the significance of an historical resource, or would cause significant effects on an unique archaeological resource, then alternative plans or mitigation measures must be considered.

Section 15065 of the CEQA Guidelines mandates a finding of significance if a project would eliminate important examples of the major periods of California history or pre-history. Impacts to resources determined to be not significant according to the significance criteria are not considered significant or potentially significant under CEQA. Generally, under CEQA, a project that follows *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or *The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* is considered to have mitigated impacts to an historical resource to a less-than-significant level (CEQA Guidelines 15064.5).

Archaeological and Paleontological Resources Impacts

Impact E.1: Construction of the project could cause substantial adverse changes to the significance of currently unknown cultural resources at the site, potentially including an archaeological resource pursuant to CEQA Guidelines Section 15064.5 or CEQA Section 21083.2(g), or the disturbance of any human remains, including those interred outside of formal cemeteries. (Potentially Significant)

Archival research at the Northwest Information Center was undertaken in 2004 to determine whether any archaeological resources have been discovered at the project site. There are no recorded Native American or historic-period archaeological resources listed with the Historical Resources Information System within or adjacent to the project site.

As previously mentioned in the Setting of this section, midden sites along the prehistoric stand of the San Francisco Bay have been identified in these environments; however, because the project site is located within a former tidal marsh environment (that is, the area was inundated with the cycle of tides during most of the Holocene), the likelihood of a well-stratified habitation or similar site existing within the project area is low.

The project would involve excavation for building footings and foundations for above-grade structures, and would require pile driving for all new buildings, which would likely be the extent of subsurface construction. Therefore, the possibility of encountering subsurface cultural resources is fairly limited. Also, because the precise locations of unrecorded prehistoric and historic subsurface resources are not known with certainty, Mitigation Measure E.1a would be implemented to properly handle and/or recover any resources that may be discovered.

Implementation of Mitigation Measure E.1a would reduce any potential impacts to a less-than-significant level.

At the project site, there is no indication that the site has been used for burial purposes in the recent or distant past, and it is unlikely that human remains would be encountered at the project site. In the event of the discovery of any human remains, including those interred outside of formal cemeteries, during project construction activities, work would be halted and the following mitigation measure would be implemented. Implementation of Mitigation Measure E.1b would reduce potential impacts to a less-than-significant level.

Mitigation Measure E.1a: Pursuant to CEQA Guidelines 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore, in the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project proponent and/or lead agency shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the City. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.

In considering any suggested mitigation proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the City shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is carried out.

Mitigation Measure E.1b: In the event that human skeletal remains are uncovered at the project site during construction or ground-breaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and follow the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.

Significance after Mitigation: Less than Significant.

Impact E.2: The project may adversely affect unidentified paleontological resources at the site. (Potentially Significant)

The project area consists of artificial fill (Af) and undivided surficial deposits (Helley & Greymer 1997). These types of sediments would not likely yield significant paleontologic remains because they are surface or artificial deposits that are not considered fossil-bearing rock units.

This notwithstanding, significant fossil discoveries can be made even in areas designated as having low potential, and may result from the excavation activities related to the project. Excavation activities can have a deleterious effect on such resources. This impact would be reduced to a less-than-significant level with the incorporation of the following Mitigation Measure.

Mitigation Measure E.2: The project sponsor shall notify a qualified paleontologist of unanticipated discoveries, who shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in Section 15064.5 of the CEQA Guidelines. In the event of an unanticipated discovery of a breas, true, and/or trace fossil during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards (SVP 1995)). The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The paleontologist shall submit the excavation plan to the City for review and approval.

Significance after Mitigation: Less than Significant

Historical Resources Impacts

Impact E.3: The project would result in the substantial demolition of the Ninth Avenue Terminal, which is an historic resource as defined in CEQA Guidelines Section 15064.5. (Significant)

The project would result in the substantial demolition of the Ninth Avenue Terminal, an historic resource as defined by CEQA. Of the approximately 180,000 total square feet that comprise the Terminal, approximately 165,000 square feet would be demolished and a minimum of 15,000 square feet (comprising portions of the Bulkhead Building) would be adaptively reused for Tidelands Trust uses. The entire building, including the 1951 addition, is considered an historic resource. By removing approximately 90 percent of the building, its ability to convey its historic

significance would be permanently altered and materially impaired. Although the portion to be saved is the key north-facing elevation with the most architectural design treatment, the retention of this portion alone would be insufficient to offset the loss of physical characteristics that qualify this building as a federal, state, and local historical resource. Demolition of 90 percent of an 180,000 square foot building would be considered a "complete demolition." Therefore, as defined by Policy 3.8, the project would constitute a significant effect that cannot be mitigated to a less-than-significant level.

Implementation of Mitigation Measures E.3a and E.3b would somewhat reduce this impact as much as feasible. However, because the demolition of substantial portions of an historical resource represents an irreversible change to the historical resource, this impact would remain significant and unavoidable, even after mitigation. Preservation and adaptive reuse of the Bulkhead Building would partially offset the loss of the building. The project would still result in a significant unavoidable impact to this building, because it would remain substantially materially impaired due to the fact that its major character defining elements would be lost.

As described in Chapter III, Project Description, and throughout other sections of this EIR, the project would incorporate a new public park and shoreline pathway where the Ninth Avenue Terminal and associated wharf now stand, providing public access and views of the Bay where none currently exists. Furthermore, the project would provide up to 3,100 new housing units near downtown Oakland, as well as up to 200,000 square feet of retail uses. Therefore, prior to issuing discretionary permits for the project, the City decision-makers would consider these aspects of the project, along with policies of the General Plan, to determine whether affirmative findings for the project could be made under Policy 3.5 of the General Plan Historic Preservation Element, that "the design quality of the proposed project is at least equal to that of the original structure and is compatible with the character of the neighborhood" (Finding 1) and that "the public benefits of the proposed project outweigh the benefit of retaining the original structure[s]" (Finding 2).

Although recommended in the Historic Preservation Element, the project design would not be modified "to avoid adversely affecting the character defining elements" of the identified historic resources, which would substantially alter the project as proposed. CEQA requires an analysis of preservation alternatives(s) in order to ascertain whether there are feasible options to the project that would lessen the significant unavoidable impacts to less than significant. A series of preservation alternatives to the project are included in Chapter V of this EIR, including an alternative that would preserve the entire Terminal building and its associated wharf structure.

Mitigation Measure E.3a: Photograph the affected historic resource through large-format, black and white photographs meeting the Photographic Specifications of the Historic American Building Survey (HABS). The documentary photographs would be archived locally at the Oakland History Room (OHR) of the Oakland Public Library along with a copy on archival paper of the Oakland Landmark and S-7 Preservation Combining Zone Application Form for the Ninth Avenue Terminal. Digital copies of the photographs would be forwarded to the Oakland Cultural Heritage Survey. Even with extensive documentation, however, the demolition of a substantial portion of the building would

result in the permanent loss of the historic resource that is associated with Oakland's history. Therefore, this demolition would remain significant and unavoidable.

Mitigation Measure E.3b: Adaptive reuse and rehabilitation of the Bulkhead Building should comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties. The current concept depicts a design that appears to comply, although the conceptual nature of the design requires further review of final design plans. The project sponsor shall submit detailed designs, including, but not limited to, proposed window treatments, materials palette, awnings, signage, and interior configurations for review by the City. For the latter, particular attention would be paid to the significance of the interior's "Expansive, unimpeded space with exposed trusses," and the statement "A key feature of the transit shed is its expansive interior with exposed trusses." In addition, the first story of the existing office in the Bulkhead Building, mentioned in Attachment 2 of the Oakland Landmark and S-7 Preservation Combining Zone Application Form for the Ninth Avenue Terminal, should be retained and rehabilitated. The review should be conducted by a professional meeting the standards for Historic Architecture or Historic Preservation Planning as set forth in the Secretary of the Interior's Professional Qualification Standards, 1997 Proposed Changes (not adopted). The results of the review should be forwarded to the Secretary of the Landmarks Preservation Advisory Board, City of Oakland, for final approval.

Mitigation Measure E.3c: The City should continue to pursue landmark nomination of the Bulkhead Building and delineate the S-7 Preservation Combining Zone immediately around it to ensure its long-term protection as a representation of Oakland's important maritime past.

Even with implementation of the above mitigation measures, the demolition of the substantial portion of the building would result in the permanent loss of the historic resource that is associated with Oakland's history. Therefore the impact of demolition would remain significant and unavoidable.

Significance after Mitigation: Significant and Unavoidable.

Impact E.4: The project would substantially alter the wharf structure supporting the Ninth Avenue Terminal and surrounding areas, which is an historic resource, as defined in CEQA Guidelines Section 15064.5. (Significant).

The wharf structure supporting the Ninth Avenue Terminal and surrounding areas was constructed as part of the initial construction of the Terminal. It was constructed to be larger than the original Terminal to provide open storage yards in the vicinity. The 1951 addition to the Terminal was constructed over a portion of the formerly open portion of the wharf. The wharf is considered an integral part of the Ninth Avenue Terminal and is an historic resource for CEQA purposes. The project would retrofit the wharf to improve its structural capacity, and a portion of its southern and western edges would be eliminated, thus reducing its current width and length

and replacing the historically paved surface with lawn area. Most of the area currently occupied by the Terminal would be converted for use as public open space. This would include a walkway would be constructed along the water's edge with new retaining walls, light standards, and pavement. The use of this space as a "shoreline park" would also require the addition of new surfacing materials on the majority of the pier, including top soil. By removing the edge and western portion of the pier structure and transforming it into a park, the wharf would be substantially altered and would no longer maintain its industrial character. This would result in a significant impact to historic resources.

Implementation of Mitigation Measure E.3a and E.3b, described above, would minimize this impact, but would not reduce the impact to a less-than-significant level. As such, the impact would remain significant and unavoidable.

City decision-makers would consider the proposed reuse of the open portion of the Terminal's wharf, along with other aspects of the project and overall General Plan policies to determine whether or not an affirmative finding could be made, under Policy 3.5 of the General Plan Historic Preservation Element, that "the design quality of the proposed project is at least equal to that of the original structure[s] and is compatible with the character of the neighborhood" (Finding 1) and that "the public benefits of the proposed project outweigh the benefit of retaining the original structure[s]" (Finding 2).

Significance: Significant and Unavoidable.

Impact E.5: The project would construct a new mixed-use, multi-story development within approximately 100 feet of the remaining Bulkhead Building which may not be architecturally compatible with this structure as a potential future Oakland City Landmark. (Significant)

As described in Mitigation Measure E.3c, the City should continue to pursue landmark nomination of the Bulkhead Building and delineate the S-7 Preservation Combining Zone immediately around it to ensure its long-term protection as a representation of Oakland's important maritime past. If designated as a landmark in the future, the proposed project may affect this building's historical setting through potentially incompatible or incongruous adjacent new construction. As the designs of the proposed mixed use, multi-story project have not been finalized, it is possible that the project could affect its historic setting as an Oakland City Landmark. This would be considered a significant and unavoidable impact.

The Historic Preservation Element recommends that the project design should be modified "to avoid adversely affecting the character defining elements" of the Bulkhead Building. As discussed in Impact E.3, above, the project would incorporate the key north-facing elevation of the Bulkhead Building, which has the most architectural design treatment and reflects much of the structure's character defining elements. The potentially incompatible or incongruous adjacent

new construction could impair the expansive setting that surrounds the Terminal Building, particularly as the new construction would occur within approximately 100 feet of the retained Bulkhead Building. Modifying the project as recommended in the Historic Preservation Element would substantially alter the project as proposed. However, as required by CEQA, a series of preservation alternatives to the project is included in Chapter V of this EIR, including an alternative that would preserve the entire Terminal building.

Significance: Significant and Unavoidable

Impact E.6: The project would demolish the remaining buildings on the project site. (Less than Significant)

The project would demolish the remaining mid to late 20th century light industrial buildings/structures on the project site, including 105, 351, 603, and 845 Embarcadero Street, 296-5th Avenue, 295, 296, 280, and 305-6th Avenue, 370-8th Avenue, 455-9th Avenue, and 101-10th Avenue. As none of these buildings appear to possess historic significance, their proposed removal would constitute a less-than-significant impact to historic resources. The project would not demolish or substantially alter the Jack London Aquatic Center or Estuary Park at 115 Embarcadero East.

Mitigation: None required**.**

Impact E.7: The project would construct a new mixed-use, multi-story development, diminishing the industrial character of the project site and vicinity, and altering the existing setting of the Fifth Avenue Point neighborhood. (Less than Significant)

The project would construct a new mixed-use, multi-story development that would be distinctly different than the existing uses on the project site and vicinity. The historic industrial character of the area would be diminished, and the previous and existing marina uses would be retained and improved. However, since no other historic resources have been identified on the project site or in the project vicinity, with the exception of the Ninth Avenue Terminal, the proposed new construction of residential and commercial retail uses would have a less-than-significant impact with regard to the loss of industrial character.

The project would appear as a new and visibly different building type immediately adjacent to Fifth Avenue Point, an artist’s community of small industrial and commercial buildings. The project would change the setting of Fifth Avenue Point by replacing empty lots or light industrial uses in the immediate area with larger-scale mixed use residential and retail uses. Fifth Avenue Point has been assigned a preliminary rating as an Area of Secondary Interest (ASI) by OCHS. However, an ASI by definition does not qualify for listing in either the National Register or in the

City of Oakland Local Register of Historical Resources, and is not considered an historic resource for CEQA purposes as defined by Policy 3.8. As a result, changes to the immediate setting of this neighborhood would have a less-than-significant impact on historic resources.

Mitigation: None required.

Cumulative Impacts

Impact E.8: The substantial demolition of the Ninth Avenue Terminal, in combination with the previous loss of the other two Oakland Municipal Terminals, would result in cumulative impacts to historic resources. (Significant)

The Ninth Avenue Terminal is the last remaining building from the three Oakland Municipal Terminals built in the early 1920s. The Grove Street Terminal, Outer Harbor Terminal, and Ninth Avenue Terminal were custom- and purpose-built buildings financed under a 1925 bond of $9,960,000. The substantial demolition of the Ninth Avenue Terminal would complete the loss of all of the buildings built as the Oakland Municipal Terminals and would result in significant, unavoidable cumulative impacts to historic resources.

The implementation of Measure E.3a and E.3b would also mitigate the significant, cumulative impact associated with Impact E.8, but not to a less-than-significant level. Even with the documentation, the cumulative impact would remain significant and unavoidable.

Previously, the demolition of the Grove Street Terminal was partially mitigated by the publication of a book on the history of the Port of Oakland, *Pacific Gateway: An Illustrated History of the Port of Oakland* (Minor, 2000) A similar type of mitigation, in the form of interpretive materials, shall also be used to partially mitigate the cumulative loss of the Ninth Avenue Terminal, as described below.

Mitigation Measure E.8: The project sponsor shall set aside a minimum of 200 square feet of floor area within the Bulkhead Building for an historical exhibit depicting the history of the Oakland Municipal Terminals. At a minimum, the exhibit would consist of the following:

1) Historic photographs of the Grove Street Terminal, Outer Harbor Terminal and Ninth Avenue Terminal.

2) Contemporary photographs of the Ninth Avenue Terminal taken as recommended in Mitigation Measure E.3a.

3) Examples of manifests, log books, invoices and other artifacts that may be in the possession of the Port of Oakland or private companies, if available. These may be reproductions.

4) Other displayable objects and narrative information.

5) An educative and documentary audio/visual history on the Oak to Ninth area and accessory areas as appropriate, including:

a. Visual explanation of wharf design versus other types of pier design;

b. Oral histories of people who worked at the building and/or other maritime industries in the area;

c. Historic film clips.

d. History of the development of the harbor;

e. History of the development of the Port Board;

f. PWA and WPA involvement at the Port;

g. World War II uses;

h. A visual film documentation of the existing warehouse/industrial character of the area, including views from the water to the City.

6) The proposed park design, to be located where the Ninth Avenue Terminal demolition is proposed, should incorporate landscaping, sculptural elements, paths, lighting, etc. that conceptually reference the expanse of the building's footprint and height.

As stated above, implementation of Mitigation Measure E.3a and E.3b would reduce, but not eliminate, the significant cumulative impact to historic resources.

City decision-makers would consider the all aspects of the project, overall General Plan policies, and the significant and unavoidable impact discussed here, to determine whether or not an affirmative finding could be made, under Policy 3.5 of the General Plan Historic Preservation Element, that "the design quality of the proposed project is at least equal to that of the original structure[s] and is compatible with the character of the neighborhood" (Finding 1) and that "the public benefits of the proposed project outweigh the benefit of retaining the original structure[s]" (Finding 2).

Significance after Mitigation: Significant and Unavoidable.

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F. Geology, Soils, and Seismicity

This section describes geologic and seismic conditions in the project vicinity and evaluates the potential for the Oak to Ninth project to result in significant related to exposing people or structures to unfavorable geologic hazards, soils, and/or seismic conditions. As the primary source of geotechnical data, this section relies on the 2002, Treadwell and Rollo (T&R) geotechnical investigation for the project. The geotechnical investigation included numerous soil borings, geotechnical testing of subsurface soil samples, and geotechnical analyses of hazards. The results of the investigation established recommendations for foundation and pile types and mitigation of geologic hazards. Potential impacts are discussed and evaluated, and appropriate mitigation measures are identified where necessary.

Setting

Regional and Site Geology

The city of Oakland includes the mountainous uplands of the Oakland-Berkeley Hills and an alluvial plain that slopes gently westward away from these hills to meet the flat marginal baylands of the San Francisco Bay. The project site is located in an area that was historically open water in Oakland's Inner Harbor. The project area is relatively flat, with a slope of less than 5 percent and elevations ranging from mean sea level (msl) to approximately 10 feet above (msl).

The city of Oakland lies within the geologic region of California referred to as the Coast Ranges geomorphic province.[1] The Coast Ranges natural region is between the Pacific Ocean and the Great Valley and stretches from the Oregon border to the Santa Ynez River near Santa Barbara. Discontinuous northwest-trending mountain ranges, ridges, and intervening valleys characterize this province. Much of the Coast Range province is composed of marine sedimentary and volcanic rocks that form the Franciscan Assemblage, which in this region of California consists primarily of greenstone (altered volcanic rocks), basalt, chert (ancient silica-rich ocean deposits), and sandstone that originated as ancient sea floor sediments.

The San Francisco Bay is in a broad depression in the Franciscan bedrock resulting from an east-west expansion between the San Andreas and the Hayward fault systems. The bedrock surface occurs at elevations that range between 200 to 2,000 feet below msl across the Bay Area. Bedrock is estimated to be at elevations of 600 to 700 feet below msl in the study area. The bedrock surface becomes deeper towards the south-southeast and shallower in other directions.

Above the bedrock, there are thick deposits of sand, silt, clay and gravel (also referred to as sedimentary deposits) overlying the Franciscan bedrock due to millions of years of erosion, deposition, and changes in sea level. These sedimentary deposits have been categorized into the following geologic formations based on the period of deposition and material type, as described below.

[1] A geomorphic province is an area that possesses similar bedrock, structure, history, and age. California has 11 geomorphic provinces.

- The Alameda Formation is the deepest and oldest of these sedimentary deposits and consists of a mixture of clay, silt, sand, gravel, and some shells with predominantly silt and clay sediments surrounding discontinuous layers of sand and gravel.

- Overlying the Alameda Formation are clay deposits referred to locally as Bay Mud. These deposits are generally divided into old and young deposits. Old Bay Mud deposits generally consist of firm, dark greenish gray clay with varying amounts of sand and fine gravel (SCI, 2000) Young Bay Mud is a natural marine deposit present throughout most of the bay that consists of generally uniform, soft, saturated clay and silt with organic material and some sand, deposited in areas of weak tidal currents and low water turbulence, primarily consisting of soft, silty clay. Deposits of Bay Mud are primarily encountered along the historic shoreline of the bay. Throughout most of the project site, the Bay Mud layer ranges in thickness between 15 and 30 feet thick with some localized areas that are thicker. In the vicinity of the Ninth Avenue Terminal, the Bay Mud appears to be up to 40 feet thick. North of the Crowley Yard, the Bay Mud is almost 50 feet thick. This area coincides with what is believed to be a former drainage of the Lake Merritt Channel (T&R, 2002).

- Heterogeneous fill that includes sands, gravels, and sand-gravel-clay mixtures. These fill materials exist across the project site and generally range from 2 to 7 feet in thickness for most of the site with some localized areas that are thicker (T&R, 2002). The Crowley Yard has between 6 and 13 feet of fill material, and north of the Crowley Yard the fill is as much as 18 to 25 feet thick. The east and south sides of the Ninth Avenue Terminal have up to 15 feet of fill. In addition, some hydraulically placed dredged Bay Mud was encountered around the Ninth Avenue Terminal most likely for the purpose of construction of that building and may be up to 11 feet thick. This dredged Bay Mud fill has similar properties to some of the other existing Bay Mud. The fill observed in borings located at the northwest end of land adjacent to Clinton Basin appears to coincide with the location of a historic slough that incised through the marshland. As early as 1852, maps show the project area entirely covered by natural marsh lands, which was reclaimed by placement of artificial fill between 1854 and 1915 for bayside development (T&R, 2002).

Soils

The project site was part of the San Francisco Bay before filling operations created the area in the mid to late 1800s and early 1900s. The United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) (formerly known as the Soil Conservation Service) has characterized soils beneath the project area as “Urban Land” soils (USDA, 1980). Urban land refers to areas that are so altered or obstructed by urbanization such as buildings, pavement, and cut and fill operations that identification of the native soils is not feasible. The fact that much of the project area is reclaimed land created by filling in the open water severely limits any native surface soils on the project site. A description of the fill materials encountered in the project area is provided above.

Mineral Resources

The California Division of Mines and Geology (CDMG) has classified lands within the San Francisco-Monterey Bay Region into Mineral Resource Zones (MRZs). The classification of MRZs is based on guidelines adopted by the California State Mining and Geology Board, as

mandated by the Surface Mining and Reclamation Act (SMARA) of 1974 (Stinson et al., 1982). The project site is mapped by the CDMG as MRZ-1, an area where no significant mineral deposits are present (Stinson et al., 1982).

Seismicity

The San Francisco Bay Area region contains both active and potentially active faults and is considered a region of high seismic activity (**Figure IV.F-1**).[2] The 2001 California Building Code locates the entire Bay Area within Seismic Risk Zone 4. Areas within Zone 4 are expected to experience maximum magnitudes and damage in the event of an earthquake. The U.S. Geological Survey (USGS) Working Group on California Earthquake Probabilities has evaluated the probability of one or more earthquakes of Richter magnitude 6.7 or higher occurring in the San Francisco Bay Area within the next 30 years. The result of the evaluation indicated a 62 percent likelihood that such an earthquake event will occur in the Bay Area between 2003 and 2032 (USGS, 2003).

Magnitude is a measure of the energy released in an earthquake and intensity is a measure of the ground shaking effects at a particular location. The estimated magnitudes, described as moment magnitudes (Mw) represent *characteristic* earthquakes on particular faults (**Table IV.F-1**).[3] Ground movement during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geologic material. The composition of underlying soils, even those relatively distant from faults, can intensify ground shaking. The Modified Mercalli (MM) intensity scale (**Table IV.F-2**) is commonly used to measure earthquake effects due to ground shaking. The MM values for intensity range from I (earthquake not felt) to XII (damage nearly total), and intensities ranging from IV to X could cause moderate to significant structural damage.[4]

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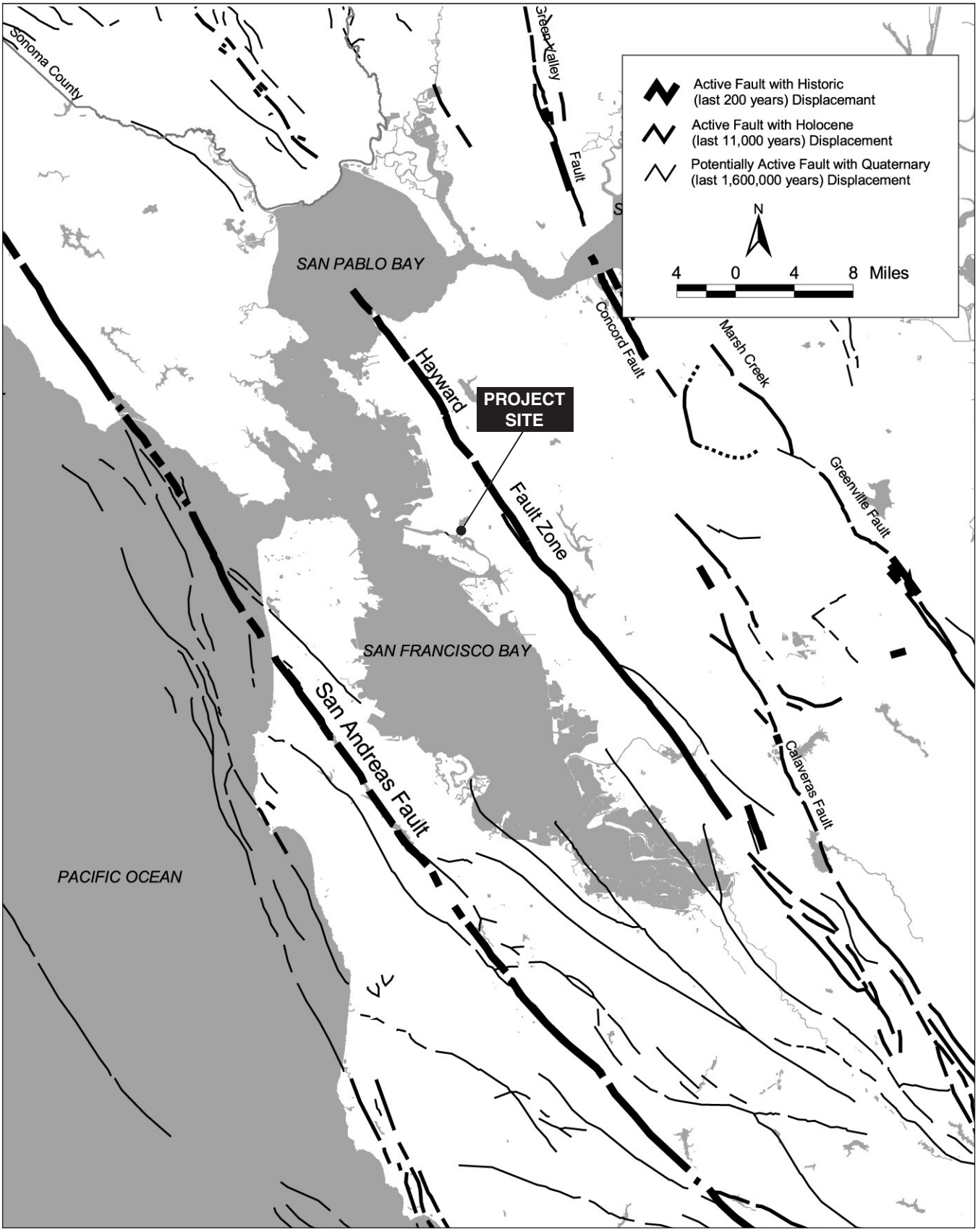
2 An "active" fault is defined by the State of California as a fault that has had surface displacement within Holocene time (approximately the last 10,000 years). A "potentially active" fault is defined as a fault that has shown evidence of surface displacement during the Quaternary (last 1.6 million years), unless direct geologic evidence demonstrates inactivity for all of the Holocene or longer. This definition does not, of course, mean that faults lacking evidence of surface displacement are necessarily inactive. "Sufficiently active" is also used to describe a fault if there is some evidence that Holocene displacement occurred on one or more of its segments or branches (Hart, 1997).

3 Moment magnitude is related to the physical size of a fault rupture and movement across a fault. The Richter magnitude scale reflects the maximum amplitude of a particular type of seismic wave. Moment magnitude provides a physically meaningful measure of the size of a faulting event (CDMG, 1997b). The concept of "characteristic" earthquake means that we can anticipate, with reasonable certainty, the actual earthquake that can occur on a fault.

4 The damage level represents the estimated overall level of damage that will occur for various MM intensity levels. The damage, however, will not be uniform. Some buildings will experience substantially more damage than this overall level, and others will experience substantially less damage. Not all buildings perform identically in an earthquake. The age, material, type, method of construction, size, and shape of a building all affect its performance (ABAG, 1998a).



SOURCES: California Department of Conservation,
Division of Mines and Geology (After Jennings, 1994)

Oak to Ninth Avenue . 202622

Figure IV.F-1
Regional Fault Map

TABLE IV.F-1

ACTIVE FAULTS IN THE PROJECT SITE VICINITY

Fault	Distance and Direction from Oak to Ninth District	Recency of Movement	Fault Classification[a]	Historical Seismicity[b]	Maximum Moment Magnitude Earthquake (Mw)[c]
Hayward	3.48 miles northeast	Historic (1836; 1868 ruptures) Holocene	Active	M 6.8, 1868 Many <M 4.5	7.1
Calaveras	13.67 miles east	Historic (1861 rupture) Holocene	Active	M 5.6–M 6.4, 1861 M 4–M 4.5 swarms 1970, 1990	6.8
San Andreas	15.53 miles west	Historic (1906; 1989 ruptures) Holocene	Active	M 7.1, 1989 M 8.25, 1906 M 7.0, 1838 Many <M 6	7.9
Marsh Creek–Greenville	21.13 miles east	Historic (1980 rupture) Holocene	Active	M 5.6 1980	6.9
Concord–Green Valley	21.13 miles northeast	Historic (1955) Holocene	Active	Historic active creep	6.9
Rodgers Creek	21.13 miles north	Historic Holocene	Active	M 6.7, 1898 M 5.6, 5.7, 1969	7.0

a See footnote 3

b Richter magnitude (M) and year for recent and/or large events. The Richter magnitude scale reflects the maximum amplitude of a particular type of seismic wave.

c Moment magnitude (Mw) is related to the physical size of a fault rupture and movement across a fault. Moment magnitude provides a physically meaningful measure of the size of a faulting event (CGS, 1997). The Maximum Moment Magnitude Earthquake, derived from the joint CDMG/USGS Probabilistic Seismic Hazard Assessment for the State of California, 1996. (USGS OFR 96-705).

SOURCES: Hart, 1997; Jennings, 1994; Peterson, 1996, T&R, 2002.

Regional Faults

The project site is approximately 3.5 miles southwest of the active Hayward Fault Zone and 15.5 miles east of the San Andreas Fault Zone (Figure IV.F-1). The Hayward fault and the San Andreas fault exhibit strike-slip orientation and have experienced movement within the last 150 years.[5] Other principal faults capable of producing significant ground shaking at the project site are listed on **Table IV.F-2** and include the Calaveras, Concord–Green Valley, Marsh Creek–Greenville, and Rodgers Creek.

Faults that have experienced displacement more than 1.6 million years ago, referred to as pre-Quaternary, exist throughout the East Bay Hills, approximately 3 miles to the east of the project site. These faults are not considered either active or potentially active; although they cannot be

5 A strike-slip fault is a fault on which movement is parallel to the fault's strike (Bates and Jackson, 1984).

TABLE IV.F-2

MODIFIED MERCALLI INTENSITY SCALE

Intensity Value	Intensity Description	Average Peak Acceleration
I	Not felt except by a very few persons under especially favorable circumstances.	< 0.0017 g[a]
II	Felt only by a few persons at rest, especially on upper floors on buildings. Delicately suspended objects may swing.	< 0.014 g
III	Felt noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly, vibration similar to a passing truck. Duration estimated.	< 0.014 g
IV	During the day felt indoors by many, outdoors by few. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.	0.014–0.04 g
V	Felt by nearly everyone, many awakened. Some dishes and windows broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles may be noticed. Pendulum clocks may stop.	0.04–0.09 g
VI	Felt by all, many frightened and run outdoors. Some heavy furniture moved; and fallen plaster or damaged chimneys. Damage slight.	0.09–0.18 g
VII	Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.	0.18–0.34 g
VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed.	0.34–0.65 g
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.	0.65–1.24 g
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from riverbanks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.	> 1.24 g
XI	Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.	> 1.24 g
XII	Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted. Objects are thrown upward into the air.	> 1.24 g

[a] g (gravity) = 980 centimeters per second squared. 1.0 g of acceleration is a rate of increase in speed equivalent to a car traveling 328 feet from rest in 4.5 seconds.

SOURCES: ABAG, 2003a, CGS, 2005.

considered inactive, their period of inactivity suggests that they are less likely to generate a considerable seismic event. Occasionally, pre-Quaternary faults exhibit secondary movement during a major event on an active fault.

Hayward Fault Zone

The Hayward Fault Zone is the southern extension of a fracture zone that includes the Rodgers Creek fault (north of San Pablo Bay), the Healdsburg fault (Sonoma County), and the Maacama fault (Mendocino County). The Hayward fault trends to the northwest within the East Bay, extending from San Pablo Bay in Richmond, 60 miles south to San Jose. The Hayward fault in San Jose converges with the Calaveras fault, a similar type fault that extends north to Suisun Bay. The Hayward fault is designated by the Alquist-Priolo Earthquake Fault Zoning Act as an active fault.

Historically, the Hayward fault generated one sizable earthquake in the 1800s.[6] In 1868, a Richter magnitude 7 earthquake on the southern segment of the Hayward Fault ruptured the ground for a distance of about 30 miles. Recent analysis of geodetic data indicates surface deformation may have extended as far north as Berkeley. Lateral ground surface displacement during these events was at least 3 feet.

A characteristic feature of the Hayward fault is its well-expressed and relatively consistent fault creep. Although large earthquakes on the Hayward fault have been rare since 1868, slow fault creep has continued to occur and has caused measurable offset. Fault creep on the East Bay segment of the Hayward fault is estimated at 9 millimeters per year (mm/yr) (Peterson, et al., 1996). However, a large earthquake could occur on the Hayward fault with an estimated moment magnitude (Mw) of about Mw 7.1 (**Table IV.F-2**). The USGS Working Group on California Earthquake Probabilities includes the Hayward–Rodgers Creek Fault Systems in the list of those faults that have the highest probability of other Bay Area faults of generating earthquakes of magnitude (M) 6.7 and greater (USGS, 2003).

San Andreas Fault Zone

The San Andreas Fault Zone is a major structural feature in the region and forms a boundary between the North American and Pacific tectonic plates, extending from the Salton Sea in Southern California near the border with Mexico to north of Point Arena, where the fault trace extends out into the Pacific Ocean. The main trace of the San Andreas fault through the Bay Area trends northwest through the Santa Cruz Mountains and the eastern side of the San Francisco Peninsula. As the principal strike-slip boundary between the Pacific plate to the west and the North American plate to the east, the San Andreas is often a highly visible topographic feature, such as between Pacifica and San Mateo, where Crystal Springs Reservoir and San Andreas Lake clearly mark the rupture zone. Near San Francisco, the San Andreas fault trace is located immediately off-shore near Daly City and continues northwest through the Pacific Ocean approximately 6 miles due west of the Golden Gate Bridge.

In the San Francisco Bay Area, the San Andreas Fault Zone was the source of the two major seismic events in recent history that affected the San Francisco Bay region. The 1906 San Francisco earthquake was estimated at M 7.9 and resulted in approximately 290 miles of surface

[6] Prior to the early 1990s, it was thought that a Richter magnitude 7 earthquake occurred on the northern section of the Hayward Fault in 1836. However, a study of historical documents by the California Geological Survey concluded that the 1836 earthquake was not on the Hayward Fault (Toppozada et al., 1998).

fault rupture. Horizontal displacement along the fault approached 17 feet near the epicenter. The more recent 1989 Loma Prieta earthquake, with a magnitude of Mw 6.9, resulted in widespread damage throughout the Bay Area.

Geologic Hazards

Expansive Soils

Expansive soils possess a “shrink-swell” behavior. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may occur over a long period of time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. Expansive soils were not identified in the geotechnical investigation performed. Also, based on the presence of coarse grained material in the artificial fill, there is a low potential that expansive soils will be encountered.

Soil Erosion

Erosion is the wearing away of soil and rock by processes such as mechanical or chemical weathering, mass wasting, and the action of waves, wind and underground water. Excessive soil erosion can eventually lead to damage of building foundations and roadways. At the project site, areas that are susceptible to erosion are those that would be exposed during the construction phase and along the shoreline where soil is subjected to wave action. Typically, the soil erosion potential is reduced once the soil is graded and covered with concrete, structures, asphalt, or slope protection. Soil erosion is a potential issue at the site and is discussed in the Impacts and Mitigations section below.

Settlement

Settlement can occur from immediate settlement, consolidation, shrinkage of expansive soil, and liquefaction (discussed below). Immediate settlement occurs when a load from a structure or placement of new fill material is applied, causing distortion in the underlying materials. This settlement occurs quickly and is typically complete after placement of the final load. Consolidation settlement occurs in saturated clay from the volume change caused by squeezing out water from the pore spaces. Consolidation occurs over a period of time and is followed by secondary compression, which is a continued change in void ratio under the continued application of the load.

Soils tend to settle at different rates and by varying amounts depending on the load weight or changes in properties over an area, which is referred to as differential settlement. The project site is underlain by poorly engineered artificial fill that varies in depth and thickness; geotechnical borings indicate up to 25 feet of artificial fill. Compressible Bay Mud underlies the fill and is up to 50 feet thick. In addition, the presence of historic sloughs, old buried foundations, and former marsh areas that may have been exposed for extended periods at the project site, indicate variable conditions that could add to the potential for differential settlement.

Seismic Hazards

Surface Fault Rupture

Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. The magnitude, sense, and nature of fault rupture can vary for different faults or even along different strands of the same fault. Ground rupture is considered more likely along active faults, which are referenced in **Table IV.F-1**.

The site is not within an Alquist-Priolo Fault Rupture Hazard Zone, as designated through the Alquist-Priolo Earthquake Fault Zoning Act, and no mapped active faults are known to pass through the immediate project region. Therefore, the risk of ground rupture at the site is low.

Ground Shaking

Strong ground shaking from a major earthquake could affect Oakland during the next 30 years. Earthquakes on the active faults (listed in **Table IV.F-1**) are expected to produce a range of ground shaking intensities at the project site. Ground shaking may affect areas hundreds of miles distant from the earthquake's epicenter. Historic earthquakes have caused strong ground shaking and damage in the San Francisco Bay Area, the most recent being the M 6.9 Loma Prieta earthquake in October 1989. The epicenter was approximately 50 miles southeast of the project site, but this earthquake nevertheless caused strong ground shaking for about 20 seconds and resulted in varying degrees of structural damage throughout the Bay Area.

The 1906 San Francisco earthquake, with an estimated moment magnitude of 7.9, produced strong (VIII) to violent (IX) shaking intensities (ABAG, 2003d). The 1989 Loma Prieta earthquake, with an Mw of 6.9, produced very strong (VIII) shaking intensities in the project area. (ABAG, 2003d).

The common way to describe ground motion during an earthquake is with the motion parameters of acceleration and velocity in addition to the duration of the shaking. A common measure of ground motion is the peak ground acceleration (PGA). The PGA for a given component of motion is the largest value of horizontal acceleration obtained from a seismograph. PGA is expressed as the percentage of the acceleration due to gravity (g), which is approximately 980 centimeters per second squared. In terms of automobile accelerations, one "g" of acceleration is a rate of increase in speed equivalent to a car traveling 328 feet from rest in 4.5 seconds. For comparison purposes, the maximum peak acceleration value recorded during the Loma Prieta earthquake was in the vicinity of the epicenter, near Santa Cruz, at 0.64 g. The highest value measured in the East Bay was 0.29 g, recorded at the Oakland Wharf near the Naval Supply Center where the soils are artificial fill overlying Bay Mud. The lowest values recorded were 0.06 g in the bedrock on Yerba Buena Island. However, an earthquake on the nearby Hayward fault would likely produce far more severe ground shaking at the site than was observed during the Loma Prieta earthquake. Probabilistic seismic hazard maps indicate that peak ground acceleration in the Oakland region

could reach or exceed 0.7g (Peterson, et al., 1999).[7] The presence of non-engineered artificial fill and Bay Mud in the project area could intensify ground shaking effects in the event of an earthquake on one of the aforementioned faults in the vicinity of the project area. The potential hazards related to ground shaking are discussed further in the Impacts and Mitigations section of this chapter.

Liquefaction

Liquefaction is a transformation of soil from a solid to a liquefied state during which saturated soil temporarily loses strength resulting from the buildup of excess pore water pressure, especially during earthquake-induced cyclic loading. Soil susceptible to liquefaction includes loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits. Four kinds of ground failure commonly result from liquefaction: lateral spread, flow failure, ground oscillation, and loss of bearing strength. Lateral spreading is the horizontal displacement of surficial blocks of sediments resulting from liquefaction in a subsurface layer that occurs on slopes ranging between 0.3 and 3 percent and commonly displaces the surface by several meters to tens of meters. Flow failures occur on slopes greater than 3 degrees and are primarily liquefied soil or blocks of intact material riding on a liquefied subsurface zone. Ground oscillation occurs on gentle slopes when liquefaction occurs at depth and no lateral displacement takes place. Soil units that are not liquefied may pull apart from each other and oscillate on the liquefied zone. The *loss of bearing pressure* can occur beneath a structure when the underlying soil loses strength and liquefies. When this occurs, the structure can settle, tip, or even become buoyant and “float” upwards. Liquefaction and associated failures could damage foundations, disrupt utility service, and cause damage to roadways.

Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables, and buildings with shallow foundations. Liquefaction can occur in areas characterized by water-saturated, cohesionless, granular materials at depths less than 40 feet (ABAG, 2003e). In addition, liquefaction can occur in unconsolidated or artificial fill sediments located at the project site and other reclaimed areas along the margin of San Francisco Bay. The depth to groundwater influences the potential for liquefaction in this area, in that sediments need to be saturated to have a potential for liquefaction (Helley and LaJoie, 1979).

Hazard maps produced by the Association of Bay Area Governments (ABAG) depict liquefaction and lateral spreading hazards for the entire Bay Area in the event of a significant seismic event

[7] A probabilistic seismic hazard map shows the predicted level of hazard from earthquakes that seismologists and geologist believe could occur. The map’s analysis takes into consideration uncertainties in the size and location of earthquakes and the resulting ground motions that can affect a particular site. The maps are typically expressed in terms of probability of exceeding a certain ground motion. These maps depict a 10% probability of being exceeded in 50 years. There is a 90% chance that these ground motions will NOT be exceeded. This probability level allows engineers to design buildings for larger ground motions than seismologists think will occur during a 50-year interval, making buildings safer than if they were only designed for the ground motions that are expected to occur in the 50 years. Seismic shaking maps are prepared using consensus information on historical earthquakes and faults. These levels of ground shaking are used primarily for formulating building codes and for designing buildings. (CDMG, 1999)

(ABAG, 2003e).[8] According to these maps, the project site is in an area expected to have a very high potential to experience liquefaction. Liquefaction potential is highest in areas underlain by unconsolidated materials and was cited as a concern during the geotechnical investigation with the area known as the Crowley Yard identified with the most potential. The CGS has designated the project and surrounding area as a Seismic Hazard Zone (discussed below) for liquefaction potential.

Earthquake-Induced Settlement

Settlement of the ground surface can be accelerated and accentuated by earthquakes. During an earthquake, settlement can occur as a result of the relatively rapid compaction and settling of subsurface materials (particularly loose, noncompacted, and variable sandy sediments above the water table) due to the rearrangement of soil particles during prolonged ground shaking. Settlement can occur both uniformly and differentially (i.e., where adjoining areas settle at different amounts). Areas underlain by artificial fill would be susceptible to this type of settlement. Given the geologic setting of the project area, this area could be subjected to earthquake-induced settlement.

Regulatory Background

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act was developed to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and from other hazards caused by earthquakes. This act requires the State Geologist to delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones. Before a development permit may be granted for a site within a Seismic Hazard Zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design. The project site is located within a Seismic Hazard Zone for liquefaction, as designated by the California Geological Survey. Therefore, evaluation and mitigation of potential liquefaction hazards must be conducted in accordance with the California Geological Survey, Special Publication 117, adopted March 13, 1997 by the State Mining and Geology Board pursuant to the Seismic Hazards Mapping Act, as discussed in the Impacts and Mitigations chapter below.

California Building Code

The California Building Code (CBC) is another name for the body of regulations found in the California Code of Regulations (CCR), Title 24, Part 2, which is a portion of the California Building Standards Code (CBSC, 2001). Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable. The purpose of the CBC is to provide minimum standards to safeguard life or limb, health, property

[8] Lateral spreading is a ground failure associated with liquefaction and generally results from predominantly horizontal displacement of materials toward relatively unsupported free slope faces.

and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. Published by the International Conference of Building Officials, the Uniform Building Code is a widely adopted model building code in the United States. The CBC incorporates by reference the Uniform Building Code (UBC) with necessary California amendments. These amendments include significant building design criteria that have been tailored for California earthquake conditions (CBSC, 2001).

The project area is located within Zone 4, one of the four seismic zones designated in the United States. Zone 4 is expected to experience the greatest effects from earthquake ground shaking and therefore has the most stringent requirements for seismic design. The national model code standards adopted into Title 24 apply to all occupancies in California except for modifications adopted by state agencies and local governing bodies.

City of Oakland

The City implements the following ordinances which are intended to reduce erosion associated with grading activities:

- The *Grading Ordinance* (Ordinance No. 10312) requires grading permits for earth moving activities under specified conditions of volume of earth to be moved, slope characteristics, areas where "land disturbance" or stability problems have been reported. To obtain a grading permit, a soils report, a grading plan, and an erosion and sedimentation control plan must be submitted to the Department of Public Works and approved.

- The *Sedimentation and Erosion Control Ordinance* (Ordinance No. 10446) requires any person who performs grading, clearing, and grubbing or other activities that disturb the existing soil to take appropriate preventative measures to control erosion; prevent sedimentation of eroded materials onto adjacent lands, public streets, or rights-of-way; and prevent carrying of eroded materials to any water course by any route.

City of Oakland Building Services Division

In addition to compliance with building standards set forth by the 1997 UBC, the project sponsor will be required to submit an engineering analysis accompanied by detailed engineering drawings to the City of Oakland Building Services Division prior to excavation, grading, or construction activities on the project site. This is consistent with standard City of Oakland practices to ensure that all buildings are designed and built in conformance with the seismic requirements of the City of Oakland Building Code. An engineering analysis report and drawings and relevant grading or construction activities on a project site would be required to address constraints and incorporate recommendations identified in geotechnical investigations. These required submittals ensure that the buildings are designed and constructed in conformance with the requirements of all applicable building code regulations, pursuant to standard City procedures.

Geology, Soils, and Seismicity Impacts Discussion

Significance Criteria

Based on Appendix G of the CEQA Guidelines and the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines, the project would have a significant geologic or seismic impact if it would:

- Expose people or structures to geologic hazards, soils, and/or seismic conditions so unfavorable that they could not be overcome by special design using reasonable construction and maintenance practices. Specifically,
- Expose people or structures to substantial risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map or Seismic Hazards Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publications 42 and 117 and PRC §2690 et. seq.);
    - Strong seismic ground shaking;
    - Seismic-related ground failure, including liquefaction, lateral spreading, subsidence, collapse; or
    - Landslides;
- Result in substantial soil erosion or loss of topsoil, creating substantial risks to life, property, or creeks/waterways;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as it may be revised), creating substantial risks to life or property;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located above a well, pit, swamp, mound, tank vault, or unmarked sewer line, creating substantial risks to life or property;
- Be located above landfills for which there is no approved closure and post-closure plan, or unknown fill soils, creating substantial risks to life or property ; or
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

This following impact analysis focuses on potential project impacts related to seismicity and other geologic hazards. The evaluation considered project plans, current conditions at the project site, and applicable regulations and guidelines.

Local Plans and Policies

Oakland General Plan policies and other applicable plans and policies that pertain to the topics addressed in this section, and that apply to the project, are listed in **Appendix F**. Key policies are identified and discussed in Section IV.A, Land Use, Plans, and Policies. General Plan policies that are also significance criteria or contain a regulatory threshold which the project must meet are addressed in this section.

Project Impacts

Impact F.1: In the event of a major earthquake in the region, seismic ground shaking could potentially injure people and cause collapse or structural damage to proposed structures. (Potentially Significant)

The project site would likely experience at least one major earthquake (Richter magnitude (M) 6.7 or higher) within the next 30 years. The intensity of such an event would depend on the causative fault and the distance to the epicenter, the moment magnitude, and the duration of shaking. A seismic event in the Bay Area could produce ground accelerations at the project site ranging from strong (MM-VII) to very violent (MM-X) (ABAG, 2003).

A characteristic earthquake on the Hayward fault with an estimated M 7.1 could produce very violent (X) shaking in the project area (ABAG, 2004). Based on the MMI scale, an earthquake of this intensity would cause considerable structural damage, even in well-designed structures. Substantial cracks could appear in the ground, and the shaking could cause other secondary damaging effects, such as the failure of underground pipes. As a comparison, the great 1906 San Francisco earthquake, with an M 7.9, produced very strong (VIII) shaking intensities in the area of the project (ABAG, 2004a). A characteristic earthquake on the Calaveras, San Andreas, Marsh Creek, Concord, or Rodgers fault (listed in **Table IV.F-1**) could produce strong (VII) to violent (IX) shaking intensities (ABAG, 2003). Earthquakes of this intensity may cause considerable damage ranging from chimneys and plaster fall or crack to some well-built wooden structures being destroyed, along with most masonry and frame structures with foundations. According to observed effects as described by the modified Mercalli Scale, ground shaking intensity of this level could cause the ground to become badly cracked and damaged.

A Master Plan level Geotechnical Investigation has been completed for the project site. This investigation has provided a broad-based analysis of site conditions which has revealed a heterogeneous subsurface environment. However, the investigation was comprehensive enough to establish the range of geotechnical concerns that are likely to be encountered on a site specific basis. This level of investigation is consistent with standard acceptable geotechnical practices for such a project as the one proposed. Based on this investigation, the following mitigation measure would ensure that standard and appropriate practices would mitigate potential seismic ground shaking impacts.

Mitigation Measure F.1: A site-specific, design level geotechnical investigation for each site area (which is typical for any large development project) shall be required as part of this

project. Each investigation shall include an analysis of expected ground motions at the site from known active faults. The analyses shall be in accordance with applicable City ordinances and policies and consistent with the most recent version of the California Building Code, which requires structural design that can accommodate ground accelerations expected from known active faults. In addition, the investigations shall determine final design parameters for the walls, foundations, foundation slabs, and surrounding related improvements (utilities, roadways, parking lots and sidewalks). The investigations shall be reviewed and approved by a registered geotechnical engineer. All recommendations by the project engineer and geotechnical engineer shall be included in the final design. Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the project design phase, shall be incorporated in the project. The final seismic considerations for the site shall be submitted to and approved of by the City of Oakland Building Services Division prior to the commencement of the project.

Significance after Mitigation: Less than Significant.

Impact F.2: In the event of a major earthquake in the region, seismic ground shaking could potentially expose people and property to liquefaction and earthquake-induced settlement. (Potentially Significant)

The CGS has designated the project and surrounding area as a Seismic Hazard Zone (discussed above) for liquefaction potential. Liquefaction at the site could result in loss of bearing pressure, lateral spreading, sand boils (liquefied soil exiting at the ground surface), and other potentially damaging effects. The geotechnical investigation completed for the site also identified liquefaction as a seismic hazard.

The Geotechnical investigation completed in 2002 identified a liquefaction potential at the site and called out the Crowley Yard parcel (northwestern tip of project area) in particular. In addition, a few of the borings indicated that there were pockets of potentially liquefiable fill in other areas. Saturated sand lenses within or just below the Bay Mud, although not laterally continuous, were noted as potentially liquefiable. The investigation reported estimated average liquefaction induced settlement figures ranging from ½ to 1 inch across the site and as much as 1.0-1.5 to 4 inches across the Crowley Yard parcel. Lateral spreading was also listed as a potential in the Crowley Yard parcel but not across the entire site. The risk of sand boils and lurching was considered low except for localized areas of thicker fill where the risk is considered higher.

The geotechnical investigation provides recommendations to mitigate the adverse effects of liquefaction in terms of specific foundation types and pile specifications. These recommendations were made based on the Master Plan level geotechnical investigation that was completed for the site which was in accordance with standard geotechnical practices for a project of this nature. The following mitigation measure incorporates these recommendations.

Mitigation Measure F.2: Prepare an updated site specific, design level geotechnical investigation for each building site to consider the particular project designs and provide site specific engineering recommendations for mitigation of liquefiable soils. Liquefiable soils under the conditions described in the geotechnical report shall be mitigated using various proven methods to reduce the risk of liquefaction. Liquefaction mitigation measures include subsurface soil improvement, deep foundations, structural slabs, and soil cover. Site improvement methods to address potential liquefaction include dynamic compaction, compaction grouting, jet grouting, and vibroflotation can significantly reduce the risk of liquefaction. Deep foundations extending below the liquefiable layers can be designed to support structures despite the occurrence of liquefaction. Structural slabs are designed to span across areas of non-support, such as in the case of liquefaction or settlement. The presence of a sufficiently thick, engineered fill layer over liquefiable soil can reduce the potential for damage at the ground surface due to liquefaction by helping to bridge across isolated liquefaction zones. Other methods of mitigating potential liquefaction hazards suggested in the *California Geological Survey's (CGS) Geology Guidelines for Evaluating and Mitigating Seismic Hazards (CGS Special Publication 117, 1997)* include edge containment structures (berms, dikes sea walls, retaining structures, compacted soil zones), removal or treatment of liquefiable soils, modification of site geometry, lowering the groundwater table, in-situ ground densification, deep foundations, reinforced shallow foundations, and structural design that can accommodate predicted displacements (CDMG, 1997).

These measures shall be evaluated during the site specific geotechnical investigation and the most effective, practical and economical methods should become part of the project. Prior to incorporation into the project, geotechnical engineering recommendations regarding the mitigation and reduction of liquefaction for each site shall be reviewed for compliance with the CGS Geology Guidelines. The purpose of these guidelines is to protect the public safety from seismic effects such as liquefaction.

Significance after Mitigation: Less than Significant.

Impact F.3: Development at the project site could be subjected to settlement. (Potentially Significant)

Based on their review of the subsurface information and laboratory testing, the geotechnical engineers T&R concluded primary consolidation of the Bay Mud layer is essentially complete under the existing fill and building loads over most of the site. Primary consolidation is likely on-going in areas covered by cargo containers, steel, and soil stockpiles. Where primary consolidation is complete, ground surface settlement is still expected to occur under the existing loads due to secondary compression of the Bay Mud layer.

Constructing new shallow foundations and/or placement of new fill at the site would begin a new cycle of consolidation settlement in the Bay Mud. The amount and rate of consolidation settlement would depend on:

- the weight of any new fill or structural loads (i.e., footings)

- the thickness of the existing fill
- the thickness of the Bay Mud deposit (including dredged Bay Mud fill)
- the degree to which desiccation has overconsolidated the upper portion of the Bay Mud
- the presence of sand layers within the Bay Mud deposit
- the amount of previous stockpiling
- the presence of existing foundation or other obstructions, particularly pile foundations.

Consolidation settlement from the new fill/structural loads would be expected to occur over a period of about 6 to 30 years, depending on the thickness of the Bay Mud.

The Bay Mud consolidation properties are expected to be highly variable across the site because of previous and/or current stockpiling of soil or other materials (including cargo containers and steel). Where former, pile-supported buildings previously existed, the degree of overconsolidation[9] would be significantly less than in open areas where stockpiling and storage has occurred. Buried foundations or foundation elements may also act as "hard points" beneath new roads or utilities, resulting in the potential for abrupt differential settlement.

The amount of differential settlement that would occur at the site due to new fill loads would depend on the differences in thickness of new fill and the Bay Mud layer and the properties of the Bay Mud. In general, the potential for differential settlement is high because of the presence of the former marsh area. Portions of the marsh that were exposed above water for extended periods of time could exhibit differences in strength and stiffness due to desiccation of the upper few feet of soil. In addition, it is likely several sloughs traversed the marsh, and the Bay Mud may be locally more compressible where soil remained below water in the sloughs.

Very little settlement is expected to occur in areas covered by the soil and gravel stockpiles at the concrete plant. The existing stockpile locations appear to coincide with the proposed perimeter road on the west side of the site. Therefore, new underground utilities constructed in the road could be subject to abrupt differential settlement over relatively short distances if new fill is placed in this area. Settlement could occur at the site due to liquefaction, immediate settlement, and/or consolidation. Settlement due to liquefaction is estimated to be up to 4 inches. While primary consolidation is anticipated to be complete throughout the majority of the site, ongoing secondary compression settlement of an estimated ½ to 2 inches is anticipated to occur throughout the site under no additional loads. New fill and structural loads would cause a new cycle of primary consolidation to occur, with the settlement depending on the magnitude of the load and thickness of Bay Mud; the amount of settlement is anticipated to be significant. Differential settlement is often the most damaging and could occur at the site due to liquefaction, variations in the thickness of the fill and Bay Mud, variations in the consolidation properties of the Bay Mud, and hard spots created by buried foundations from previous structures.

Settlement would have an effect on many aspects of the project:

9 Degree of overconsolidation refers to the ratio of the maximum sustained load imposed on the soil in the past to the load currently imposed on the soil, including the weight of all overlying soil. More highly overconsolidated soil (i.e., soil that was loaded much more heavily in the past relative to its current condition) is typically stronger and less compressible.

- Liquefaction and consolidation settlement would cause a negative friction on deep foundations, called "downdrag". The load from downdrag is added to the foundation load, effectively reducing the available capacity of the foundation.

- Settlement beneath pile-supported slabs and buildings would cause damage to utilities where they connect to the structure and create differential settlement at entrances to the building.

- Settlement of gravity utilities can flatten or increase the gradient and/or change the flow direction. Where utilities cross pile-supported structures or old piles remaining in the ground, abrupt differential settlement would occur, potentially causing damage.

- The settlement of the ground surface in streets, sidewalks, and open space would change site topography and may impact surface drainage.

Mitigation Measure F.3: As with standard geotechnical practices, site specific geotechnical investigations and reports would be required in order to obtain permits from the City of Oakland. Such geotechnical investigations and reports prepared for the project site shall include generally accepted and appropriate engineering techniques for determining the susceptibility of the project site to settlement and reducing its effects. Where settlement and/or differential settlement is predicted, mitigation measures such as lightweight fill, geofoam, surcharging, wick drains, deep foundations, structural slabs, hinged slabs, flexible utility connections, and utility hangers could be used. These measures shall be evaluated and the most effective, feasible, and economical measures shall be recommended. Engineering recommendations shall be included in the project engineering and design plans. All construction activities and design criteria shall comply with applicable codes and requirements of the 1997 UBC with California additions (Title 22), and applicable City construction and grading ordinances.

Significance after Mitigation: Less than Significant.

Impact F.4: Development at the project area may include use of dredged material as fill which would be subject to settlement and subsidence. (Potentially Significant)

Construction activities at the project area may include filling the north end of Clinton Basin with dredged fill generated from the south half of the basin. Reuse of dredged fill is highly subject to settling and subsidence. The soft unconsolidated dredged materials will likely have a high water content and are, in general, very weak from a geotechnical standpoint. Settlement could range from several inches to several feet depending on the material and what method is used for dredging.

Mitigation Measure F.4: Any dredged material used for fill will have to undergo an appropriate process of consolidation and stabilization to render it suitable for the support of engineered fill. A geotechnical investigation and report will be required in order to obtain permits from the City of Oakland *in addition to the Dredged Material Management Office*

***permitting requirements*. The geotechnical investigations and reports prepared for the project site shall include generally accepted and appropriate engineering techniques for determining the susceptibility of the project specific site to settlement and reducing its effects. Engineering recommendations shall be included in the project engineering and design plans. The use of dredged materials as fill shall be limited to open space areas.**

Significance after Mitigation: Less than Significant.

Impact F.5: Construction activities at the project area could loosen and expose surface soils. If this were to occur over the long term, exposed soils could erode by wind or rain causing potential loss of topsoil. In addition, shoreline areas exposed to wave action could be subject to erosion and loss of topsoil. (Potentially Significant)

Construction activities such as backfilling, grading and compaction can expose areas of loose soil that, if not properly stabilized, could be subjected to soil loss and erosion by wind and storm water runoff. Concentrated water erosion, if not managed or controlled, can eventually result in significant soil loss. Potentially, this soil loss could lead to a reduction in the structural integrity of building foundations, berms, riprap, or access roads.

Mitigation Measure F.5: Consistent with Mitigation Measure D.1 (which addresses construction-related water quality impacts), the project sponsor shall comply with all applicable NPDES requirements, RWQCB General Construction Permit requirements, and all City regulations, including Creek Protection Permits, as detailed in Mitigation D.1.

During the construction phase, the applicant would comply with erosion and sediment control measures in accordance with City of Oakland's stormwater management requirements and construction best management practices for the reduction of pollutants in runoff and the State Water Quality Control Board National Pollution Discharge Elimination System (NPDES) requirements, including the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) incorporating Best Management Practices (BMPs). The SWPPP would identify BMPs for implementation during construction activities, such as detention basins, straw bales, silt fences, check dams, geofabrics, drainage swales, and sandbag dikes.

Compliance with these requirements, together with Alameda County and the City of Oakland's stormwater management requirements would reduce erosion of disturbed soils during construction activities to less than significant levels.

The project includes improvements to the shoreline such as removal of existing debris, re-grading of the banks, addition of shoreline protection measures (e.g. riprap, geotextiles, etc.), and construction of retaining walls. These proposed bank stabilization improvements would reduce the potential for wave action erosion to less than significant levels.

Significance after Mitigation: None Required.

Impact F.6: The project would not expose people or structures to substantial risk or hazards as a result of 1) expansive soils, or 2) conditions that would potentially result in landslides or 3) surface fault rupture. (Less than Significant)

In 2002, Treadwell and Rollo completed a geotechnical investigation on the project site and did not identify expansive soils. The investigation also determined that the potential for encountering expansive soils on the site is low due to the presence of coarse grained material in the artificial fill that exists. Therefore, the potential for the project to expose persons or structures to risk as a result of expansive soils is less than significant.

In general the site is relatively flat, with an average slope of less than 5 percent, however steeper slopes exist along the shoreline. The project includes three different shoreline improvement features that are designed to improve upon the existing condition of the shoreline. These measures include revetment (rock slope protection that includes armor stone, geotextile fabric, and crushed rock fill), slope dressing (similar to revetment only without significant excavation and uses smaller armor stone and bedding material), and a bulkhead wall with a revetment toe (Moffat & Nichol, 2005). The vertical bulkhead wall will consist of either steel or concrete sheet piles or a concrete retaining wall on a foundation. These bank stabilization measure would reduce the potential impact of shoreline

Seismically induced ground rupture is considered most likely to occur along active faults, which are referenced in **Table IV.F-1**. As indicated previously, the project site is not within an Alquist-Priolo Fault Rupture Hazard Zone, and no mapped active faults are known to pass through the immediate project region. Therefore, the potential for the project to expose persons or structures to risk of ground rupture is less than significant.

Significance after Mitigation: None Required.

Impact F.7: The project would not create substantial risks to life or property as a result of being located above a well, pit, swamp, mound, tank vault, or unmarked sewer line; above landfills for which there is no approved closure and post-closure plan, or unknown fill soils; or soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems. (Less than Significant)

The investigation conducted on the site did not identify any wells (excluding groundwater monitoring wells), pits, swamps, tank vaults, or unmarked sewer lines on the project site, nor is the site above a landfill. The project would connect to the existing EBMUD sanitary sewer system and may require extension or improvement to existing onsite pipelines to accommodate the project. As discussed in Section IV.M., Utilities and Service Systems, there is adequate capacity to serve the project's projected demand for sewer utilities.

Significance after Mitigation: None Required.

Cumulative Impacts

Cumulative Context

As discussed above, the project would result in potentially significant project-level impacts related potentially hazardous geologic and seismic conditions. The mitigation measures described above, however, would reduce all potential impacts to less-than-significant level. Although the entire Bay Area is within a seismically active region with a wide range of geologic and soil conditions, these conditions can vary widely within a short distance, making the cumulative context for potential impacts resulting from exposing people and structures to related risks one that is more localized or even site-specific.

Geology, Soils and Seismic Cumulative Impacts

Impact F.8: The development proposed as part of the project, when combined with other reasonably foreseeable development in the vicinity, would not result in significant cumulative impacts with respect to geology, soils or seismicity. (Cumulative Impact: Less than Significant)

Development of the project, with implementation of the identified mitigation measures above, would have less than significant impacts related to exposing persons or structures to geologic, soils, or seismic hazards. The project, combined with other foreseeable development in the area, would result in increased population and development in an area subjected to seismic risks and hazards. While the number of people visiting, living and working in the area will increase incrementally, exposing additional people to seismic and geological hazards over a short term, the risk to people and property would be reduced through the upgrading or demolishing of older buildings that are seismically unsafe. Older buildings would be seismically retrofitted and newer buildings will be constructed to stricter building codes. All construction phases of this project, and other foreseeable projects in the area, would be required to implement mitigation measures similar to those above and adhere to all federal, state, and local programs, requirements and policies pertaining to building safety and construction permitting. All projects would be required to adhere to adhere to the City's Building Code and grading ordinance. Therefore, the project, combined with other foreseeable development in the area, would not result in a cumulatively significant impact by exposing people or structures to risk related to geologic hazards, soils, and/or seismic conditions.

Significance after Mitigation: None Required.

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G. Noise

This section analyzes potential impacts on the ambient noise environment caused by construction and operation of the proposed Oak to Ninth Avenue Project. It also analyzes the compatibility of proposed noise-sensitive uses, such as residences and commercial areas, with the existing noise environment. The section describes the environmental and regulatory setting of the project as well as basics of environmental acoustics, including definitions of terms commonly used in noise analysis.

Introduction

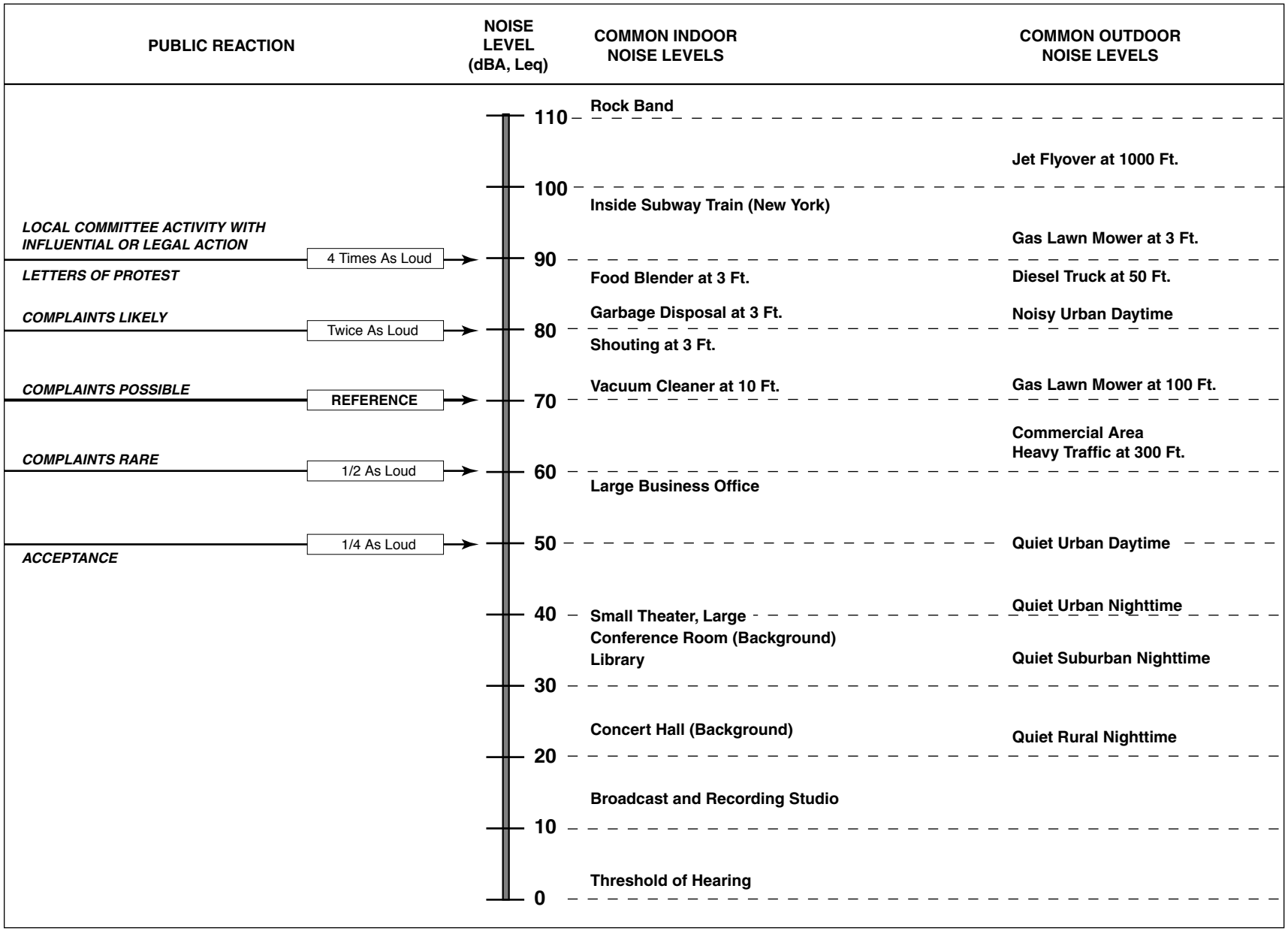
Noise Principles

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise is defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. Sound pressure level is measured in decibels (dB), with 0 dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 hertz (Hz) and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting is typically applied to community noise measurements. Some representative noise sources and their corresponding sound levels (in dBA) are shown in **Figure IV.G-1**.

Noise Exposure and Community Noise

A person's noise exposure is a measure of the noise experienced by that person over a period of time. A noise level is a measure of noise at a given instant in time. However, noise levels rarely persist consistently over a long period of time. Rather, community noise varies continuously in relation to contributing sound sources. Community noise is primarily the product of many distant noise sources that constitute a relatively stable background noise, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic and atmospheric conditions. What makes community noise constantly variable throughout a day, besides the slowly changing background noise, is the addition of short-duration single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual.



SOURCE: Caltrans Transportation Laboratory Noise Manual, 1982; and Modification by Environmental Science Associates

Oak to Ninth Avenue . 202622

Figure IV.G-1
Effects of Noise on People

These successive additions of sound to the community noise environment lead to variations in the community noise level from instant to instant. Because of these variations, noise exposure must be measured over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The most frequently used noise descriptors are as follows:

L_{eq} The equivalent sound level. This descriptor is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. The L_{eq} is the constant sound level that would contain the same acoustic energy as the varying sound level during the same time period (i.e., the average noise exposure level for the given time period).

L_{max} The instantaneous maximum noise level measured during the measurement period of interest.

L_{50} The noise level that equals or exceeds 50 percent of the specified time period. L_{50} represents the median sound level.

L_{90} The noise level that equals or exceeds 90 percent of the specified time period. L_{90} is often considered the background noise level averaged over the specified time period.

L_{dn} The energy average of A-weighted sound levels over a 24-hour period, including a "penalty" to account for the greater sensitivity of most people to nighttime noise. Noise that occurs between 10:00 PM and 7:00 AM is weighted (penalized) by adding 10 dBA to account for the greater annoyance of such noise. The L_{dn} is also referred to as DNL.

CNEL Similar to the L_{dn}. However, the Community Noise Equivalent Level (CNEL) adds a 5-dBA "penalty" for the evening hours between 7:00 PM and 10:00 PM in addition to a 10-dBA penalty between the hours of 10:00 PM and 7:00 AM.

Effects of Noise on People

Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. The effects of noise on people can be placed into three categories:

- Subjective effects of annoyance, nuisance, or dissatisfaction;
- Interference with activities such as speech, sleep, or learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants generally experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction. A wide variation exists in the individual thresholds of annoyance, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting human reaction to a new noise environment is to compare the new environment to the existing one to which people have adapted, or the so-called "ambient

noise" level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur (Caltrans, 1998):

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause adverse response.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. The human ear perceives sound in a non-linear fashion; hence the decibel scale was developed. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion; rather, they combine logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

Noise Attenuation

Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate between 6 dBA for "hard sites" and 7.5 dBA for "soft sites" for each doubling of distance from the reference measurement. Hard sites are those with a reflective surface between the source and the receiver, such as parking lots or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the changes in noise levels with distance (drop-off rate) is simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. In addition to geometric spreading, an excess ground attenuation value of 1.5 dBA (per doubling of distance) is normally assumed for soft sites. Line sources (such at traffic noise from vehicles) attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement (Caltrans, 1998). Widely distributed noises, such as a large industrial facility spread over many acres or a street with moving vehicles (a "line" source), would typically attenuate at a lower rate, approximately 3 to 4.5 dBA per doubling of distance from the source (also dependent upon environmental conditions) (Caltrans, 1998). Noise from large construction sites would have characteristics of both "point" and "line" sources, so attenuation would range between 3.0 and 7.5 dBA per doubling of distance.

Setting

Federal, State, and Local Regulations

Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor

vehicles, while regulation of stationary sources is left to local agencies. Local regulation of noise involves implementation of general plan policies and noise ordinance standards. Local general plans identify general principles intended to guide and influence development plans; local noise ordinances establish standards and procedures for addressing specific noise sources and activities. Federal regulations and local policies address airport noise. Noise issues relevant to the proposed project are addressed in Title 24 of the California Code of Regulations and in City of Oakland General Plan policies and noise ordinance standards.

State of California Regulations

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for multi-unit residential buildings (Title 24, Part 2, California Code of Regulations). Title 24 establishes standards for interior room noise (attributable to outside noise sources). To limit noise transmitted between adjacent dwelling units, the noise insulation standards specify the extent to which walls, doors, and floor-ceiling assemblies must block or absorb sound. The regulations also specify that acoustical studies must be prepared whenever a residential building or structure is proposed to be located near an existing or adopted freeway route, expressway, parkway, major street, thoroughfare, rail line, rapid transit line, or industrial noise source, and where such noise source or sources create an exterior CNEL (or L_{dn}) of 60 dB or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise such that the interior CNEL (or L_{dn}) is no more than 45 dB. If the interior noise level depends upon windows being closed, the design for the structure must also specify ventilation or an air-conditioning system to provide a habitable interior environment.

The proposed project would include development of dwelling units that would be required to comply with the above standards. The Title 24 standards are enforced through the building permit application process in the City of Oakland, as in most jurisdictions.

Alameda County Airport Land Use Commission and Federal Aviation Administration (FAA) Regulations

The Alameda County Airport Land Use Plan (ALUP) developed by the Airport Land Use Commission of Alameda County has adopted Noise Impact Zones for the Oakland International Airport. Noise Impact Zones are areas where exposure to aircraft noise would be above the levels considered acceptable under the state noise guidelines for judging land use compatibility (see **Figure IV.G-2** below). Noise Impact Zones ensure that new development in the vicinity of an airport would be compatible with existing and projected noise from airport operations.

The project site would be located outside the 65-dBA contour for the Oakland International Airport. The site therefore is not located within the airport's Noise Impact Zone.

City of Oakland Policies and Regulations

The Oakland General Plan contains guidelines for determining the compatibility of various land uses with different noise environments (City of Oakland, 2005). The General Plan Noise Element recognizes that some land uses are more sensitive to ambient noise levels than others, due to the

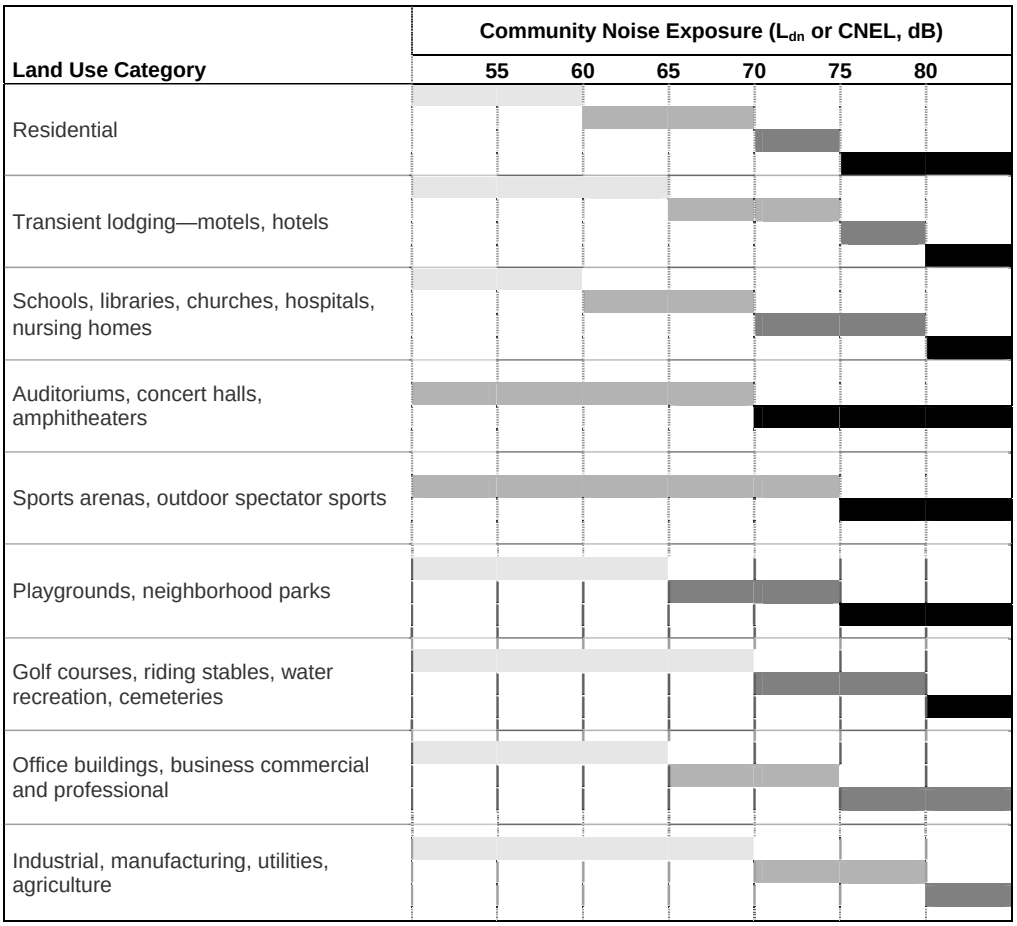
amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. The City of Oakland uses state noise guidelines, depicted in **Figure IV.G-2**, for judging the compatibility between various land uses and their noise environments (City of Oakland, 2005).

The City also regulates noise through enforcement of its noise ordinance and nuisance standards, which are found in the Oakland Planning Code, Section 17.120.050 (City of Oakland, 2003b), and Oakland Health and Safety Code, Section 8.18.020 (City of Oakland, 2003a), respectively. The noise ordinance regulates only operational noise from stationary sources, as cities and counties do not have regulatory authority over noise from mobile sources (transportation noise). (Transportation noise is regulated at the state and federal level by noise limits placed on vehicle manufacturers.) **Table IV.G-1** presents standards for maximum allowable receiving noise applicable to long-term exposure of residential and civic land uses. The noise ordinance states that if the measured ambient noise level exceeds the applicable noise level standard in any category, then the stated applicable noise level shall be adjusted so as to equal the ambient noise level. **Table IV.G-2** presents noise level standards that apply to temporary exposure to short- and long-term construction noise. In this context, “short-term” refers to construction activity lasting less than 10 days while “long-term” refers to construction activities lasting more than 10 days.

Existing Noise Environment

Noise Sources and Levels

The project site adjoins the Oakland Estuary to the south, the Embarcadero and I-880 to the north, 10th Avenue to the east, and Fallon Street to the west. The eastern part of the site contains commercial and industrial uses (the Ninth Avenue Terminal, a retail furniture store, a metal recycling facility, and outdoor storage of shipping containers). The central portion of the project site (which excludes the Fifth Avenue Point outparcel) contains residential, commercial, and industrial uses, a concrete batch operation, and a mix of manufacturing and outdoor storage uses. The western part of the site contains public open space and industry (Estuary Park and Jack London Aquatic Center, and an East Bay Municipal Utility District dechlorination facility).



INTERPRETATION

NORMALLY ACCEPTABLE: Development may occur without an analysis of potential noise impacts *to the proposed development* (though it might still be necessary to analyze noise impacts that the project might have *on its surroundings*).

CONDITIONALLY ACCEPTABLE: Development should be undertaken only after an analysis of noise-reduction requirements is conducted, and if necessary noise-mitigating features are included in the design. Conventional construction will usually suffice as long as it incorporates air conditioning or forced fresh-air-supply systems, though it will likely require that project occupants maintain their windows closed.

NORMALLY UNACCEPTABLE: Development should generally be discouraged; it may be undertaken only if a detailed analysis of the noise-reduction requirements is conducted, and if highly effective noise insulation, mitigation or abatement features are included in the design.

CLEARLY UNACCEPTABLE: Development should not be undertaken.

Oak to Ninth Mixed Use Development Project . 202622

SOURCE: *City of Oakland General Plan*, Noise Element, Adopted June 21, 2005

Figure IV.G-2

Land Use Compatibility for Community Noise Environment

TABLE IV.G-1

MAXIMUM ALLOWABLE RECEIVING NOISE STANDARDS FOR LONG-TERM EXPOSURE OF SPECIFIED LAND USES, IN dBA

		Maximum Allowable Noise Level Standards (dBA)	
Receiving Land Use	**Cumulative Number of Minutes in One-Hour Time Period**	**Daytime 7:00 AM to 10:00 PM**	**Nighttime 10:00 PM to 7:00 AM**
Residential, School, Child Care, Health Care, or Nursing Home, and Public Open Space	20	60	45
	10	65	50
	5	70	55
	1	75	60
	0	80	65
		Anytime	
Commercial	20	65	
	10	70	
	5	75	
	1	80	
	0	85	
		Anytime	
Manufacturing, Mining, and Quarrying	20	70	
	10	75	
	5	80	
	1	85	
	0	90	

SOURCE: City of Oakland, Oakland Planning Code, Section 17.120.050, 2003.

TABLE IV.G-2

MAXIMUM ALLOWABLE RECEIVING NOISE STANDARDS FOR TEMPORARY CONSTRUCTION OR DEMOLITION ACTIVITIES, IN dBA

Operation/Receiving Land Use	**Daily 7:00 AM to 7:00 PM**	**Weekends 9:00 AM to 8:00 PM**
Short-Term Operation (less than 10 days)		
Residential	80	65
Commercial, Industrial	85	70
Long-Term Operation (more than 10 days)		
Residential	65	55
Commercial, Industrial	70	60

SOURCE: City of Oakland, Oakland Planning Code, Section 17.120.050, 2003.

The primary sources of noise in the project area are traffic on local roads and on the railroad tracks north of the project site. Occasional boat traffic on the Oakland Estuary and activities associated with the retail, commercial, and industrial establishments are secondary noise sources. The sources of transportation-related noise that dominate the noise environment include vehicular traffic on the Embarcadero and I-880 as well as Union Pacific Railroad, Amtrak, and BART railway traffic the project site (Salter Associates, 2002).

Long-Term Noise Levels

In 2002, Charles M. Salter Associates, conducted six 48-hour long-term measurements in the vicinity of the project site (Salter Associates, 2002). In addition, ESA conducted two 72-hour long-term noise level measurements in the vicinity of the project site in the year 2005. The noise measurement locations are shown on **Figure IV.G-3**.

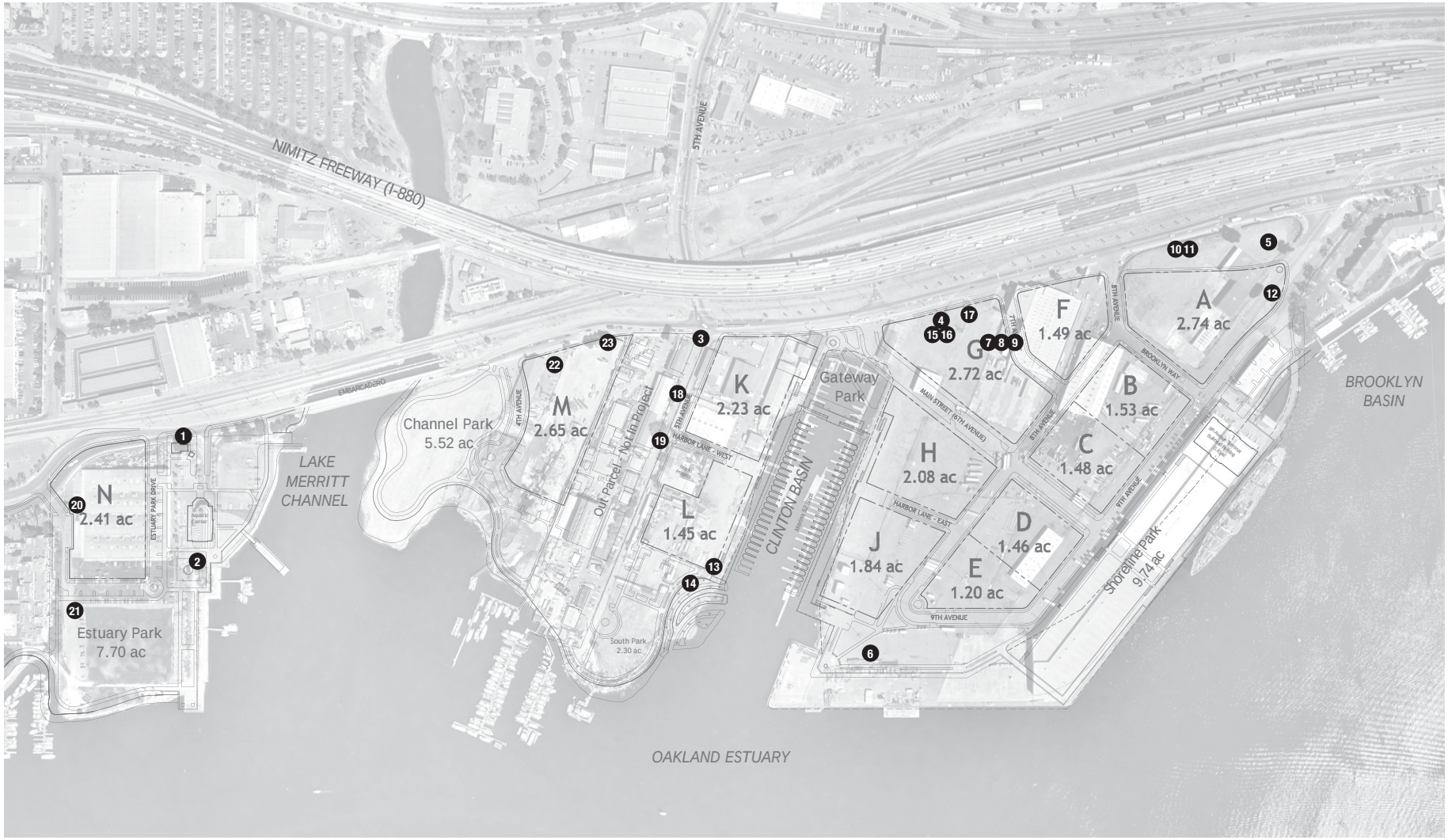
Noise levels were logged digitally during the monitoring period, although individual noise sources are not identifiable in the resulting data. High noise levels typical of an urban environment were measured at all monitor locations. The results are presented below in **Tables IV.G-3** and **IV.G-4** and **Figures IV.G-4** through **IV.G-9.**

Short-Term Noise Levels

Three short-term measurements were taken by ESA in 2005, in addition to 17 short-term measurements that were taken by Charles M. Salter Associates in 2002 in the project site vicinity. Noise levels measured at these locations are shown in **Tables IV.G-3** and **IV.G-4.**

Sensitive Receptors

Human response to noise varies considerably from one person to another. Effects of noise at various levels can include interference with sleep, concentration, and communication; physiological and psychological stress; and hearing loss. Given these effects, some land uses are considered more sensitive to ambient noise levels than others. In general, residences, schools, hotels, hospitals, and nursing homes are considered to be the most sensitive to noise. Commercial and industrial uses are considered the least noise-sensitive. Residents of the adjacent residential development (The Portobello) are the primary existing sensitive receptors in the project area. Fifth Avenue Point includes a mix of work-live, industrial, and commercial uses and is located in an industrial zoning district (M-40 Heavy Industrial), however, the work-live tenants would also be considered sensitive receptors to project-related noise.



0 300
Feet

Oak to Ninth Avenue . 202622

SOURCE: Environmental Science Associates

Figure IV.G-3
Noise Monitoring Locations

TABLE IV.G-3

EXISTING NOISE ENVIRONMENT (2002 MEASUREMENTS)

Location	Time Period	L_{dn} (dBA) Oct 1st – 2nd	L_{dn} (dBA) Oct 3rd – 4th
1. Estuary Park Monitor – Embarcadero (35' south of Embarcadero center line, 65' west of driveway center line, 16' elevation)	Long Term	72	73
2. Estuary Park Monitor – Boat House (450' south of Embarcadero center line, 75' west of water line, 14' elevation)	Long Term	65	65
3. 5th Avenue Monitor – Embarcadero (50' south of Embarcadero center line, 25' west of 5th Avenue center line, 14' elevation)	Long Term	77	77
4. 8th Avenue Monitor – Embarcadero (50' south of Embarcadero center line, 28' west of 8th Avenue center line, 14' elevation)	Long Term	79	78
5. 10th Avenue Monitor – Embarcadero (45' south of Embarcadero center line, 60' west of 10th Avenue center line, 15' elevation)	Long Term	82	82
6. Oakland Estuary Monitor – Clinton Basin (1140' south of Embarcadero center line, 120' east of water line, 14' elevation)	Long Term	67	62
7. Embarcadero 45' Elevation Spot (50' south of Embarcadero center line, 110' east of 8th Avenue center line, 45' elevation on northwest corner of Furniture Liquidator rooftop)	Short Term	83	83
8. Embarcadero 58' Elevation Spot (50' south of Embarcadero center line, 110' east of 8th Avenue center line, 60' elevation on northwest corner of Furniture Liquidator rooftop)	Short Term	84	83
9. Embarcadero 70' Elevation Spot (50' south of Embarcadero center line, 110' east of 8th Avenue center line, 70' elevation on northwest corner of Furniture Liquidator rooftop)	Short Term	83	83
10. Embarcadero Spot Between 9th and 10th Avenues (30' south of Embarcadero center line, 315' west of 10th Avenue center line, 5' elevation)	Short Term	80	80
11. Embarcadero Spot Between 9th and 10th Avenues (30' south of Embarcadero center line, 315' west of 10th Avenue center line, 18' elevation)	Short Term	85	85
12. 10th Avenue Spot (190' south of Embarcadero center line, 32' west of 10th Avenue center line, 5' elevation)	Short Term	76	76
13. 6th Avenue Spot – Clinton Basin (740' south of Embarcadero center line, 110' west of Clinton Basin shoreline, 5' elevation)	Short Term	63	61
14. 6th Avenue Spot – Clinton Basin (850' south of Embarcadero center line, 110' west of Clinton Basin shoreline, 5' elevation)	Short Term	62	60
15. 8th Avenue Spot – Embarcadero (60' south of Embarcadero center line, 25' west of 8th Avenue center line, 5' elevation)	Short Term	76	76
16. 8th Avenue Spot – Embarcadero (60' south of Embarcadero center line, 25' west of 8th Avenue center line, 18' elevation)	Short Term	77	77
17. 8th Avenue Spot – Embarcadero (60' south of Embarcadero center line, 35' east of 8th Avenue center line, 5' elevation)	Short Term	78	77

TABLE IV.G-3 (continued)

EXISTING NOISE ENVIRONMENT (2002 MEASUREMENTS)

18. 5th Avenue Spot – 200-foot setback (200' south of Embarcadero center line, 10' west of 5th Avenue center line, 5' elevation)	Short Term	69	69
19. 5th Avenue Spot – 350-foot setback (350' south of Embarcadero center line, 10' west of 5th Avenue center line, 5' elevation)	Short Term	65	65
20. Estuary Park Spot – West Location (125' southeast of Embarcadero center line, 100' east of neighboring residential building, 5' elevation)	Short Term	70	70
21. Estuary Park Spot – setback from Embarcadero (335' southeast of Embarcadero center line, 100' east of neighboring residential building, 5' elevation)	Short Term	62	62
22. Embarcadero Spot – West of 5th Avenue (80' south of Embarcadero center line, 450' west of 5th Avenue center line, 5' elevation)	Short Term	71	70
23. Embarcadero Spot – West of 5th Avenue (40' south of Embarcadero center line, 340' west of 5th Avenue center line, 5' elevation)	Short Term	75	74

SOURCE: Charles M. Salter Associates, Inc. *Oak to 9th Residential Development, Oakland, California, Environmental Noise Assessment,* November 2002.

TABLE IV.G-4

EXISTING NOISE ENVIRONMENT (2005 MEASUREMENTS)

Location	Time Period	Leq (dBA)	Noise Sources
1. 9th Avenue and Embarcadero (65 feet from center of Embarcadero, 15 feet from center of 9th)	24–hour CNEL measurements were: Tuesday: 75 dBA Wednesday: 75 dBA Thursday: 75 dBA	Hourly L_{eq} ranged from 63 to 72 dBA	Interstate 880 traffic (ground level) Embarcadero traffic
2. 5th Avenue and Embarcadero (150 feet from center of Embarcadero, 20 feet from center of 5th)	24–hour CNEL measurements were: Tuesday: 71 dBA Wednesday: 72 dBA Thursday: 72 dBA	Hourly L_{eq} ranged from 58 to 69 dBA	Interstate 880 traffic (on high overpass) Embarcadero traffic
3. 9th Avenue and Embarcadero (65 feet from center of Embarcadero, 15 feet from center of 9th)	10 minutes	69	Interstate 880 traffic (ground level) Embarcadero traffic Several trucks on 9th Birds chirping
4. 6th Avenue and Embarcadero (110 feet from center of Embarcadero, 15 feet from center of 6th)	9 minutes	63	Interstate 880 traffic (on high overpass) Embarcadero traffic Several cars on 6th Birds chirping
5. 5th Avenue and Embarcadero (120 feet from center of Embarcadero, 12 feet from center of 5th)	9 minutes	64	Interstate 880 traffic (on high overpass) Embarcadero traffic Several cars and a motorcycle on 5th Industrial saw/equipment across 5th

SOURCE: Environmental Science Associates, 2005.

Figure IV.G-4
24-hours Noise Measurement
Location - 9th and Embarcadero
Tuesday April 5, 2005

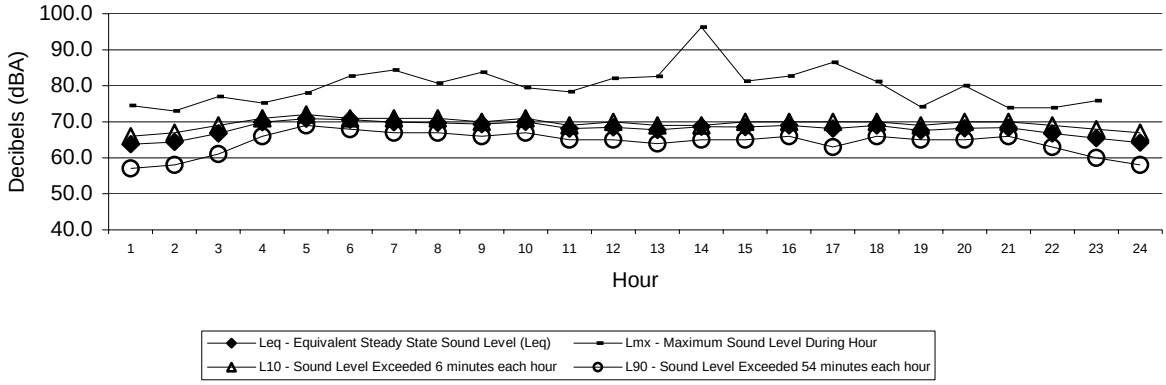


Figure IV.G-5
24-hours Noise Measurement
Location - 9th and Embarcadero
Wednesday April 6, 2005

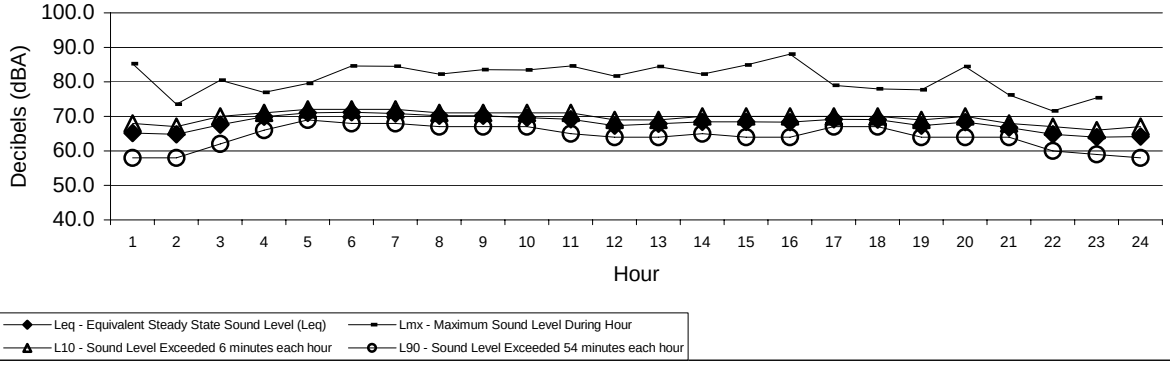


Figure IV.G-6
24-hours Noise Measurement
Location - 9th and Embarcadero
Thursday April 7, 2005

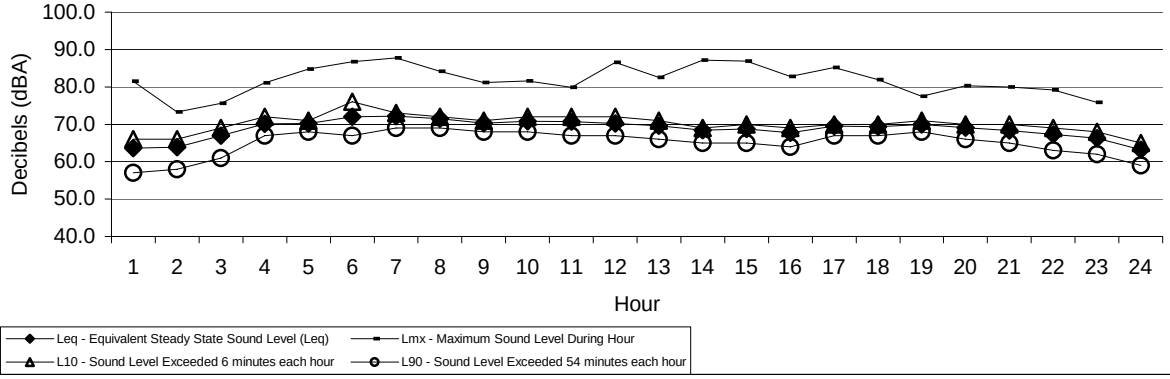


Figure IV.G-7
24-hours Noise Measurement
Location - 5th and Embarcadero
Tuesday April 5, 2005

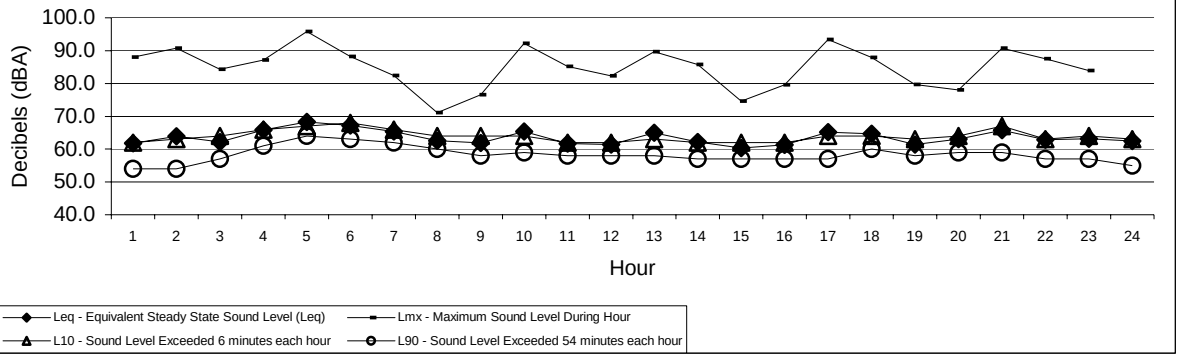


Figure IV.G-8
24-hours Noise Measurement
Location - 5th and Embarcadero
Wednesday April 6, 2005

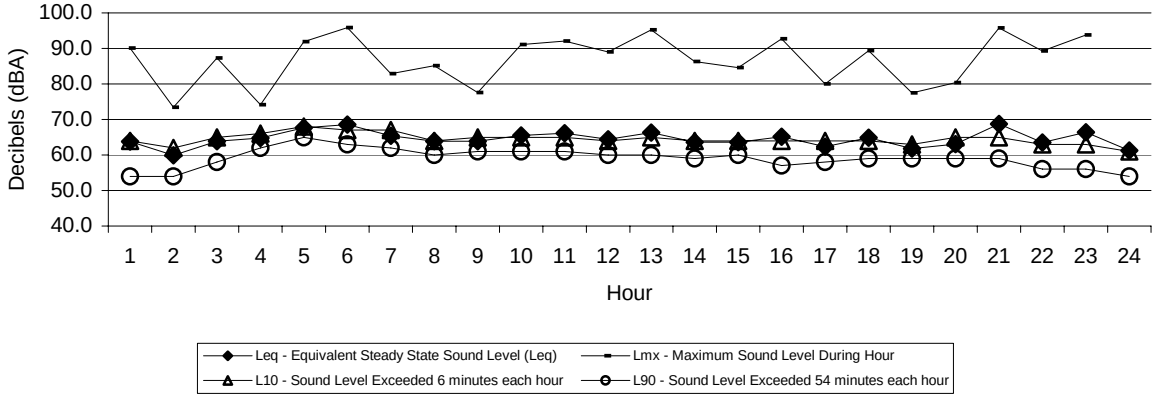
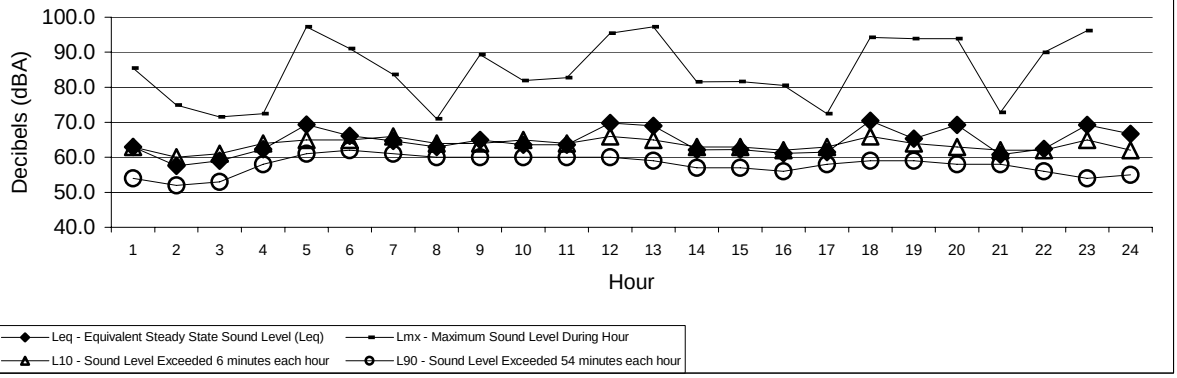


Figure IV.G-9
24-hours Noise Measurement
Location - 5th and Embarcadero
Thursday April 7, 2005



Noise Impacts Discussion

Significance Criteria

The City of Oakland considers a project to have a significant noise impact if it would:

- Expose persons to or generate noise levels in excess of standards established in the City of Oakland General Plan or applicable standards of other agencies (e.g., Occupational Safety and Health Administration [OSHA]);
- Violate City of Oakland Noise Ordinance standards for operational noise (Oakland Planning Code Section 17.120.050);
- Violate City of Oakland Noise Ordinance standards for construction noise (Oakland Planning Code Section 17.120.050), unless an acoustical analysis is performed and all feasible mitigation measures imposed, including the standard City of Oakland noise measures adopted by the Oakland City Council on January 16, 2001 (addressed in Impact IV.G.1);
- Violate City of Oakland Health and Safety Code provisions regarding nuisance from persistent construction-related noise (Oakland Municipal Code Section 8.18.020);
- Create a vibration that is perceptible without instruments by the average person at or beyond any lot line containing vibration-causing activities not associated with motor vehicles, trains, and temporary construction or demolition work, except activities located within the (a) M-40 zone, or (b) M-30 zone more than 400 feet from any legally occupied residential property (Oakland Planning Code Section 17.120.060);
- Generate interior L_{dn} or CNEL greater than 45 dBA for multi-family dwellings, hotels, motels, dormitories and long-term care facilities (and may be extended by local legislative action to include single-family dwellings) per California Noise Insulation Standards *(*California Code of Regulations Part 2, Title 24;
- Result in a 5-dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- Conflict with state land use compatibility guidelines for all specified land uses for determination of acceptability of noise (in accordance with the State of California Governor's Office of Planning and Research *General Plan Guidelines, 2003*);
- Be located within an airport land use plan and expose people residing or working in the project area to excessive noise levels; or
- Be located within the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels.

The proposed project site is not located within 2 miles of a public airport or private airstrip. The Oakland International Airport is located approximately 3 miles southeast of the project site, and the San Francisco International Airport is located approximately 14 miles southwest of the project site. The Alameda Point Naval Air Station closed in April 1997. Therefore, the project would not

expose persons residing at the project site to excessive noise levels as a result of proximity to an airport, and airport noise will not be addressed further in this document.

Local Plans and Policies

Oakland General Plan policies and other applicable plans and policies that pertain to noise, and that apply to the project, are listed in Appendix F. Key policies are identified and discussed in Section IV.A, Land Use, Plans, and Policies. General Plan policies that are also significance criteria or contain a regulatory threshold which the project must meet are addressed in this section.

Project Impacts and Mitigation Measures

Noise impacts are assessed by comparing noise levels resulting from the Oak to Ninth Avenue Project with noise levels under baseline or existing conditions. These existing conditions were measured using sound level meters at various locations (specified above in **Table IV.G-3** and **Table IV.G-4**) in the vicinity of the proposed project site. Temporary construction impacts from the development of the project are evaluated based on typical noise levels generated during various phases of construction and proximity to sensitive land uses. Analysis of traffic-related noise is based on (1) traffic survey data (prepared by Fehr & Peers transportation consultants) that included existing and projected traffic around the project site, and (2) the Federal Highway Administration (FHWA) Traffic Noise Prediction Model. Long-term noise impacts are evaluated both with respect to the impact of the project on existing uses and the impact of the existing noise environment on future project residents.

Construction Noise Impacts

Impact G.1: Project construction activities would intermittently and temporarily generate noise levels above existing levels in the project vicinity. Project construction noise levels could exceed City of Oakland standards and cause disturbances in noise-sensitive areas, such as residential areas. (Potentially Significant)

Projected Noise Levels

The project would start construction in 2006 and be built out over approximately eleven years. Project construction would occur in four phases and would involve demolition of 425,700 square feet of existing commercial and industrial space and construction of 3,100 residential units, 200,000 square feet of retail space, and up to 3,534 vehicle parking spaces. Construction-related activities would temporarily increase ambient noise levels in the project vicinity over the duration of construction. Construction-related noise levels at and near locations on the project site would fluctuate depending on the particular type, number, and duration of use of various pieces of construction equipment. The effect of construction noise would depend upon the level of construction activity on a given day and the related noise generated by that activity, the distance between construction activities and the nearest noise-sensitive uses, and the existing noise levels at those uses.

Table IV.G-5 shows typical noise levels generated by building construction. As shown in the table, the noisiest phase of construction would be during pile driving, which could generate noise levels of approximately 90 to 105 L_{eq} at 50 feet. Excavation and exterior finishing may also generate a substantial amount of noise.

Noise from project demolition and construction activities could affect adjacent and nearby commercial and residential uses. Noise-sensitive uses nearest the proposed demolition and construction activity would be the residents of the adjacent residential complex (The Portobello), work-live tenants in the adjacent Fifth Avenue Point, and tenants occupying buildings completed during initial construction phases. These uses could occasionally experience the noise levels indicated in **Table IV.G-5**, depending on the proximity of equipment at a given time.

TABLE IV.G-5

TYPICAL CONSTRUCTION ACTIVITY NOISE LEVELS

Phase	Noise Level (L_{eq})[a]
Ground Clearing	84
Excavation	89
Foundations	78
Erection	85
Exterior Finishing	89
Pile Driving	90-105

[a] Estimates correspond to a distance of 50 feet from the noisiest piece of equipment associated with a given phase and 200 feet from the other equipment associated with that phase.

SOURCE: Bolt, Baranek, and Newman, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, December 1971.

Compliance with City of Oakland Noise Standards

As noted above, building construction noise during the noisiest phases of construction would be 90 to 105 L_{eq} at 50 feet. These predicted noise levels would exceed the standards of the City of Oakland's Noise Ordinance, which states that, for residential receptors, the maximum allowable receiving noise for weekdays (Monday through Friday, 7:00 AM to 7:00 PM) is 65 dBA for construction activity of greater than 10 days duration and 80 dBA for construction activity of 10 days or less. Also, during nighttime, temporary construction-related noise could be more disturbing given the more sensitive nature of the nighttime period. Temporary construction noise impacts could be significant unless proper mitigation is followed.

According to Section 8.18.020 of the Health and Safety Code, the persistent emission of any noise produced by mechanical means between the hours of 9:00 PM and 7:00 AM, could constitute a nuisance if the raucous noise disturbs the peace or comfort or is injurious to the health of any exposed individual. The nuisance of persistent construction-related noise impacts could be significant unless proper mitigation is followed.

Ground-Borne Vibration

Ground-borne vibration from activities that involve "impact tools," especially pile driving, could produce significant vibration at sensitive receptors unless proper mitigation is followed. Mitigation measures described below that would decrease the noise associated with impact equipment, such as the pre-drilling of piles, would also decrease vibration levels (see Mitigation Measure G.1c).

The project construction activities would involve pile driving intermittently throughout the 11-year construction phase. The actual number of piles would be determined when each building is

designed, and the duration of pile driving activities for each building will vary with site conditions which can vary widely throughout the project site. The project sponsor estimates that the number of piles required per parcel may range from 420 to 900 (with an average of 675 piles per parcel). The duration of pile driving per parcel may range from nine to 16 weeks (with an average of 12 weeks per parcel).

Mitigation Measure G.1a: The project applicant shall require construction contractors to limit standard construction activities as required by the City of Oakland Building Services Division. Such activities are generally limited to between 7:00 AM and 7:00 PM Monday through Friday, with pile driving and/or other extreme noise-generating activities (greater than 90 dBA) limited to between 8:00 AM and 4:00 PM Monday through Friday, with no extreme noise generating activity permitted between 12:30 PM and 1:30 PM. No construction activities shall be allowed on weekends, except that interior construction shall be permitted after buildings are enclosed, without prior authorization of the Building Services Division, and no extreme noise-generating activities shall be allowed on weekends and holidays.

Mitigation Measure G.1b: To reduce daytime noise impacts due to construction, the project applicant shall require construction contractors to implement the following measures:

- **Equipment and trucks used for project construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds, wherever feasible).**

- **Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible; this could achieve a reduction of 5 dBA. Quieter procedures, such as use of drills rather than impact tools, shall be used whenever feasible.**

- **Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures to the extent feasible.**

- **If feasible, the noisiest phases of construction (such as pile driving) shall be limited to less than 10 days at a time to comply with the local noise ordinance.**

Mitigation Measure G.1c: To further mitigate pile driving and/or other extreme noise-generating construction impacts, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted for review and approval by the City of Oakland Building Services Division to ensure that maximum feasible noise

attenuation will be achieved. These attenuation measures shall include as many of the following control strategies as feasible:

- **Erect temporary plywood noise barriers around the construction site, particularly along the western boundary along Fallon Street to shield the adjacent multi-family residential uses;**
- **Implement "quiet" pile-driving technology (such as pre-drilling of piles and the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;**
- **Use noise control blankets on building structures as buildings are erected to reduce noise emission from the site;**
- **Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings; and**
- **Monitor the effectiveness of noise attenuation measures by taking noise measurements.**

Mitigation Measure G.1d: Prior to the issuance of each building permit, along with the submission of construction documents, the project applicant shall submit to the City Building Services Division a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:

- **A procedure for notifying the Building Services Division staff and Oakland Police Department of complaints;**
- **A plan for posting onsite signs pertaining to permitted construction days and hours, complaint procedures, and whom to notify in the event of a problem;**
- **A listing of telephone numbers (during regular construction hours and off-hours);**
- **Designation of an onsite construction complaint manager for the project;**
- **Notification of neighbors within 300 feet of the project construction area about the estimated duration of the pile-driving activity at least 30 days in advance of the activity; and**
- **A preconstruction meeting with the job inspectors and the general contractor/onsite project manager to confirm that noise mitigation and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.**

The contractor would be required to implement the above measures throughout the duration of construction activity. Based on the significance criteria used by the City of Oakland, compliance with the City's noise ordinance is achieved if the above mitigation measures are implemented. However, given the significant number of piles (estimated average of 675 pile per parcel), and the extended duration of pile driving (estimated average of 12 weeks per parcel) that would occur over the nearly 11-year construction period, implementation of the above measures to the extent feasible is not expected to adequately reduce the potential construction-related noise impacts to a less than significant level. The General Plan Noise Element incorporates the City's noise ordinance and allows for the City to interpret the existing noise standards as appropriate to ensure consistency with the City's noise policies (General Plan Action 3.2). Therefore, project construction noise impacts would be considered significant and unavoidable.

Significance after Mitigation: Significant and Unavoidable

Noise from Project Traffic and Other Operations

Impact G.2: Noise from project-generated traffic and other operational noise sources, such as mechanical equipment and truck loading/unloading, could exceed City of Oakland Noise Ordinance standards and disturb project occupants and nearby residents. (Potentially Significant)

Operational activities associated with the project that would generate noise include vehicle traffic; operation of mechanical equipment such as heating, ventilation, and air conditioning (HVAC) equipment; and truck loading or unloading activities.

Operational Traffic Noise

As discussed above, and depicted in **Tables IV.G-3** and **IV.G-4** and **Figures IV.G-4** through **IV.G-9**, Charles M. Salter Associates in 2002, and ESA in 2005, conducted several long-term and short-term measurements in the vicinity of the project site. The measured long-term results along the affected roadway segments are shown in **Table IV.G-6** and considered to be the existing ambient noise from all noise sources.

In addition, noise level projections were made using traffic data from Fehr & Peers (2005) and the Federal Highway Administration (FHWA) Noise Prediction Model for those road segments that would experience the greatest increase in traffic volume and/or that would pass through residential areas. The model is based on the Calveno reference noise factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site.

The results of the modeling effort are shown in **Table IV.G-6** for the Existing, Interim (Year 2010), Interim Plus Project (Year 2010), Cumulative (Year 2025), and Cumulative Plus Project scenarios. The traffic analysis indicates that the project would generate approximately

11,741 total daily vehicle trips under the Interim Plus Project scenario and 30,681 daily vehicle trips for the Cumulative Plus Project scenario. This traffic would be distributed over the local street network and would affect roadside noise levels. For the modeling effort, PM peak hour traffic volumes during weekdays were used. Modeled existing noise levels shown in **Table IV.G-6** correspond to a distance of 7.5 meters (25 feet) or 15 meters (50 feet) from the centerline of applicable roadway segments.

The difference between the calculated and actual (measured) noise levels along these roadways is due to other noise sources in the vicinity, such as intersecting roadway and I-880 traffic and other non-vehicle noise sources that substantially contribute to the total ambient noise levels but are not included in the FHWA Modeling (which is based on traffic volume on the specified Road Segments only).

To account for other noise sources that are not included in the FHWA Modeling, the levels of actual existing noise (which do reflect all sources of noise in the vicinity) are also considered in the analysis to assess the impact of project traffic on future roadside noise levels. Given that the Measured Existing Noise Levels more accurately reflect existing noise conditions, the City has determined that these levels shall be used to evaluate the significance of the project's impacts. A review of **Table IV.G-6** shows that under the 2010 Interim Plus Project scenario and the 2025 Cumulative Plus Project scenario, the incremental increase in noise levels over existing conditions on the road segments analyzed would be less than significant.

HVAC and Loading/Unloading Operations

Once the project is in operation, noise would also be generated by truck loading and unloading activities as well as HVAC systems on project buildings. These noise sources are considered separately from traffic noise because they would be located on rooftops and in loading docks, away from street noise generated by traffic. Because these noise sources would be separated by location from traffic noise, they would not combine with traffic noise to create higher noise levels. Operation of HVAC equipment would be subject to City of Oakland Noise Ordinance standards shown in **Table IV.G-1**. Provided that the equipment would be designed and used in a manner that complies with those standards (see Mitigation Measure G.2 below), the related noise impact on project residences and adjacent land uses would be less than significant. Operational noise related to the arrival, departure, and loading/unloading of goods from delivery trucks associated with the project's proposed commercial establishments would be potentially significant.

Mitigation Measure G.2: The project applicant shall incorporate the following design features into the final site plans:

- **Building equipment (e.g., HVAC units) shall be located away from nearby residences, on building rooftops, and properly shielded within an enclosure that effectively blocks the line of sight of the source from receivers in order to meet City of Oakland Noise Ordinance standards.**

- **Truck delivery areas shall be located as far from adjacent residences as possible. To the extent feasible, project buildings shall be located so that they block noise related to truck deliveries and waste collection from residential or other sensitive receptors.**

With implementation of the mitigation measure listed above, noise impacts from HVAC equipment and truck loading and unloading activities would be reduced to a less-than-significant level.

Significance after Mitigation: Less than Significant

TABLE IV.G-6

TRAFFIC NOISE INCREASES ALONG ROADS IN THE PROJECT AREA

	Measured and Modeled Noise Levels, dBA, CNEL									
Road Segment	**Modeled Existing Traffic Noise[c]**	**Measured Existing Noise (CNEL)**	**Modeled Interim (Year 2010)**	**Modeled Interim (Year 2010) plus Project**	**Modeled Incremental Increase (Interim Plus Project vs. Modeled Existing)**	**2010 Estimated Noise from All Sources/ Incremental Increase from Existing Measured Noise**	**Modeled Cumulative (Year 2025)**	**Modeled Cumulative (Year 2025) plus Project**	**Modeled Incremental Increase (Cumulative Plus Project vs. Existing)**	**2025 Estimated Noise from All Sources/ Incremental Increase from Existing Measured Noise**
1. 5th Street (between Madison and Oak Streets)[e]	71.7	77[b]	73.1	73.4	1.7	78/ +1	73.9	74.4	2.7	79/ +2
2. Oak Street (between 5th Street and Embarcadero)[e]	69.6	71[b, g]	70.8	71.5	1.9	71.5/ +0.5	72.5	73.8	4.2	73.8/ +4.2
3. Embarcadero (west of 5th Avenue)[f]	68.3	77[a]	68.8	70.4	2.1	78/ +1	69	72.6	4.3	78/ +1
4. Embarcadero (between 5th Avenue and 6th Avenue)[f]	71	77[a]	71.2	72.7	1.7	78/ +1	71.6	74.7	3.7	79/ +2
5. Embarcadero (between 6th Avenue and 10th Avenue)[f]	70.3	75 – 82[a]	70.3	72.1	1.8	76 – 82/ +0 to +1	70.3	73.7	3.4	78 – 83/ +1 to +3
6. 5th Avenue (south of Embarcadero)[e]	50.8	71[a]	55.1	55.1	4.3	71/ +0	59.8	65.5	14.7[d]	72/ +1
7. East 8th Street (between Oak Street and 5th Avenue)[e]	72	72[b, g]	73.5	73.7	1.7	73.7/ +1.7	74.7	75.1	3.1	75.1/ +3.1
8. 5th Avenue (between East 8th Street and Embarcadero)[e]	70	71[b, g]	70.2	71.3	1.3	71.3/ +0.3	70.7	73	3	73/ +3

[a] The measured existing traffic noise levels on these roadway segments are based on actual long-term measurement data that account for all noise sources, not just traffic on the single roadway.

[b] Since measurement data were not available for some roadway segments, the noise levels on these roadway segments were deduced from actual long-term measurements on roadway segments that were similar in proximity to I-880 and where I-880 was at a similar elevation.

[c] These listed values represent the modeled existing noise levels from mobile sources along specified roadways and are based on traffic data from Fehr and Peers. These values allow incremental noise increases to be deduced in order to provide an initial screening with respect to the noise level standard of a 5 dBA increase over existing (in this case, the calculated existing noise from traffic on the roadways). However, other noise sources in the vicinity of these roadway segments, such as intersecting roadways, I-880 traffic, and other non-vehicular noise sources, can contribute substantially to the total ambient noise levels along roadways in the project vicinity.

[d] On Road Segment 6, the calculated incremental increase between the Cumulative Plus Project versus Existing scenario is 14.7 dBA. Although this exceeds the 5 dBA criterion, the traffic-related impact on the noise environment along this Road Segment is considered less than significant because actual measured ambient noise levels on this Road Segment are much greater than the modeled existing noise from traffic on Road Segment 6 only. When using the noise model to predict only the noise from Road Segment 6, the future noise level would be 65.5 on this Road Segment in 2025. However, actual noise

measurements show that the existing noise levels along Road Segment 6 are already 71 to 77 dBA, CNEL (from Tables **IV.G-3** and **IV.G-4)**. Thus, in 2025 the predicted future Cumulative Plus Project noise level

TABLE IV.G-6 Footnotes, continued.

of 65.5 dBA (from traffic on Road Segment 6 only) would sum logarithmically with the actual measured existing noise levels of 71-77 dBA and result in a maximum increase of 0-1 dBA with resulting future noise levels expected to be 72-77 dBA, CNEL (Caltrans, 1998). Thus, the incremental increase in noise for the actual Cumulative Plus Project versus actual existing noise would be considered less than significant without mitigation

e Road center to receptor distance is assumed to be 7.5 meters (approximately 25 feet) on these segments. Vehicle mix on these road segments is assumed to be 90 percent auto, 5 percent medium trucks, and 5 percent heavy trucks. The speed limit for these segments is assumed to be 25 miles per hour.

f Road center to receptor distance is assumed to be 15 meters (approximately 50 feet) on these segments. Vehicle mix on these road segments is assumed to be 90 percent auto, 5 percent medium trucks, and 5 percent heavy trucks. The speed limit for these segments is assumed to be 35 miles per hour.

g Because modeled and measured noise levels were approximately equal, future noise levels are estimated directly from the model.

SOURCE: ESA, 2005

Indoor Noise Exposure

Impact G.3: The project would locate noise-sensitive multifamily residential uses in a noise environment where noise levels are above what is considered "normally acceptable" according to the City of Oakland General Plan Noise Element. (Potentially Significant)

Based on noise measurements in the project site vicinity (see **Table IV.G-3** and **Table IV.G-4**), existing ground-level and aerial (elevations of 14 to 70 feet) L_{dn} noise levels range from 60 dBA to 80 dBA and from 62 dBA to 85 dBA, respectively. These noise levels are primarily due to the proximity of the measurement location to the Embarcadero and I-880 and show that project-related ground floor and non-ground floor residences in close proximity to these noise sources would be exposed to noise levels classified from "normally unacceptable" to "clearly unacceptable" for residential uses (see **Table IV.G-2**).

The project would include development of 3,100 multifamily housing units that would be subject to Title 24 standards of the *California Code of Regulations*, which provides an interior standard of DNL 45 dBA in any habitable room and requires an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard.

Though commercial uses are not subject to the requirements of Title 24, incorporation of standard noise insulation features in the design would minimize potential noise impacts on onsite commercial uses.

Mitigation Measure G.3: To comply with the requirements of Title 24 and achieve an interior noise level of less than 45 dBA, noise reduction in the form of sound-rated assemblies (i.e., windows, exterior doors, and walls) shall be incorporated into project building design. Final recommendations for sound-rated assemblies will depend on the specific building designs and layout of buildings on the site and shall be determined during the design phase.[1]

Significance after Mitigation: Less than Significant

Outdoor Noise Exposure

Impact G.4: The project would locate noise-sensitive multifamily residential uses and public parks in a noise environment where outdoor noise levels are above what is considered "normally acceptable" according to the City of Oakland General Plan Noise Element. (Potentially Significant)

[1] *Oak to 9th Residential Development, Oakland, California, Environmental Noise Assessment* by Charles M. Salter Associates, Inc., November 2002. Table 4 of the Salter Associates document lists conceptual window and wall Sound Transmission Class (STC) ratings for different noise environments and gives an estimate of the STC requirements needed to meet interior noise criteria.

As discussed in Impact G.3 above, noise measurements taken in the project site vicinity (see **Table IV.G-3** and **Table IV.G-4**) showed existing ground-level and aerial (elevations of 14 to 70 feet) L_{dn} noise levels from 60 dBA to 80 dBA and from 62 dBA to 85 dBA, respectively. These noise levels are primarily due to the proximity of the measurement location to the Embarcadero and I-880. Project-related residences located on the northern perimeter of parcels A, F, G, K, M, and N and public open space located in the northern area of the project (portions of Estuary Park, Channel Park, Gateway Park, and Shoreline Park) would be exposed to outdoor noise level environments classified from "normally unacceptable" to "clearly unacceptable" for residential and park uses (see **Table IV.G-2**), whereas residences and public open space in the southern area of the project would be exposed to reduced noise levels due to sound attenuation by distance and potentially some blockage by project-developed buildings.

Measured noise levels also exceed the maximum allowable daytime (60 dBA, 20 minutes in a one-hour time period) and nighttime (45 dBA, 20 minutes in a one-hour time period) noise level standards listed in **Table IV.G-1** for residences and public open space. Although construction of berms and sound walls along the northern perimeter of the project would reduce the outdoor noise levels reaching project-related public open space and residential receptors, sound barrier construction is not considered feasible given the height of the barriers that would be required to effectively block the line of sight of the Embarcadero and I-880 traffic and the effect they would have on the aesthetic character of the area. Thus, locating residential and public open space uses in the existing noise environment would result in a significant and unavoidable outdoor noise impact.

Significance after Mitigation: Significant and Unavoidable.

Cumulative Impacts

Cumulative Context

The geographic context used for the cumulative assessment noise impacts includes the Oak to Ninth District and surrounding freeways and major roadways in the vicinity. Cumulative noise is generated by the project and background growth from reasonably foreseeable projects identified in the Oakland Cumulative Growth Scenario as refined for this EIR.

Noise

Impact G.5: The proposed project, together with anticipated future development in Oakland, could result in long-term traffic increases that could cumulatively increase noise levels. (Less than Significant)

A cumulative impact arises from two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant impacts. This means that the

project's incremental effects must be viewed in connection with the effects of past, current, and probable future projects.

The traffic analysis indicates that the project would generate approximately 30,681 daily vehicle trips for the Cumulative Plus Project scenario. This traffic would be distributed over the local street network and would affect roadside noise levels. To assess the cumulative impact on roadside noise levels, noise level projections were analyzed using the FHWA Noise Prediction Model and results of noise measurements in the project area and are shown in **Table IV.G-6** above. Given that the Measured Existing Noise Levels more accurately reflect existing noise conditions, the City has determined that these levels shall be used to evaluate the significance of the project's impacts. A review of **Table IV.G-6** finds that the Interim project traffic in the year 2010 and the Cumulative Plus Project traffic in the year 2025 would have less than significant noise impacts.

Mitigation: None Required.

References – Noise

Airport Land Use Commission of Alameda County, *Alameda County Airport Land Use Plan*, July 16, 1986.

Bolt, Baranek, and Newman, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, December 1971.

Caltrans, Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, October 1998.

Charles M. Salter Associates, Inc., *Oak to 9th Residential Development, Oakland, California, Environmental Noise Assessment*, November 2002.

City of Oakland, Oakland Health and Safety Code (Title 8 of the Oakland Municipal Code), Chapter 8.18.020, Persistent Noises a Nuisance, 2003a.

City of Oakland, Oakland Planning Code (Title 17 of the Oakland Municipal Code), Chapter 17.120.050, Noise Ordinance, 2003b.

City of Oakland General Plan, *Noise Element*, Adopted June 21, 2005.

State of California, California Code of Regulations, Title 24 Part 2, California Building Code, 2001.

H. Hazardous Materials

This section discusses the hazardous materials issues associated with the project site, project construction, and project operations. The hazardous materials issues evaluated include past chemical use and potential buildup of associated toxic substances in soil and groundwater at the site; past onsite and offsite storage and release of petroleum products, including the presence and former presence of underground storage tanks at the site; potential hazardous waste issues during site construction; and the potential of the project to generate and discharge hazardous materials and/or hazardous wastes. This section identifies potential project impacts and appropriate mitigation measures when necessary and describes the regulatory process for remediation of the site.

Introduction

Under federal and state laws, materials, including wastes, may be considered hazardous if they are specifically listed by statute as such or if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode or generate vapors when mixed with water (reactivity). The term "hazardous material" is defined in law as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.[1] In some cases, past industrial or commercial activities on a site could have resulted in spills or leaks of hazardous materials to the ground, resulting in soil and/or groundwater contamination. The presence of certain hazardous materials can also lead to the buildup of methane gas which if trapped under structures can become an explosive hazard. Federal and state laws require that hazardous materials be specially managed and that excavated soils having concentrations of contaminants such as lead, gasoline, or industrial solvents that are higher than certain acceptable levels, be specially managed, treated, transported, and/or disposed of as a hazardous waste. The California Code of Regulations, Title 22, §66261.20-24 contains technical descriptions of characteristics that would cause a soil to be designated a hazardous waste. The California regulations are compliant with the federal regulations and in most cases, more stringent.

A preliminary site assessment, commonly referred to as a "Phase I" investigation, seeks to identify the presence or likely presence of hazardous materials at a project site under conditions that indicate an existing release, a past release, or a material threat of release of hazardous materials into structures on the site or into the ground, groundwater, or surface water of the site, and to assess whether such conditions warrant further investigation, such as subsurface soil and groundwater sampling. Such subsurface sampling is often, referred to as a "Phase II" investigation.

During the Phase I investigation, environmental professionals, among other things, research the site history, perform a regulatory database review and conduct a site reconnaissance for the site and surrounding area. Methods to obtain historical information pertaining to the site include the

[1] State of California, Health and Safety Code, Chapter 6.95, Section 25501(o).

review of historical aerial photographs, topographical maps and Sanborn Fire Insurance Maps. A Phase I generally includes a review of potential offsite sources of contamination that may be of potential environmental concern due to their proximity to the project site. A Phase II generally involves subsurface sampling of soil or groundwater at a project site to evaluate the extent of known or suspected contaminant releases

Numerous Phase I and Phase II investigations have been conducted on the project area, including comprehensive Phase I and Phase II investigations by Lowney Associates (Lowney), dated March 2002 and December 2002, respectively.

Setting

Geology and Groundwater

Regional

The project site is within the East Bay Plain groundwater basin bounded by San Pablo Bay to the north, Hayward to the south, San Francisco Bay to the west, and the Hayward Fault to the east.

Five unconsolidated sedimentary formations lie over the bedrock. The deepest is the Alameda Formation which consists of marine and continental deposits of clay, silt, sand, and gravel. Old Bay Mud is deposited on top of the Alameda formation and consists primarily of firm, dark greenish gray clay with varying amounts of sand and fine gravel. This formation forms a fairly continuous aquitard[2] across the region.

Above the Old Bay Mud is the San Antonio formation, which includes the Merritt and Posey sands. The San Antonio formation generally consists of clean sands with interbedded layers of clay and sand. Younger deposits of Bay Mud, overlying the San Antonio formation throughout much of the region, are soft clays deposited in an estuarine/marine environment. Young Bay Mud is a natural marine deposit present throughout most of the Bay that consists of generally uniform, soft, saturated clay and silt with organic material and some sand, deposited in areas of weak tidal currents and low water turbulence, primarily consisting of soft, silty clay. The uppermost layer is fill that was placed on top of the Young Bay Mud (where present) or the San Antonio formation (where Young Bay Mud is absent) along the margins of the Bay since the mid-1800s. (See Section IV.F, Geology, Soils, and Seismicity for more information.)

The East Bay Plain (DWR Groundwater Basin No. 2-9.01) is an important and beneficial groundwater basin underlying the East Bay, extending from Richmond (San Pablo Bay) to Hayward. The alluvial materials that extend westward from the East Bay hills to the edge of the San Francisco Bay constitute the deep waterbearing strata for this groundwater basin, which is identified for municipal, industrial, and agricultural water supply. Historic groundwater levels in the deep aquifer in the basin have varied between -10 and -140 feet mean sea level since the early 1950s (DWR, 2004).

[2] A layer of rock having low permeability that stores groundwater but delays its flow.

Groundwater elevations at the project site tend to be highest towards the northern (or inland) areas with groundwater flow radiating outward toward the shorelines. The shallow groundwater table varies between 3 and 20 feet below ground surface (Lowney, 2002a). The groundwater in the project area is of poor quality and is underlain by relatively impermeable Bay Mud sediments. The thick mud forms a groundwater barrier impeding surface water infiltration to the underlying water sources. Results of groundwater sampling in the shallow groundwater zone (Lowney, 2002a) indicated poor groundwater quality and contamination with total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), metals, and polynuclear aromatic hydrocarbons. (See also Section IV.G, Hydrology and Water Quality for more discussion regarding groundwater.)

Project Site – Historical Use

Historical land uses on and near a site can be important indicators of whether hazardous materials were likely used at or near the site and may be present in the subsurface soil and groundwater at that location. The following paragraphs summarize what is known regarding the past uses of the major parcels that comprise the Oak to Ninth project site. For reference and planning purposes, the project site has generally been divided into eight property areas listed below:

- Ninth Avenue Terminal
- 901 Embarcadero
- Former Seabreeze Yacht Center – 280 6th Avenue
- 6th Avenue Area
- Berkeley-Oakland Ready Mix (formerly Kaiser Sand and Gravel) Parcel
- Pacific Dry Dock Yard II – 321 and 325 Embarcadero
- Cash & Carry
- Silviera and Schultz Parcels

Ninth Avenue Terminal Area

The Ninth Avenue Terminal area is the most studied portion of the project site regarding hazardous materials. The Ninth Avenue Terminal area is also the portion of the project site that is slated for the first phases of development. The area is approximately 25 acres in size, not including the Terminal building's wharf areas built on piers. It lies on the easternmost portion of the project site, west of Clinton Basin and east of Brooklyn Basin. Existing streets (7th, 8th, 9th, and 10th Avenues) and several railroad track spurs extend onto the Ninth Avenue Terminal property.

The Ninth Avenue Terminal area originally consisted mainly of marshlands and tidal flats not connected to the mainland. By 1911, the property was filled to almost its current boundaries. A riprap seawall was built along the southern and western boundaries of the filled area and a concrete bulkhead was present along the southern boundary (Brooklyn Basin). The concrete bulkhead is located inboard of the pile-supported concrete wharves that were constructed as early

as 1933 and wrap around the southern side of the bulkhead. A storm drain outfall into the northern reach of Clinton Basin discharges runoff from a portion of the Embarcadero.

The Port of Oakland has owned most of the Ninth Avenue Terminal property since the 1920s. Previous tenants have included Pacific Lumber Company, Britz Chemical Company, Vic Adelsons' Drayage, Marine Terminals Corporation, Keep-On-Trucking, Chevron Oil Company, Bay City Fuel Company, East Bay Oil Company, AMCO, and Lakeside Nonferrous Metals. Activities conducted by these previous tenants have included lumber handling, manufacturing operations, metals recycling, packing operations, truck dispatching, warehousing, repair of marine vessels and equipment, truck repair, fuel storage and handling, and break-bulk cargo loading. Fuel was historically stored onsite in aboveground storage tanks (ASTs) and underground storage tanks (USTs).

901 Embarcadero Area

From 1954/1955 until recently, the Port has leased the approximately 3 acre 901 Embarcadero area to manufacturers of various compressed gases (i.e., Liquid Carbonic, Praxair, and Alliance Gas Products). Activities conducted on the property were related to the production and bottling of carbon dioxide gas and acetylene gas. Chemicals used on the property were diesel and gasoline fuel (stored in USTs), acetone, carbon dioxide, nitrous oxide, calcium carbide (carbide lime), liquid oxygen, liquid nitrogen, liquid argon, paints, and other miscellaneous chemicals of concern.

Former Seabreeze Yacht Center Area – 280 – 6th Avenue

The former Seabreeze Yacht Center (Seabreeze property) is located to the west of the Ninth Avenue Terminal. Clinton Basin, an inner harbor with tidal wetland areas occupies approximately 6 acres of the 9-acre former Seabreeze property; approximately 1 acre of the property is occupied by a parking lot on the northern side of Clinton Basin, adjacent to Embarcadero. (See Section IV.I, Biological Resources for additional discussion of wetland areas.)

There is one primary historical use of this site and several ancillary uses that may have resulted in releases of chemicals of concern to soil and groundwater. A steam generating power plant was constructed on the northwestern portion of the site in 1909, operated until the late 1950's, and was demolished sometime between 1977 and 1979. Extensive foundation remnants remain in place below grade. Maintenance and storage facilities for boats (prior to 1911) and Oakland Sash and Door Company, a lumber operation, were located on the northeast portion of the site. Seabreeze Yacht Center leased the entire property from the Port of Oakland from 1961 to 1989. Currently, the Seabreeze property is vacant.

6th Avenue Area

The approximately two acres referred to as the 6th Avenue area is bounded by 5th Avenue to the west, Embarcadero to the north, 6th Avenue to the east, and the privately-owned 27,000 square-foot parcel that is not part of the Oak to Ninth Project site to the south. Current site occupants in various buildings include a storage warehouse for the Port of Oakland, a KTVU broadcasting

company storage warehouse, and Jal-Vue Windows Co. The southeastern part of the property, near the foot of Clinton Basin, has been occupied by various businesses, including Steel Sash & Glass Company. Activities conducted by these businesses included crate manufacturing, steel fabricating, and painting. Sanborn maps (historic fire insurance maps) indicate that the oldest building, and longest continuous business on the site, has been a boat manufacturing and repair facility near the corner of 6th Avenue and the Embarcadero.

Berkeley-Oakland Ready Mix (formerly Kaiser Sand and Gravel) Parcel Area

The approximately five-acre Berkeley-Oakland Ready Mix (BORM) area is bounded by the Pacific Dry Dock property (discussed below) to the northwest, Embarcadero to the north, the approximately five-acre area that is not part of the Oak to Ninth Project site (Fifth Avenue Point) to the southeast, and Oakland Estuary to the southwest. Current tenants include Golden State Diesel Marine and Telemedia Communications along the Embarcadero, and a concrete batch operator (BORM) on the remaining areas of the parcel. The BORM parcel was mostly vacant, undeveloped fill in 1911, with only a few buildings present in the northeastern corner of subject property, including a hotel and several, small storage sheds and warehouses. The main portion of the property was later occupied by the Hurley Marine Works Inc., a ship repair yard with associated machine shops, office and warehouse buildings, including dry docks, and boat slips near the waterfront (circa 1947 to 1953). Various tenants subsequently occupied the space of the former shipyard, including a door manufacturer, wire rope and splicing manufacturer, and warehouse operators from 1953 to 1965. After approximately 1965, the central area of the property was cleared. Buildings and remaining shipyard-related structures were demolished and replaced by the facilities of Kaiser Sand and Gravel, Inc. Until the 1970s, the parcel was occupied by Kaiser Sand and Gravel. Kaiser has utilized the central area of the site for concrete mixing, sand and gravel operations.

Pacific Dry Dock Yard II Area – 321 and 325 Embarcadero

The approximately four-acre Pacific Dry Dock area is bounded by Lake Merritt Channel to the west, Embarcadero to the north, Kaiser Sand and Gravel, Inc. property to the east, and the estuary to the south. According to reports reviewed by Lowney (2002a), the property was used for dry dock activities from 1912, after the City of Oakland assumed ownership of the property from a private land owner, to approximately 1942, when the U.S. Navy assumed ownership. The Navy filled the western and southern portions of the site in 1944 and constructed buildings on top of the fill. Reportedly, the fill was created from dredging the bottom of the estuary (Versar, Inc., 1995). In 1948, the City of Oakland regained ownership of the property. Crowley Marine Services, Inc. and its predecessors leased the property from the Port of Oakland from approximately 1951 to 1992, and the dry dock was removed in 1993.

Cash & Carry Area

The approximately 2.73-acre Cash & Carry area is located adjacent to Estuary Park and the Jack London Aquatic Center on the west bank of the Lake Merritt Channel. Historical records indicated that a boiler house, an engine room, steam pumps, lumber storage, and a deep-well pump and water tank, were located on the property at the time of occupancy by the Sunset

Lumber Company (1911). An auto repair shop and an oil house were also located on the property at the time of occupancy by Monarch Lumber Company (1950). Later tenants included Scammel Lumber Company, Cutter Lumber Company, and Standard Wholesale Grocery, Inc.(Lowney, 2002c).

Silviera and Schultz Parcels

These two parcels are located between the former Seabreeze Yacht Center and the Berkeley-Oakland Ready Mix operation. The Silviera is a rectangular parcel approximately 5.5 acres in size. The Schultz property is located adjacent to the Silviera towards the southeast and is approximately 0.5 acres in size. Both properties currently have residential and commercial tenants that include marine-related facilities, metal works, and artist studios. Former tenants of the Silviera parcel have included General Metals Corporation, Hurley Marine Works, M&M Drilling & Shoring Services, Shamrock Marine, In Sight Designs, Corvette Parts & Restoration, Boardworks, Ethan Silva, and 5th Avenue Boatyard. Former tenants of the Schultz property have included Pacific Carbonic Gas Company, and a rubber and boot manufacturing facility. Records indicate that hazardous materials have been handled and stored at these properties throughout its history and have included the use of USTs, ASTs, and a boiler (Lowney, 2002b). The Silviera and Schultz parcels are not part of the project site.

Soil and Groundwater Contamination

Site Investigations

Numerous Phase I and Phase II investigations have been conducted for the project site. The remainder of this section provides a brief overview of the results of these investigations and the identified chemicals of concern (COCs) for each of the property areas identified above. Chemicals of concern are chemicals that have been shown to potentially cause harm to human health or the environment.

Much of the available information on contaminant concentrations at the project site are compared to environmental screening levels (ESLs) published by state and federal agencies, including the Department of Toxic Substances Control (DTSC), the San Francisco Regional Water Quality Control Board (RWQCB) and the United States Environmental Protection Agency (EPA), for evaluation of property proposed for residential use. It is generally accepted that detections of chemicals at concentrations below their paplicable screening levels means that the chemicals pose no significant, long-term threat to human health or the environment. Thus, ESLs are often used to evaluate the potential for risk at a site associated with the presence of hazardous materials in soil and/or groundwater. Such screening levels do not, however, constitute regulatory “cleanup standards.” The presence chemicals at concentrations in excess of their designated ESL does not necessarily indicate that adverse impacts to human health or the environment are occurring; it simply indicates that potential risks may exist and that additional site-specific evaluation is warranted.

Ninth Avenue Terminal Area

Site Investigations

Since 1988, several investigations have been performed on the Ninth Avenue Terminal property area by the Port or on behalf of Port tenants. These investigations included near surface soil samples, removal of USTs and surrounding contaminated soil, verification sampling after UST removals, and installation of ground water monitoring wells. Investigations have included installation of 35 ground water monitoring wells, 74 soil borings, and 42 test pits across the property. Alameda County Environmental Health Department (ACEHD) and/or the RWQCB have overseen these activities. (ACEHD and the RWQCB are discussed below as part of the Regulatory Framework section.)

In 1992, a diesel AST and associated piping located on the property leased by Keep-On-Trucking was determined to be the source of an unauthorized release of diesel into the Oakland Estuary. The storm drain acted as a conduit for migration of the product into the Estuary. Contaminated soils were removed in the vicinity of the AST and monitoring wells were installed to assess the groundwater quality. Floating product was observed on the groundwater table. Interim measures to remove the free product from the groundwater were put into place.

Lowney conducted environmental investigations at the Ninth Avenue Terminal on behalf of the project sponsor of the Oak to Ninth Project, Oakland Harbor Partners (OHP) in 2002 (Lowney, 2002a) The investigations included the completion of 27 borings (T-1 through T-27) to approximate depths between 8 and 17 feet. Lowney also collected soil and soil gas samples. Currently, the Port of Oakland conducts quarterly groundwater monitoring at the site under the supervision of the ACEHD.

In addition to the soil and groundwater investigations, the Port of Oakland has previously conducted asbestos surveys in Port owned buildings in the project area for tenant notification purposes. The results of the surveys indicate that asbestos was detected or assumed in various friable and non-friable materials including transite pipe, floor tile and adhesive, duct tape, drywall and joint compound, and wall texturing compound (Heinze, 2005).

Geology and Groundwater

Fill and Bay Mud are the two primary stratigraphic units that underlie the Ninth Avenue Terminal area. The fill soils beneath the Ninth Avenue Terminal extend up to as much as 25 feet below ground surface (bgs), but most of the site fills range from 2 to 7 feet bgs. The fill at the Ninth Avenue Terminal is underlain by up to almost 40 feet of Bay Mud (TRI, 2002), a soft, highly compressible, highly organic, silty clay. Beneath the Bay Mud is an alluvial soil formation, consisting of silts and clays and interbedded with silts and sands.

Two hydrologic units are defined beneath the Ninth Avenue Terminal: a shallow unconfined water bearing zone in the fill and a deeper, confined, water bearing zone below the Bay Mud.

Shallow groundwater is encountered at the Ninth Avenue Terminal, on average, approximately 5 feet bgs and range from approximately 1 foot bgs to 8 feet bgs. The majority of the area of the Ninth Avenue Terminal is currently paved, which limits surface water infiltration.

In general, local gradients in the shallow fill zone are complex and are likely influenced by vertical gradients, tidal fluctuations, and the presence of preferential pathways (*e.g.*, zones of more permeable material and major utility lines); however, shallow groundwater appears, under existing site conditions, to follow a radial flow pattern away from the recharge mound at the center of the Ninth Avenue Terminal property toward the edges of the Ninth Avenue Terminal.

The Bay Mud is approximately 30 feet thick and overlies the interbedded clay, silt, and alluvial silts and sands that extend to at least 120 feet bgs (the maximum cone penetrometer test (CPT) depth). Water-bearing zones are encountered in this deeper unit, but they appear to be of limited extent. The predominant, regional direction of the groundwater gradient follows the topography down towards the Oakland Estuary (Lowney, 2002a).

Chemicals of Concern

The potential chemicals of concern associated with the Ninth Avenue Terminal are discussed below.

- Total petroleum hydrocarbons as diesel (TPHd) and motor oil (TPHmo) have been identified in soils over a large portion of the western area of the Ninth Avenue Terminal. Total petroleum hydrocarbons as gasoline (TPHg) has been identified to a more limited extent.

- Metals (primarily lead and copper) are present in localized hot spots.

- Polycyclic aromatic hydrocarbons (PAHs) are present in localized areas, typically associated with fuel releases.

- Polychlorinated biphenyls (PCBs) and pesticides have been detected in localized areas.

- Volatile organic compounds (VOCs), including trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), methylene chloride, and other chlorinated and non-chlorinated VOCs are present in a limited area in the central portion of the Ninth Avenue Terminal (Lowney, 2002a).

Chemicals of concern identified in soil vapors include TPH related compounds in limited areas, VOCs in limited areas, and methane and hydrogen sulfide (H_2S) over a large portion of the Ninth Avenue Terminal. The methane is likely present due to both degradation of hydrocarbons in soils and groundwater and naturally occurring sources including the Bay Mud. Significant methane is present in soil vapor in the area of the former ASTs on the western portion of the Ninth Avenue Terminal. H_2S is present likely due to naturally occurring sources such as organic rich muds and former shoreline areas that were filled.

The chemicals detected in shallow groundwater can be summarized as follows:

- TPH as diesel/motor oil is present in a large area on the western portion of the Ninth Avenue Terminal. Free phase diesel product has been observed on the groundwater table in certain monitoring wells (Fugro, 2004). TPH as gasoline (TPHg) is present to a more limited extent.

- VOCs (TCE, cis-1,2-DCE, methylene chloride, and other VOCs) have been present in a limited area in the central portion of the Ninth Avenue Terminal. Groundwater sampling conducted in the fall of 2004 did not indicate the presence of TCE or methylene chloride.

- Metals (barium, copper, and lead) have historically been present in isolated areas and more recent sampling has shown the presence of arsenic and barium in one of the onsite wells (Fugro, 2004).

- Semi-volatile organic compounds (SVOCs), PAHs, and pesticides are present in localized areas.

One groundwater monitoring well has been installed in the deeper confined groundwater zone. Analytical results from sampling conducted out of this well has shown no detections of the identified COCs in the shallow groundwater above (James, 2005).

In addition, Lowney conducted sediment sampling along the shoreline of the Terminal. A summary of the significant chemicals of concern that were detected are presented below.

- Metals exceeding residential ESLs and likely exceeding soluble hazardous waste concentrations were detected.

- PCBs were detected at concentrations that exceed residential ESLs.

- PAHs exceeding residential ESLs were detected.

901 Embarcadero Area

Investigations have been conducted on the 901 Embarcadero property by consultants employed by Praxair, a previous tenant at the property and a manufacturer of compressed gases. Based on the Lowney summary (Draft Remediation Investigation), investigations have included soil sampling and the installation and sampling of groundwater monitoring wells (Lowney,2002a). Available results from prior soil and groundwater investigations indicate the presence of TPHd, TPHg, and metals (mercury, copper, and manganese) exceeding applicable screening levels. In addition, there may be areas of high pH due to releases of carbide lime.

Praxair conducted demolition and closure activities in consultation with the Port and with oversight from ACEHD in late 2003. Additional environmental investigation and remediation was performed as part of these closure activities. The 901 Embarcadero property is currently awaiting closure of environmental issues by ACEHD.

Former Seabreeze Yacht Center Area – 280 Sixth Avenue

Environmental investigations have been conducted at the Seabreeze property since 1989. Regulatory oversight has been provided primarily by the ACEHD. Previous investigations performed by others on the Seabreeze property identified several environmental concerns. Lowney conducted an investigation on the Seabreeze property that included the installation and sampling of ten borings to approximate depths from 8 to 26 feet, collection of grab groundwater samples, collection of soil gas samples, and collection of twelve shoreline sediment samples. TPH-impacted soil and groundwater were detected in several areas of the property, including the Clinton Basin shoreline, areas surrounding the former power plant foundation, and areas surrounding the former intake and discharge tunnels (which have since been grouted and abandoned in place (James, 2005))**.** Isolated lead- and copper-impacted soil was detected. Lead and Copper in concentrations exceeding applicable screening levels were detected in shallow soils (0 to 3 feet), deeper soils (3 to 6 feet), and shoreline sediment samples (Lowney, 2002a). Copper was detected in groundwater samples in the central portion of the property.

A wetlands mitigation project is in progress on the southeast portion of the Seabreeze property near the former location of the above ground storage tank. The Port is conducting this wetlands project. Currently, the bulk of the mitigation project has been completed and is being monitored for a one year period.

The Port of Oakland has conducted some preliminary sampling and analysis of sediment within the Clinton Basin (Moffatt & Nichol, 2005). Based on this limited sampling, it was determined that the sediment within the basin if removed, may not be suitable for placement in San Francisco Bay, but some of which could potentially be used as a wetland foundation in marshland areas.

6th Avenue Area

The only investigation data available for properties in this area were the results of the Phase II investigations conducted by Lowney in 2002 on behalf of OHP. The Lowney investigations included six borings to approximate depths of 8 to 12 feet bgs, grab groundwater sampling, and soil vapor sampling. The results of these investigations indicate that lead and copper were detected in shallow soils (0 to 3 feet, bgs) at concentrations exceeding applicable screening levels and lead was detected from one sample that indicated the presence of likely soluble hazardous waste concentrations (Lowney, 2002a). PAHs were detected at concentrations of concern from the northeast corner near Embarcadero. TPH was detected at a concentration of concern in one shallow soil sample (0 to 4 feet, bgs) from the northeast corner near Embarcadero. Levels of methane gas were detected exceeding the lower explosive limit ("LEL") of 5 percent in the southwestern corner, eastern area, and north corner of the 6th Avenue area.

Berkeley-Oakland Ready Mix (formerly Kaiser Sand and Gravel) Parcel Area

Lowney conducted investigations in the Berkeley-Oakland Ready Mix (BORM) Parcel area in 2002 on behalf of OHP. The Lowney investigations included 12 borings (K-7 through K-18) to approximate depths of 8 to 20 feet, bgs. Borings were drilled on the Golden State Diesel Marine property and on the accessible portions of the BORM property.

The results of these investigations indicate that lead and copper were detected in shallow soils (0 to 3 feet, bgs) at concentrations of concern in an area on the Golden State Diesel Marine property and in an area on the southeast portion of the parcel. PCBs were detected in shallow soils (0 to 2 feet, bgs) at concentrations of concern in one sample in the northeast area of the parcel. PAHs were detected in shallow soils (0 to 3 feet, bgs) at concentrations of concern in one sample from the central area of the parcel.

Pacific Dry Dock Yard II Area – 321 and 325 Embarcadero

Previous investigations performed by others on the Pacific Dry Dock parcel (Dry Dock) identified several potential environmental concerns. Lowney conducted an investigation on behalf of OHP in 2002. Lowney installed, sampled, and logged 17 borings to approximate depths of 4 to 16 feet. In addition, Lowney collected five shoreline sediment samples.

Four USTs were removed from the Dry Dock property in the 1990's. According to the available information, TPHd and PAHs were found at concentrations of concern around former locations of several of the USTs.

The results of the prior environmental investigations indicate that lead and copper were detected in shallow soils (0 to 3 feet, bgs) at concentrations of concern near a former UST and at the northern side of the former warehouse on the northeast corner of the property. PCBs were detected in shallow soils (0 to 2 feet, bgs) at concentrations of concern in the central portion of the parcel and along the northeast shoreline of the Lake Merritt Channel. PAHs were detected in shallow soils (0 to 3 feet, bgs) at concentrations of concern in one sample from the northeast corner of the parcel. PAHs were detected in soils (3 to 6 feet, bgs) at concentrations of concern in areas around the former USTs. TPH-impacted soil (0 to 4 feet, bgs) was detected at concentrations of concern in areas near the northeast corner of the parcel and in the central portion of the parcel. TPH-impacted soil was detected in soils (4 to 7 feet, bgs) at concentrations of concern around the former UST GF-12 and in areas on the northern portion of the parcel. TPH-impacted groundwater was encountered along the southern side of the parcel near the shoreline and was historically detected on the northern portion of the parcel. Chlorobenzene-impacted ground water (up to 2,200 parts-per-billion (ppb)) was detected on the northern portion of the parcel.

In August 1996, under an abatement order by the RWQCB, Crowley Marine Services (as the identified responsible party) removed approximately 720 tons of residual sandblast grit from three areas in the tidal zones. According to the *Sandblast Grit Removal Project Report*, dated February 1998, prepared by The Gauntlett Group, LLC for Crowley, the RWQCB approved the removal activities upon visual inspection.

Cash & Carry Area

Lowney conducted investigations in 2002 that included the installation and logging of 14 borings to approximate depths of 5 to 20 feet, bgs, collection of grab groundwater samples, collection of soil gas samples, and performance of a geophysical survey (Lowney, 2002a). Boring locations

were selected to address potential areas of concern identified during Lowney's Phase I environmental site assessment and during previous soil quality evaluation around the Jack London Aquatic Center.

The results of the Lowney environmental investigations indicate that lead and copper were detected in soils (0 to 3 feet bgs) at concentrations of concern. PAHs were detected in shallow (0 to 2 feet bgs) and deeper soils (3 to 6 feet bgs) at concentrations of concern. TPH-impacted soils were identified in several areas. TPH-impacted groundwater was detected with floating hydrocarbon product (FHP). Lead was detected in groundwater at concentrations of concern. Concentrations of methane gas were detected exceeding the LEL of 5 percent. Two geophysical anomalies, possible USTs, were identified during geophysical survey.

Structural and Building Components

Asbestos

Asbestos is a naturally-occurring fibrous material that was used as a fireproofing and insulating agent in building construction before such uses were banned by the Environmental Protection Agency (EPA) in the 1970's, although some nonfriable[3] use of asbestos in roofing materials still exists. The presence of asbestos can be found in such materials as ducting insulation, wallboard, shingles, ceiling tiles, floor tiles, insulation, plaster, floor backing, and many other building materials. Asbestos and asbestos-containing materials (ASMs) are considered as both a hazardous air pollutant and as a human health hazard. The risk to human health is from inhalation of air born asbestos which commonly occurs when ASMs are disturbed during such activities as demolition and renovation. Due to the age of the buildings on the project site, it is very likely that ACMs are present.

Polychlorinated Biphenyls (PCBs)

PCBs are synthetic organic oils that were historically used in many types of electrical equipment, including transformers and capacitors, primarily as electrical insulators. Manufacture of PCBs was halted in 1977 due to the determination that PCBs build up in the environment and can cause adverse human health effects. PCBs bind strongly to soil and do not break down readily but rather remain in the environment for long periods of time.

PCBs were detected in shallow soil samples in the Ninth Avenue Terminal area, the Kaiser area, the Former Seabreeze Yacht Center area, and the Pacific Dry Dock area. The detections of PCBs in the subsurface indicates that PCBs may have been stored at the site and could potentially be encountered during demolition activities.

Lead and Lead-Based Paint

The presence of lead in soils above natural background levels can be a common occurrence in areas that were created by fill and in former industrial areas. Lead concentrations can also be

[3] Nonfriable asbestos refers to ACMs that contain asbestos fibers in a solid matrix that does not allow for them to be easily released.

elevated in fill materials similar to those that underlie portions of the project site because fill can originate from building and industrial rubble containing or affected by sources of lead such as piping, coatings, and other construction materials. Lead-based paint was common prior to 1978. The project site contains buildings with painted surfaces, such as drywall, ceilings, and exterior stucco, which could contain lead-based paint (LBP). It should also be noted that areas located adjacent to busy roadways or freeways can contain elevated lead in soils from times when lead additives were common in gasoline.

Underground Storage Tanks

As discussed above, the project site has had a long history of UST use. While some of these USTs have been removed and investigations of the potential impact to soil and groundwater have either been completed or are in progress, there is a potential for encountering previously unidentified USTs during construction activities. Commercial and industrial activities on the project site date back to times when record keeping for such matters as locations of USTs and UST removal practices (historically, it was not uncommon to abandon tanks in place) were not performed to today's standards. In addition, the geophysical survey conducted in 2002 by Lowney Associates indicated the presence of suspected USTs.

Regulatory Framework

Hazardous Materials and Waste Handling

The California Environmental Protection Agency (Cal EPA), Department of Toxic Substances Control (DTSC) regulates the generation, transportation, treatment, storage, and disposal of hazardous waste. State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. These laws require hazardous materials users to prepare written plans, such as Hazard Communication Plans and Hazardous Materials Business Plans. Laws and regulations require hazardous materials users to store these materials appropriately and to train employees to manage them safely. A number of agencies participate in enforcing hazardous materials management requirements, including DTSC, the RWQCB and the ACDEH.

Throughout Alameda County, a Hazardous Materials Management Plan must be prepared and submitted to the County by businesses that use or store certain quantities of hazardous materials. The Federal Resource Conservation and Recovery Act of 1976 (RCRA) established a "cradle-to-grave" regulatory program for governing the generation, transportation, treatment, storage and disposal of hazardous waste. Under RCRA, individual states may implement their own hazardous waste programs in lieu of RCRA as long as the state program is at least as stringent as Federal RCRA requirements. In California, the DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous material waste. The hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; dictate the management of hazardous waste; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in landfills.

Hazardous Materials Transportation

The United States Department of Transportation regulates hazardous materials transportation on all interstate roads. Within California, the state agencies with primary responsibility for enforcing federal and state regulations and for responding to transportation emergencies are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications. Although special requirements apply to transporting hazardous materials, requirements for transporting hazardous waste are more stringent, and hazardous waste haulers must be licensed to transport hazardous waste on public roads.

Soil and Groundwater Contamination

In Alameda County, remediation of contaminated sites is generally performed under the oversight of DTSC, the RWQCB, and/or the ACDEH. At sites where contamination is suspected or known to occur, the project sponsor is required to perform a site investigation and draw up a remediation plan, if necessary. For typical development projects, site remediation is completed either before or during the construction phase of the project.

The project includes substantial environmental cleanup at the project site. The cleanup will be performed under the oversight of a lead oversight agency. DTSC is currently anticipated to serve as the lead agency pursuant to California Health & Safety Code 25395.60 et seq., the California Land Reuse and Revitalization Act (CLRRA). Under CLLRA, a project proponent, would enter into a contractual agreement with DTSC to complete an environmental assessment of the project site and to clean up the property in accordance with all applicable laws and regulations.

Under CLLRA, the environmental assessment of the site must include:

a) characterization of the hazardous materials released or threatened to be released at or from the site;

b) available information about the site;

c) a risk assessment, if appropriate, that evaluates the risk posed by any hazardous materials released or threatened to be released at or from the site;

d) information regarding "reasonably anticipated foreseeable uses of the site based on current and projected land use and zoning designations"; and

e) if the release has impacted groundwater, "reasonable characterization of underlying groundwater," including present and anticipated beneficial uses of the water.

For cleanup, CLLRA requires that the project proponent submit to the lead agency and agree to implement a response plan to clean up the property. The response plan must include:

a) identification of the releases or threatened releases at the site;

b) documentation that the plan is based on adequate characterization of the site;

c) identification of the response plan's objectives and the proposed remedy;

d) identification of the current and reasonably anticipated future land use of the site, including confirmation regarding such projections city or county in which the site it located;

e) a description of activities that will be used to control any endangerment that may occur during the response action;

f) a description of any land use control that is part of the response action;

g) a description of wastes other than hazardous materials at the site and how such wastes will be managed during the response action;

h) provisions for the removal of containment vessels and other sources of contamination, including soil and free product, that cause an unreasonable risk;

i) provisions for the agency to require further response actions based on the discovery of hazardous materials that pose an unreasonable risk to human health or the environment during the response action or subsequent development of the site; and

j) any other information required by the lead agency. Prior to approval by the lead agency or implementation by the project proponent, CLRRA further requires that, the response plan be subject to meaningful public notice and comment to permit the community and other state and local agencies to obtain information about and express their views regarding the proposed cleanup.

Site remediation or development may also be subject to regulation by other agencies. For example, if dewatering of a hazardous waste site were required during construction, subsequent discharge to the sewer system could require a permit from the East Bay Municipal Utility District (EBMUD), and discharge to the storm water collection system could require an NPDES permit from the RWQCB.

Worker Safety

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the work place. The California Division of Occupational Safety and Health (Cal OSHA) and the federal Occupational Safety and Health Administration are the agencies responsible for assuring worker safety in the workplace.

Cal OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices. At sites known to be contaminated, a Site Safety Plan must be prepared to protect workers. The Site Safety Plan establishes policies and procedures to protect workers and the public from exposure to potential hazards at the contaminated site.

Emergency Response

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local government and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services (OES), which coordinates the responses of other agencies, including Cal EPA, CHP, the Department of Fish and Game, the RWQCB, and the local fire department. The Oakland Fire Department provides first response capabilities, if needed, for hazardous materials emergencies within the project area.

Structural and Building Components

Asbestos

Similar to federal laws, state laws and regulations also pertain to building materials containing asbestos. Inhalation of airborne fibers is the primary mode of asbestos entry into the body, making friable (easily crumbled) materials the greatest health threat. These existing laws and regulations prohibit emissions of asbestos from asbestos-related manufacturing, demolition, or construction activities; require medical examinations and monitoring of employees engaged in activities that could disturb asbestos; specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers; and require notice to federal and local governmental agencies prior to beginning renovation or demolition that could disturb asbestos.

Polychlorinated Biphenyls (PCBs)

PCBs are organic oils that were formerly placed in many types of electrical equipment, including transformers and capacitors, primarily as electrical insulators. Years after widespread and commonplace installation, it was discovered that exposure to PCBs may cause various health effects, and that PCBs are highly persistent in the environment.

In 1979, the U.S. EPA banned the use of PCBs in most new electrical equipment and began a program to phase out certain existing PCB-containing equipment. The use and management of PCBs in electrical equipment is regulated pursuant to the Toxic Substances Control Act, 15 U.S.C. § 2601 *et seq*.(TSCA). TSCA and its implementing. regulations generally require labeling and periodic inspection of certain types of PCB equipment and set forth detailed safeguards to be followed in disposal of such items.

Lead and Lead-Based Paint

Pursuant to California Code of Regulations, Title 22 Section 66261.24, waste soil containing lead is classified as hazardous if the lead exceeds a total concentration of 1,000 parts per million (ppm) and a soluble concentration of 5 ppm.

Underground Storage Tanks

State laws governing USTs specify requirements for permitting, monitoring, closure, and cleanup. Regulations set forth construction and monitoring standards for existing tanks, release reporting

requirements, and closure requirements. Generally speaking, the ACEHD is the local agency designated to permit and inspect USTs and to implement applicable regulations. The ACDEH Local Oversight Program and the Oakland Fire Department also have regulatory authority for removal of USTs. A closure plan for each UST to be removed must be prepared and submitted to the County prior to tank removal. Upon approval of the UST closure plan by the County, the Oakland Fire Department would issue a permit for removal. The Oakland Fire Department Hazardous Materials Unit oversees the removal of USTs and the subsequent collection of subsurface soil samples beneath a removed UST.

Hazardous Materials Impacts Discussion

Introduction

Hazardous materials and hazardous wastes, if mishandled, could pose risks to the public. Potential health and safety impacts can stem from interactions of construction workers, the public and/or future occupants with hazardous materials and wastes encountered or generated during project construction activities or project operations.

Significance Criteria

A hazardous materials impact would be considered significant if it would result in any of the following, which are adapted from CEQA Guidelines, Appendix G, and the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; or
- Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Local Plans and Policies

Oakland General Plan policies and other applicable plans and policies that pertain to hazardous materials and related effects, and that apply to the project, are listed in **Appendix F**. Key policies are identified and discussed in Section IV.A, Land Use, Plans, and Policies. General Plan policies

that are also significance criteria or contain a regulatory threshold which the project must meet are addressed in this section.

Approach to the Analysis

This impact analysis focused on potential effects of hazardous materials or waste associated with the project site. The evaluation was made in light of project plans, current conditions at the project site, applicable regulations and guidelines, and previous environmental site assessments.

Project Construction Impacts

Impact H.1: Disturbance and release of contaminated soil during remediation, demolition and construction phases of the project, or transportation of excavated material, contaminated groundwater or dredged sediment could expose construction workers, the public, or the environment to adverse conditions related to hazardous materials handling. (Potentially Significant)

***Contaminated Soils and Groundwater*:** Excavation for installation of project-related utilities, building footings, and regrading would occur at the project site. Soil disturbance at the project site during construction could further disperse existing contamination into the environment and expose construction workers or the public to contaminants.

If significant levels of hazardous materials in excavated soils should go undetected, health and safety risks to workers and the public could occur. Exposure to hazardous materials could cause various short-term and/or long-term health effects. Possible health effects could be acute (immediate, or of short-term severity), chronic (long-term, recurring, or resulting from repeated exposure), or both. Acute effects, often resulting from a single exposure, could result in a range of effects from minor to major, such as nausea, vomiting, headache, dizziness, or burns. Chronic exposure could result in systemic damage or damage to organs, such as the lungs, liver, or kidneys. Health effects would be specific to each hazardous material.

The results of the soil and groundwater investigations indicate that existing soil and groundwater quality at portions of the project site has the potential to cause risks to human health and ecological receptors. Concentrations of a variety of constituents including petroleum hydrocarbons, metals (including lead), PCBs, PAHs, VOCs, methane gas, and arsenic, were above either the ESLs[4] developed and assembled by the RWQCB, the City of Oakland-specific ESLs, or STLC and TTLC levels established by DTSC for hazardous waste classification (Lowney, 2002a).

Contaminated soil requiring offsite disposal could be generated from the project either as part of excavation activities associated with the construction or potentially as part of remediation activities (discussed below).

[4] ESLs are used to assess exposures of contaminants to buildings and occupants. Risk factors may be linked to an increase risk of an adverse health effect from an adverse building condition. Formerly known as Risk-Based Screening Levels (RBSLs).

Dredging. The proposed project includes providing adequate water depth for berthing within the Clinton Basin. Based on a 2002 hydrograph survey, the project would require removal of approximately 20,000 cubic yards of sediment. Preliminary sampling indicates that some of the sediment would be classified as a hazardous waste and require disposal at a Class I hazardous waste facility.

Grading and Utilities. Given the contaminated soil and groundwater conditions on the project site, proposed street grades would be elevated approximately three feet above existing grade to allow for excavation and placement of EBMUD water utility lines above the groundwater table. Building pads would be approximately 1.0 to 1.5 feet above the finished street elevations to allow building pads to drain to streets. New open spaces will generally vary from existing grades to approximately 5 feet above existing grades. EBMUD indicates that it will not install pipeline in contaminated soil or groundwater that meets hazardous waste criteria, that may be hazardous to the health and safety of construction or maintenance personnel, or that exceed specified limits for discharge to sanitary sewer systems of treatment plants. As EBMUD requires, the project sponsor would submit all necessary soil and groundwater quality reports and remediation plans to EBMUD prior to EBMUD's design or installation of pipeline on the project site. Additionally, since removal of all contaminated soils prior to construction activities would be prohibitive, the project proposes to excavate a utility trench for EBMUD utilities that will be backfilled with clean, imported material. The trench will allow required separation between the domestic and reclaimed water lines and laterals for fire hydrants and building services. Other deeper gravity utility lines (not regulated by EBMUD) may extend into Bay Mud and below groundwater level, with each such line installed with trench cutoff walls to control migration of potentially contaminated groundwater into the permeable backfill around utility pipes.

Mitigation Measure H.1a: The applicant shall retain a qualified environmental consulting firm to prepare a cleanup plan for the contaminated soil and groundwater which would be based on a comprehensive remedial investigation report for the project area. This plan shall be approved by the appropriate regulatory agencies which may include but not be limited to the DTSC and the RWQCB. The plan shall also include the preparation of a health and safety plan to protect the workers and the public during all remediation and construction activities proposed. Following agency approval of the plan, remediation and removal work shall be conducted according to all applicable OSHA worker safety regulations. Remediation activities at the site may include, without limitation, closure or removal of subsurface structures, excavation and disposal of contaminated materials, natural and enhanced bioremediation of soil and groundwater, restoration and improvement of shoreline structures, limited dredging of sediments, and institutional and engineering controls to prevent exposure to and migration of contaminated materials. Throughout the course of remediation and construction activities, the handling, transport, and storage of any hazardous waste or potentially hazardous waste shall be conducted appropriate to all local and state agency protocols.

Mitigation Measure H.1b: Prior to offsite disposal, the project applicant shall adequately profile excavated soils to establish the proper classification of the soils for hazardous or

non-hazardous waste disposal. The soils shall be handled, stored and transported according to all applicable regulations for the appropriate classification.

Mitigation Measure H.1c: Soil generated by construction activities shall be stockpiled onsite and sampled prior to reuse or disposal at an appropriate facility. Any reuse of soils shall be conducted by prior approval from the appropriate state oversight agency.

Mitigation Measure H.1d: Groundwater generated during construction dewatering shall be contained and transported offsite for disposal at an appropriate facility, or treated, if necessary, prior to discharge into the sanitary sewer to levels acceptable to the East Bay Municipal Utilities District.

Mitigation Measure H.1.e: Prior to dredging any materials from the Clinton Basin, the project applicant shall retain a qualified environmental consulting firm to prepare a Sampling and Analysis Plan (SAP) as described by the Corps of Engineers (PN 99-4). The SAP shall be approved by the Dredged Material Management Office (DMMO) and shall include a proposal for a disposal location and a disposal alternatives analysis. Following agency approval of the plan, sediment removal work shall be conducted in accordance with all applicable OSHA worker safety regulations. In addition, the handling, transport, and storage of any hazardous waste or potentially hazardous waste shall be conducted consistent with all local and state agency protocols.

Significance after Mitigation: Less than Significant.

Impact H.2: Disturbance and release of hazardous structural and building components (i.e. asbestos, lead, PCBs, USTs, and ASTs) during demolition and construction phases of the project or transport of these materials could expose construction workers, the public, or the environment to adverse conditions related to hazardous materials handling. (Potentially Significant)

As discussed above, some of the existing buildings at the project site may contain asbestos, lead-based paint, and/or PCBs.

Asbestos

Asbestos could be encountered during structural demolition of the existing buildings and may require containment and disposal. A non-destructive survey for ACMs was completed for the Port of Oakland owned buildings in the project area for the purposes of tenant notification. A thorough ACM survey would have to be done for destruction purposes, however asbestos was detected in various building materials. Affected buildings would need appropriate abatement of identified asbestos prior to demolition or renovation. Asbestos-containing material is regulated both as a hazardous air pollutant under the Clean Air Act and as a potential worker safety hazard under the authority of Cal-OSHA. The renovation or demolition of buildings containing asbestos would require retaining contractors who are licensed to conduct asbestos abatement work and notifying

the Bay Area Air Quality Management District (BAAQMD) ten days prior to initiating construction and demolition activities.

Section 19827.5 of the California Health and Safety Code, adopted January 1, 1991, requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. The BAAQMD is vested by the California legislature with authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement, and is to be notified ten days in advance of any proposed demolition or abatement work.

Potential exposure to asbestos, and its related chronic adverse health effects, is possible throughout demolition and renovation if materials that contain asbestos are present during operations.

Lead and Lead-based Paint

Lead-based paint could be separated from building materials during the demolition process. Separated paint can be classified as a hazardous waste if the lead content exceeds 1,000 parts per million and would need to be disposed of accordingly. Additionally, lead-based paint chips can pose a hazard to workers and adjacent sensitive land uses. Both the Federal and California OSHAs regulate all worker exposure during construction activities that impact lead-based paint. Interim Final Rule found in 29 CFR Part 1926.62 covers construction work where employees may be exposed to lead during such activities as demolitions, removal, surface preparation for re-painting, renovation, clean up and routine maintenance. The OSHA-specified method of compliance includes respiratory protection, protective clothing, housekeeping, hygiene facilities, medical surveillance, training, etc.

Demolition and renovation work could create exposure to lead-based paint present in building structures. Dust generating activities that include removal of walls, sanding, welding, and material disposal could produce airborne quantities of lead-laden material. These materials could expose workers and persons in close proximity, including occupants of offsite locations. The project site contains buildings with painted surfaces, such as drywall, ceilings, and exterior stucco, which could contain lead-based paint (LBP). The project site is also underlain by artificial fill, which could contain lead. This is a significant impact of the project.

PCB-containing Materials

The presence of PCB-containing materials may be present within the existing structures on the project site. The detection of significant concentrations of PCBs indicates the former use and/or storage of PCBs at the project site. Demolition of these structures could disturb these materials and expose workers or the public to adverse effects. Similar to the concerns of ACM, an initial survey to determine the presence of PCBs would need to be conducted for the project site followed by implementation of appropriate measures to handle any materials with PCBs.

Underground Storage Tanks

There are both documented USTs and physical evidence indicating the potential presence of undocumented USTs on the project site. Prior to UST regulations that were established in the 1980's, USTs were commonly installed without any documented record. Therefore, additional undocumented USTs may be encountered during demolition and grading activities. If encountered, an older UST could expose the workers or public to adverse effects. This would be a significant impact.

The following mitigation measures address the potential impacts for the various structural and building components described above.

Mitigation Measure H.2a: A pre-demolition ACM survey shall be performed by a state-certified asbestos consultant prior to demolition of any of the structures located on the project site. The survey shall include sampling and analysis of suspected ACMs. Abatement of known or suspected ACMs shall occur prior to demolition or construction activities that would disturb those materials. Pursuant to an asbestos abatement plan developed by a state-certified asbestos consultant and approved by the City, all ACMs shall be removed and appropriately disposed of by a state certified asbestos contractor.

Mitigation Measure H.2b: The project applicant shall implement a lead-based paint abatement plan, prepared by a qualified consultant, which shall include the following components:

- **A pre-demolition LBP survey for all structures proposed for demolition at the project site. The survey shall include sampling and identification of suspected materials containing LBP.**
- **Development of an abatement specification plan which shall be based on survey work and detail proposed abatement work areas and procedures.**
- **A site Health and Safety Plan,.**
- **Containment of all abatement work areas to prohibit offsite migration of paint chip debris.**
- **Removal of all peeling and stratified lead-based paint on building surfaces and on non-building surfaces to the degree necessary to safely and properly complete demolition activities per the recommendations of the survey. The demolition contractor shall be identified as responsible for properly containing and disposing of intact lead-based paint on all equipment to be cut and/or removed during the demolition.**
- **Appropriately remove paint chips by vacuum or other approved method.**
- **Collection, segregation, and profiling waste for disposal determination.**

- **Appropriate disposal of all hazardous and non-hazardous waste.**

- **Mitigation Measure H.2c: A pre-demolition PCB survey shall be performed prior to demolition of any of the structures located on the project site. The survey shall include sampling and identification of suspected PCBs. Abatement of known or suspected PCBs shall occur prior to demolition or construction activities that would disturb those materials. In the event that electrical equipment or other PCB-containing materials are identified prior to demolition activities they shall be removed, and shall be disposed of by a licensed transportation and disposal contractor at an appropriate hazardous waste facility.**

- **Mitigation Measure H.2d: When known or previously unidentified USTs are encountered during construction, construction in the immediate area shall cease until the UST is removed with oversight from the City of Oakland Fire Department Hazardous Materials Unit or other applicable oversight agency. If there is any indication that the tank has leaked, then the lead agency shall direct any appropriate remediation measures. Removal of the UST shall include, to the extent deemed necessary by the lead agency, over-excavation and disposal of any impacted soil that may be associated with such tanks to a degree satisfactory to the oversight agency.**

Significance after Mitigation: Less than Significant.

Impact H.3: Hazardous materials used onsite during construction activities (i.e. solvents) could be released to the environment through improper handling or storage. (Potentially Significant)

Construction activities would require the use of certain hazardous materials such as fuels, oils, solvents, and glues. Inadvertent release of large quantities of these materials into the environment could adversely impact soil, surface waters, or groundwater quality. However, the onsite storage and/or use of quantities of materials capable of significantly impacting soil and groundwater are not typically required for a project of the proposed size and type.

Mitigation Measure H.3: The use of construction best management practices shall be implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following:

- **Follow manufacturer's recommendations on use, storage and disposal of chemical products used in construction;**

- **Avoid overtopping construction equipment fuel gas tanks;**

- **During routine maintenance of construction equipment, properly contain and remove grease and oils.**

- **Properly dispose of discarded containers of fuels and other chemicals.**

Significance after Mitigation: Less than Significant

Project Operations Impacts

Impact H.4: Project operations would generate and involve the handling of general commercial/retail and household hazardous waste in small quantities, and therefore would not cause an adverse effect on the environment. (Less than Significant)

The project proposes to redevelop a maritime and industrial area on the Oakland Estuary into a mixed-use neighborhood with residential, commercial/retail, open space, and marina uses. The majority of existing commercial and industrial uses in the project area would be demolished to accommodate the project. Commercial/retail and building support activities would use hazardous chemicals common in other commercial/retail and support settings. These chemicals would include familiar materials such as toners, correction fluid, paints, lubricants, kitchen and restroom cleaners, pesticides and other maintenance materials. These common consumer products would be used for the same purposes as in any commercial/retail or support setting. Because general commercial/retail and household hazardous materials are generally handled and transported in small quantities and because the health effects associated with them are generally not as serious as industrial uses, implementation of the project would not cause an adverse effect on the environment with respect to the use, storage, or disposal of general office and household hazardous materials generated from proposed office and support building uses. In fact, in general the project would likely result in an overall decrease in the use, storage and disposal of hazardous materials and wastes and therefore the impact would be considered less than significant.

Mitigation: None Required.

Impact H.5: The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

The project site is not within a quarter mile of any school. La Escuelita Elementary School is located at 1100 3rd Avenue, two-thirds of a mile to the north from the project site. Franklin Elementary School is located at 915 Foothill Boulevard, approximately 1.4 miles northeast of the project site. Oakland High School located at 1023 MacArthur Boulevard, approximately two miles from the project site. Laney College campus is about one-half mile to the northwest of the project site. Therefore, the operational practices of the project would not impact any nearby schools.

Mitigation: None Required.

Impact H.6: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant)

The project would result in an increased resident, employee and visitor population in the project area. Potential project impacts related to emergency vehicle access is discussed in Section IV.B, Traffic, Transportation, Circulation and Parking. Potential impacts related the provision of emergency police and fire (including hazmat) services to the project site is discussed in Section IV.L, Public Services and Recreation. Overall, the project would not impede an emergency access route and would continue to maintain the existing city grid system. Additionally, the project would not result in permanent road closures, and therefore, would not physically interfere with emergency response or evacuation plans. In addition, construction activities that would result in temporary road closures would include traffic control plans to ensure emergency vehicle access and therefore would not cause an impact.

Mitigation: None Required.

Cumulative Impacts

Cumulative Context

As discussed above, the project would result in potentially significant project-level hazardous material impacts related to construction and remediation activities. Hazardous material impacts typically occur in a local or site-specific context versus a cumulative context combined with other development projects. It is possible, however for combined effects of transporting and disposal of hazardous materials to be affected by cumulative development. Project vicinity (per the Oakland Cumulative Growth Scenario as refined for this EIR) was used as context for assessing cumulative impacts on the transporting and disposal of hazardous materials.

Hazardous Materials Cumulative Impacts

Impact H.7: Development proposed as part of the project, when combined with other foreseeable development in the vicinity, would not result in cumulative hazardous materials impacts. (Cumulative Impact: Less than Significant)

The project development, with implementation of the identified mitigation measures above, would have a less than significant hazardous materials impact to the public or the environment within the vicinity of the project area. Other foreseeable development within the area, although likely increasing the potential to disturb existing contamination and the handling of hazardous materials, would be required to comply with the same regulatory framework as the project. This

includes federal and state regulatory requirements for transporting (Cal EPA and Caltrans) hazardous materials or cargo (including fuel and other materials used in all motor vehicles) on public roads or disposing of hazardous materials (Cal EPA, DTSC, ACEHD). Therefore, the effect of the project on hazardous materials, in combination with other foreseeable projects, would not be significant.

References – Hazardous Materials

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I. Biological Resources/Wetlands

This section describes 1) the environmental setting of the project site, with respect to its proximity to existing wetlands and tidelands, the shoreline of Lake Merritt Channel and the Inner Harbor of the Oakland Estuary, and Bay waters; 2) applicable federal, state, and, local laws and policies protecting biological resources; 3) potential impacts of the project; and 4) appropriate mitigation measures when necessary.

Setting

Regional Setting

The climate in the San Francisco Bay region is considered “Mediterranean,” with cool, wet winters and hot dry summers. The majority of rainfall in this region occurs between November and March. The Oakland Estuary and surrounding inland areas are subject to microclimate conditions with temperatures being cooler toward the Bay and hotter inland, especially during the summer months. Climatic conditions within the San Francisco Bay area produce unusual biological conditions that create unique habitats for a variety of species.

The project site is located in the Oakland Estuary, which is part of the larger San Francisco Bay-Delta. The San Francisco Bay-Delta Estuary is the largest estuarine system on the West Coast of the United States. It drains over 40 percent of California's land and includes the waters of San Francisco Bay, San Pablo Bay, Suisun Bay, and the Sacramento-San Joaquin Delta (Goals Project, 1999).

The Oakland Estuary is an immensely productive ecosystem that supports a diverse community of plant, animal, and aquatic life. Half of the birds migrating along the Pacific Flyway use the estuary's wetlands for wintering. Pintails, canvasbacks, widgeons, and other waterfowl breed in the area, and in certain seasons the estuary's mudflats and saltflats support more than one million shorebirds.

As part of this system of interconnected water bodies and harbors, the Inner Harbor of the Oakland Estuary is narrow and separates the inland areas of Oakland from the island of Alameda. The Lake Merritt Channel connects the Inner Harbor with Lake Merritt and the Clinton and Brooklyn Basins. The Oakland Inner Harbor, the Lake Merritt Channel, and the two basins create much of the project site’s shoreline.

Project Site Location and Description

Historically, the Oakland Estuary was a tidal slough that originated in a vast marsh that stretched from Lake Merritt to Brooklyn Basin. Most of the baylands in the Oakland Estuary were flat, tidal wetlands fringed by sandy beaches or open bay (Goals Project, 1999). At the turn of the century, the estuary was dredged, separating Oakland from Alameda and forming the Oakland Estuary as it is today. The area that is now referred to as the “Oak-to-Ninth District” (the project

site and an additional nearly 40 acres located north of the Embarcadero). was predominantly tidal marsh and tidal mudflats with the Oakland Estuary extending east of the site.

The project site is currently a complex of roads, older mixed use development, industrial and commercial buildings constructed since the 1950s, and some vacant and ruderal (weedy) lots. Operations at the site include are primarily industrial and commercial services, such as concrete batch operations (Kaiser Sand and Gravel, Inc./Oakland-Berkeley Ready Mix), wholesale commercial warehouses, and bulk storage at the Ninth Avenue Terminal. Historically, this portion of the estuary waterfront primarily served as an industrial and warehousing support district, oriented to and served by the Union Pacific main line rail tracks and cargo handling facilities at the Ninth Avenue Terminal. Currently, the site is still primarily characterized by industrial use and dominated by warehousing/storage, manufacturing, distribution, and transportation activities. Although there are marine-related services on the site, historic waterfront industries have declined, and many waterfront properties have been converted to work-live uses and commercial uses within underused warehouse and industrial buildings.

Ground cover on the project site varies from pavement and rubble to relict landscaping. Although some natural characteristics still exist along the waterfront, they occur in small patches and are usually the result of abandoned properties or developments. The effects of abandonment, Bay fill, human-induced disturbance, and historical uses have made the project site very ruderal in nature and dominated by non-native vegetation. The native vegetation that does exist is found on soils clearly derived from fill, with concrete and asphalt visible in places. The exception is the Clinton Basin Wetland Restoration and Enhancement Project (implemented by the Port of Oakland and RWQCB in 2002) at the southwest edge of the mouth of Clinton Basin that consists of a sandy shoreline marsh zones and transitional areas for wildlife habitat. The project site is located approximately 3 miles north of natural and restored wetlands at Martin Luther King Jr. Regional Shoreline Park and San Leandro Bay.

Much of the development along the Bay front occupies Bay fill material. Placement of this fill material has resulted in the loss of tidal wetlands and marshes. Edges of the Bay front have been altered through riprapping, Bay fill, and other hard surfaces, thereby reducing the tidal ebb and flow through these reclaimed marshlands. The project site contains upland areas and pile-supported piers, and other in-water structures associated with upgraded marinas will protrude into the estuary.

Regulatory Framework

Federal Endangered Species Act

Under the Federal Endangered Species Act (FESA), the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered (16 United States Code [USC] 1533(c)). Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federal listed threatened or endangered species may be present in the project area and determine whether the

proposed project may affect such species. In addition, the agency is required consult with the U.S. Fish and Wildlife Service (USFWS) to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536(3), (4)). Therefore, project impacts on listed or candidate species or their habitats would be considered "significant" in this EIR.

The USFWS also publishes a list of candidate species for listing and "Species of Concern."[1] Species on this list receive special attention from federal agencies during environmental review, although they are not otherwise protected under FESA. The candidate species are taxa which the USFWS has sufficient biological information to consider listing as Endangered or Threatened.

California Endangered Species Act

Under the California Endangered Species Act (CESA), the California Department of Fish and Game (CDFG) maintains a list of threatened species and endangered species (California Fish and Game Code 2070). The CDFG also maintains a list of "candidate species," which are species that the CDFG has formally noticed as being under review for addition to either the list of endangered species or the list of threatened species. The CDFG also maintains lists of "Species of Special Concern" which are roughly analogous to the federal Species of Concern described above. Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State-listed endangered or threatened species may be present in the project area and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFG encourages informal consultation on any proposed project that may affect a candidate species. Project impacts on species on the CESA endangered list or threatened list would be considered significant in this Environmental Impact Report (EIR). Impacts on Species of Special Concern would be considered significant under certain circumstances, as discussed in this section of the EIR.

Regulation of Wetlands and Other Waters

The regulations and policies of various federal agencies (e.g., U.S. Army Corps of Engineers [Corps]), U.S. Environmental Protection Agency [EPA] and USFWS) mandate that the filling of wetlands be avoided unless it can be demonstrated that no practicable alternatives (to filling wetlands) exist. The Corps has primary federal responsibility for administering regulations that concern waters and wetlands on the project site under statutory authority of the Rivers and Harbors Act (Sections 9 and 10) and the Clean Water Act (Section 404).

Pursuant to Section 10 of the Rivers and Harbors Act, the Corps regulates the construction of structures in, over, or under, excavation of material from, or deposition of material into navigable waters. In tidal areas, the limit of navigable water is the mean high tide line; in non-tidal waters it is the ordinary high water mark (OHWM). Larger streams, rivers, lakes, bays, and oceans are

[1] "Species of Concern," "Species of Special Concern" and "special-status" species are terms-of-art used to describe the entire realm of taxa whose conservation status may be of concern for the USFWS or other resource agencies.. Project impacts on such species could, on a case-by-case basis, be considered "significant" in this EIR.

examples of navigable waters regulated under Section 10 of the Rivers and Harbors Act. Historically navigable waters are also subject to federal regulation. Historically navigable waters are those areas that are no longer navigable as a result of artificial modifications, such as levees, dikes and dams.

Section 404 of the federal Clean Water Act (CWA) prohibits the discharge of dredged or fill material into waters of the U.S., including wetlands, without a permit from the Corps. The CWA prohibits the discharge of any pollutant without a permit. Implicit in the CWA definition of "pollutant" is the inclusion of dredged or fill material regulated by Section 404 (22 USC 1362). The discharge of dredge or fill material typically means adding into waters of the U.S. materials such as concrete, dirt, rock, pilings, or side cast material that are for the purpose of replacing an aquatic area with dry land or raising the elevation of an aquatic area (Cylinder, et al. 2004). Activities typically regulated under Section 404 include the use of construction equipment such as bulldozers, and the leveling or grading of sites where jurisdictional waters occur.

The State's authority in regulating activities in wetlands and waters at the site resides primarily with the State Water Resources Control Board (SWRCB). The SWRCB, acting through the San Francisco Regional Water Quality Control Board (RWQCB), must certify that a Corps permit action meets State water quality objectives (Section 401, Clean Water Act). Any condition of water quality certification is then incorporated into the Corps Section 404 permit authorized for the project.

The SWRCB and RWQCB also have jurisdiction over waters of the state under the Porter-Cologne Water Quality Control Act (Porter-Cologne). This jurisdiction includes waters the Corps deems to be isolated or non-jurisdictional under Section 404 under *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC). The SWRCB and RWQCB authorize impacts on waters of the state by issuing Waste Discharge Requirements (WDR) or in some cases, a waiver of WDR.

The San Francisco Bay Conservation and Development Commission (BCDC) has jurisdiction over coastal activities occurring within the San Francisco Bay Area and Suisun Marsh. BCDC was created by the McAteer-Petris Act in 1965. BCDC regulates filling and dredging in the San Francisco Bay including San Pablo Bay, Suisun Bay and sloughs, and certain creeks and tributaries that are part of the Bay system. BCDC also has jurisdiction over a 100-foot shoreline band surrounding the Bay that extends from the mean high tide line inland. The Coastal Zone Management Act of 1972 (CZMA) requires that all applicants for federal permits and federal agency sponsors obtain certification from the state's approved coastal program that the proposed project is consistent with the state's program. In the San Francisco Bay, BCDC is charged with making this consistency determination

The CDFG has jurisdiction over certain aquatic resources and associated riparian habitats under California Fish and Game Code Sections 1600-1616 for Lake and Streambed Alteration Agreements. Fish and Game Code Section 1602 requires any person, state or local governmental agency, or public utility to notify the CDFG before beginning any activity that will do one or more of the following: 1) substantially obstruct or divert the natural flow of a river, stream, or

lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake. Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state.

CEQA Guidelines Section 15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. Section 15380(b) was included in the CEQA Guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a "candidate species" that has not yet been listed by either the USFWS or CDFG. Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

Other Statues, Codes, and Policies Affording Limited Species Protection

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (16 USC, Section 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act applies to whole birds, parts of birds, and bird nests and eggs. Birds of prey are protected in California under the California Fish and Game Code (Section 3503.5, 1992). Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFG. Any loss of fertile eggs or nesting raptors, or any activities resulting in nest abandonment, would constitute a significant impact. This approach would apply to red-tailed hawks, American kestrels, burrowing owls, and other birds of prey. Project impacts on these species would not be considered "significant" in this EIR unless the species are known or have a high potential to nest on the site or rely on it for primary foraging.

Bald Eagle Protection Act

The federal Bald Eagle Protection Act prohibits persons within the United States (or places subject to U.S. jurisdiction) from "possessing, selling, purchasing, offering to sell, transporting, exporting or importing any bald eagle or any golden eagle, alive or dead, or any part, nest, or egg thereof."

Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) of 1976 applies to fisheries resources and fishing activities in federal waters that extend to 200 miles offshore. Conservation and management of U.S. fisheries, development of domestic fisheries, and phasing out of foreign fishing activities are the main objectives of the legislation. When the MSFCMA was amended in 1996 to include habitat conservation issues, the designation of "Essential Fish Habitat" (EFH) was created. EFH is broadly defined by the MSFCMA as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity."

Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) of 1972 establishes a federal responsibility for the protection and conservation of marine mammal species by prohibiting the harassment, hunting, capture, or killing of any marine mammal. The primary authority for implementing the act belongs to the USFWS and the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS).

California Plant Conservation Program

The legal framework and authority for the state's program to conserve plants is derived from various legislative sources, including CESA, the California Native Plant Protection Act (Fish and Game Code Sections 1900-1913), the CEQA Guidelines, and the Natural Communities Conservation Planning Act.

Vascular plants listed as rare or endangered by the California Native Plant Society (CNPS) (Skinner and Pavlik, 1995), but which may have no designated status or protection under federal or state endangered species legislation, are defined as follows:

- List 1A: Plants Presumed Extinct.
- List 1B: Plants Rare, Threatened, or Endangered in California and elsewhere.
- List 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere.
- List 3: Plants About Which More Information is Needed – A Review List.
- List 4: Plants of Limited Distribution – A Watch List.

In general, plants appearing on CNPS List 1A, 1B, or 2 are considered to meet the criteria of Section 15380 of the CEQA Guidelines, and effects on these species are considered "significant" in this EIR. Additionally, plants listed on CNPS List 1A, 1B or List 2 meet the definition of Section 1901, Chapter 10 (Native Plant Protection Act) and Sections 2062 and 2067 (California Endangered Species Act) of the California Fish and Game Code.

City of Oakland Regulations

Tree Preservation and Removal Ordinance

This City ordinance (Oakland Municipal Code Chapter 12.36) requires a permit for removal of protected trees. A permit is also required if work might damage or destroy a protected tree. A "protected tree" is a coast live oak four inches or larger in diameter measured four-and-a-half feet above the ground (diameter at breast height), or any other species nine inches in diameter or larger at breast height, except eucalyptus and Monterey pine trees. Tree permits are reviewed and approved by the Public Works Agency. Tree planting plans are approved by the Tree Services Department of the Office of Parks and Recreation.

Creek Protection, Stormwater Management and Discharge Control Ordinance

Oakland updated its stormwater ordinance in 1997 to provide new and stronger provisions to safeguard and manage creeks. The ordinance is now called the Creek Protection, Stormwater Management and Discharge Control Ordinance and includes permitting guidelines for development and construction projects taking place on a creekside property.

Biological Resources At or Near the Project Site

The following describes the methods employed to identify biological resources on the project site and in the larger area, as appropriate, and discusses the findings in four categories: natural communities, wildlife habitats, wetlands, and special-status species.

Methods

The CDFG's California Natural Diversity Data Base (CNDDB, 2004) and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California were reviewed for special-status species located within the U.S. Geological Survey Oakland West, San Quentin, Richmond, Briones Valley, San Francisco West, Oakland East, San Francisco South, Hunters Point, and San Leandro 7.5-minute quadrangles. For this assessment, habitat requirements for special-status species were evaluated and compared to habitats present in the project vicinity, including locations outside the project site. Factors such as habitat quality and species distribution were considered to evaluate the likelihood of special-status species occurrence. ESA biologists conducted reconnaissance-level surveys in the spring and fall of 2004 to inventory biological resources present at the site and identify habitats with potential to support special-status species. In addition, existing habitat and shoreline types were identified and delineated on maps of the study area.

LSA Associates, Inc. (LSA) conducted additional field surveys in 2004. Reconnaissance-level field surveys were conducted to identify biological resources and potentially jurisdictional features. Surveys were conducted by boat and on foot throughout the project area. An LSA wetland specialist identified potentially jurisdictional features along the shoreline and within the interior of the project area. An LSA wildlife biologist conducted land-based surveys to identify sensitive habitats along the shoreline and within the interior of the project site. Results of these

surveys were presented in a report entitled *Biological Resources and Jurisdictional Areas, Oak to Ninth Project, Oakland, California* (LSA, 2004).

Natural Communities

Habitat in and around the project site can be characterized as aquatic or terrestrial. Terrestrial habitat is limited to non-native grasslands and small patches of weeds and other disturbance-adapted vegetation that grow upon the breakwaters and near site buildings. Aquatic habitat at the project site includes open waters along with "artificial reef" substrate, which is made up of pilings, dock structures, and breakwater rubble. The aquatic habitat is capable of supporting a variety of organisms ranging from open water and inshore species of fish and marine mammals to marine plants, animals, and invertebrates that use the "artificial reef" substrate created by existing pilings, dock structures, and breakwater rubble along the shoreline.

Vegetation on the project site consists of the following:

Non-Native Grassland/Ruderal Vegetation

The majority of the terrestrial plant species on the project site is comprised of a low diversity of non-native ruderal vegetation. The surrounding basins and shoreline have been completely altered by filling and development, limiting the diversity of aquatic plants found at the project site. Vegetation in the open lot areas, primarily near and adjacent to Clinton Basin, consists of a mixture of annual grasses, herbs, and turf grass. Small patches of ice plant (*Carpobrotus chilensis*), Henderson's angelica (*Angelica hendersonii*), seashore lupine (*Lupinus littoralis*), and other disturbance-adapted vegetation occur on top of the paved and dirt areas of the outer and inner breakwater structures.

Marsh Vegetation

Patches of marsh vegetation are found within the areas of riprap along the shoreline and in larger patches west of the Clinton Basin. The dominant species include pickleweed (*Salicornia virginica*), saltgrass (*Distichlis spicata*), and dense-flowered cord grass (*Spartina densiflora*), which are found among the riprap at Estuary Park and in the remaining soft edges of Clinton Basin. There is a sparse distribution of Pickleweed throughout the project site, and no contiguous stands were observed during the site surveys conducted between fall 2004 and spring 2005.

Open Water (Marine) Vegetation

The open water areas within Clinton Basin and at the edge of the project site provide habitat for marine vegetation including patches of sea lettuce (*Ulva sp*.), brown alga (*Porphyra sp*.), and red alga (*Fauchea* sp.*)* covering pilings and breakwater structures up to the Mean Low Water (MLW) level.[2]

[2] Mean Low Water (MLW) level refers to the average low tidal levels for the previous 19 years.

Wildlife Habitats

Due to the urban setting of the project site and the lack of terrestrial and aquatic vegetation for food and cover, habitat value for other terrestrial wildlife species is limited. Species that would use the project area are those adapted to the urban environment and human disturbance.

The project site has the potential for limited terrestrial wildlife use by pocket gopher (*Thomomys bottae*), California voles (*Microtus californicus*), and ground squirrel (*Spermophyllus beecheyi*). Red-tailed hawks (*Buteo jamaicensis*) may forage on the site and, when the site is wet, great blue herons (*Ardea berodias*), great egrets (*Casmerodius albus*), and snowy egrets (*Egretta thula*) may occasionally use the site. Ornamental plants provide some habitat for birds adapted to urban environments, including northern mockingbird (*Mimulus polyglottos*), American crow (*Corvus brachyrhynchos*), European starling (*Sturnus vulgaris*), mourning dove (*Zenaida macroura*), rock dove, house sparrow, and house finch. Due to the presence of public facilities (boat dock, outdoor seating) at the Jack London Aquatic Center/Estuary Park, several gull species may be found foraging at the site, including California gull (*Larus californicus*), western gull (*Larus occidentalis*), glaucous-winged gull (*Larus glaucescens*), and herring gull (*Larus argentatus*). The potential also exists for certain bat species to use older or abandoned buildings for roosting and nesting structures.

The open waters of San Francisco Bay provide habitat for large numbers of birds that migrate along the Pacific Flyway. Most of these birds use offshore Bay waters for resting, feeding, and wintering areas. The Oakland Estuary and associated waterfront are used by water and shorebirds such as mallard duck (*Anas platyrhynchos*), California gull (*Larus californicus*), brown pelican (*Pelecanus occidentalis*), common loon (*Gavia immer*), western grebe (*Aechmophprus occidentalis*), cormorant (*Phalacrocorax* sp.), black-crowned night heron (*Nycticorax nycticorax*), and great egret (*Casmerodius albus*), though these species do not nest in the local vicinity. Resident bird species in upland areas near the Oakland Estuary are typically urban-adapted and include rock dove (*Columba livia*), house sparrow (*Carpodacus mexicanus*), and European starling (*Sturnella neglecta*). The killdeer (*Charadrius vociferous*), a common ground-nesting plover, may nest in barren areas along the shoreline.

Marine mammals associated with the aquatic habitat in both the Oakland Estuary and San Francisco Bay include the harbor seal (*Phoca vitulina*) and the California sea lion (*Zalophus californianus*). Both species can be found foraging close to the shoreline and marina structures, and may be present at certain times in the Oakland Inner Harbor.

The “artificial reef” substrate likely harbors marine invertebrates such as the Bay mussel (*Mystiques edulis*), California mussel (*Mytilus californianus*), red barnacle (*Tetraclita squamosa rubescens*), red and white barnacles (*Megabalanus californianus*), hydroids (*Obelia* sp.), tunicates (*Styela* sp.), and rock crabs (*Pachygrapsus crassipes*) (Smith and Carlton, 1975). Some common marine fish that occur in Bay waters near the project area include pile perch (*Rhacochilus vacca*), barred surfperch (*Amphistichus argenteus*), topsmelt (*Atherinops affinis*), whitebait (*Allosemerus elongates*), striped bass (*Morone saxatilis*), pacific halibut (*Hippoglossus stenolepis*), and speckled sanddab (*Citharichthys sigmaeus*). An assortment of sharks, rays, and

skates such as the leopard shark (*Triakis semifasciata*), spiny dogfish (*Squalus acanthias*), bat ray (*Myliobatis californica*), California skate (*Raja inornata*), and big skate (*Raja binoculata*) are likely to be found forging along the Bay floor and breakwater rubble (Gotshall, 1989).

Wetlands

Wetlands are lands where saturation with water is the dominant factor in determining the nature of soil development and the types of plants and animal communities living in the soil and on its surface (Cowardin, 1979). Wetlands are ecologically productive habitats that support a rich variety of both plant and animal life. The importance and sensitivity of wetlands has increased as a result of their value as recharge areas and filters for water supplies and widespread filling and destruction to enable urban and agricultural development.

Clean Water Act Sections 404 and 401 Wetland Definition

Wetlands are a subset of “waters of the United States” and receive protection under Sections 404 and 401 of the Clean Water Act (CWA). The term "waters of the United States" as defined in Code of Federal Regulations (33 CFR 328.3[a] and [b]; 40 CFR 230.3[s]) includes wetlands, defined as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands falling under Corps jurisdiction must demonstrate the presence of three specific wetland parameters: hydric soils, hydrophytic vegetation, and sufficient wetland hydrology. Generally, wetlands include swamps, marshes, bogs, and similar areas.

Lakes, rivers, and streams are defined as “other waters” under Sections 404 and 401 of the CWA. Jurisdictional limits of these features are typically noted by the Ordinary High Water Mark (OHWM). The OHWM is the line on the shore or bank that is established by the fluctuations of water and indicated by physical characteristics, such as a clear, natural line impressed on the bank, shelving, changes in soils, lack of woody or terrestrial vegetation, the presence of litter or debris, or other characteristics of the surrounding areas (33 CFR 328.3). Isolated ponds or seasonal depressions had been previously regulated as waters of the U.S. In *Solid Waste Agency of Northwestern Cook County v. United State Army Corps of Engineers et al.* (January 8, 2001), however, the U.S. Supreme Court ruled that certain “isolated” wetlands do not fall under the jurisdiction of the CWA and are no longer under the jurisdiction of the Corps.

Other Wetland Definitions

While the Corps definition of wetlands is most commonly used for regulatory purposes, definitions adopted by other state and federal agencies may also apply. The state’s authority in regulating activities in wetlands and waters at the project site resides primarily with the CDFG and the State Water Resources Control Board (SWRCB). The USFWS and CDFG have adopted the Cowardin, et al. (1979) definition of wetlands. Under normal circumstances, the federal Corps definition of wetlands requires three wetland identification parameters to be met (as discussed above), whereas the Cowardin definition requires the presence of only two parameters. For this reason, identification of wetlands by the CDFG consists of the union of all areas that are

periodically inundated or saturated, or in which at least seasonal dominance by hydrophytes may be documented, or in which hydric soils are present. The CDFG does not typically assert jurisdiction over wetlands unless the feature is subject to a Lake and Streambed Alteration Agreement (California Fish and Game Code Sections 1600-1616) or supports state-listed endangered species.

In California, most wetlands found in the "coastal zone" are regulated under the California Coast Act of 1976 (CCA) and the Coastal Zone Management Act (CZMA) and are within the jurisdiction of the California Coastal Commission. Under the CCA, wetlands are defined as "land within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats and fens" (Public Resources Code Section 30121). However, coastal management of the San Francisco Bay and Oakland Estuary is provided by BCDC under the McAteer-Petris Act. The McAteer-Petris Act does not define wetlands, but does outline BCDC's jurisdiction over "managed wetlands consisting of all areas which have been diked off from the Bay and have been maintained during the three years immediately preceding the effective date of the amendment of this section during the 1969 Regular Session of the Legislature as a duck hunting preserve, game refuge or for agriculture" (Government Code Section 66610(b)).

Potentially Jurisdictional Wetlands at the Project Site

In 2004, LSA wetland specialists conducted reconnaissance-level surveys to identify potentially jurisdictional features along the shoreline and within interior portions of the project site. In July 2005, the project sponsor submitted a draft potentially jurisdictional wetland delineation to the Corps for review and verification and remains under Corps review as of publication of this document. (The draft potentially jurisdiction wetland delineation is provided in **Appendix K.**) A description of these potentially jurisdictional features is provided below.

Shoreline Adjoining the Project Site

The shoreline surrounding the project site consists of rock and concrete riprap placed to prevent shoreline erosion. The physical structure of riprap varies from recently-constructed grouted riprap around Estuary Park to a loose conglomeration of concrete blocks, bricks, and other hard debris in other areas. Overall vegetation at the shoreline is sparse to non-existent, with small clumps of cordgrass (*Spartina* sp.), marsh gumplant (*Grindelia stricta*), and pickleweed (*Salicornia virginica*) occurring in scattered patches. Although small numbers of shorebirds occasionally forage along the rocks, riprap has little habitat value for local wildlife. The shoreline adjacent to the concrete batch operations is a steep concrete wall at the edge of the shoreline.

Areas along Clinton Basin consist of eroding fill that includes rock, gravel, soil, small blocks of concrete, and other debris that have eroded out of the adjacent to upland fill areas. Between 30 to 40 percent of the eroded fill shoreline is hardscaped, with the remaining areas covered by bare soil or stands of cordgrass, marsh gumplant, and small patches of pickleweed (LSA, 2004). The majority of the eroded fill is fairly steep, but in several areas shoreline erosion has created a gradually sloping profile, allowing for the establishment of vegetation.

Small stands of cordgrass occur in patches throughout the shoreline areas, but cordgrass occurs most notably along the western shoreline of the Clinton Basin. Larger stands of cordgrass occur along the shoreline west of the Clinton Basin. These stands are too small to support populations of tidal marsh wildlife species such as salt marsh common yellowthroat, but they do provide foraging habitat for some species of waterbirds and cover for common wildlife species that occur in the adjacent uplands.

The southwestern corner of Clinton Basin consists of a sandy shoreline where the Port of Oakland implemented a restoration project in 2002. The restoration of this area included construction of a tidal channel and grading to establish higher marsh zones and transitional areas to provide habitat for shorebirds and other wildlife. There is a small patch of cordgrass along the southern shoreline of the Ninth Avenue Terminal property. This patch of cordgrass is too small to support special-status rails or other nesting birds.

Interior Areas of Project Site

The interior areas of the project site have been subject to development and consist mostly of Bay fill. Non-native grassland is the dominant vegetation community, and ruderal vegetation (including pampas grass, Italian ryegrass, ripgut brome, and ornamental trees and shrubs) occurs in patches throughout the grassland areas.

As depicted in the preliminary wetland delineation (**Appendix K**), three potentially jurisdictional features occur within the interior areas of the project site. Two seasonal pools occur at the southeastern portion of the parcel east of Clinton Basin. These pools both contained approximately 6 inches of water at the time of the site survey in fall 2004 (LSA, 2004). Dominant vegetation in these pools consists of ruderal wetland plant cover, including Italian ryegrass, rabbit's foot grass, and Bermuda grass. The southernmost pool is approximately 600 square feet (0.014 acre) and the northernmost pool is approximately 400 square feet (0.009 acre).

A narrow ditch carries stormwater runoff into Clinton Basin from the residential uses within the Fifth Avenue Point area located to the west of Clinton Basin. This ditch is potentially jurisdictional. The ditch crosses the project area for a distance of about 40 feet before entering a culvert that leads directly to Clinton Basin. The bottom of the ditch is about 3 feet wide and is dominated by ruderal wetland plants, and therefore is potentially jurisdictional.

Open Water at Project Shoreline Edges.

The open water areas at the edges of the project shoreline, including Lake Merritt Channel and within Clinton Basin and Brooklyn Basin, are also considered jurisdictional waters.

Regulation of Activities in Wetlands

The regulations and policies of various federal agencies (e.g., Corps, EPA, and USFWS) mandate that the filling of wetlands be avoided unless it can be demonstrated that no practicable alternatives (to filling wetlands) exist. The Corps has primary federal responsibility for administering regulations that concern waters and wetlands on the project site. In this regard, the

Corps acts under two statutory authorities: the Rivers and Harbors Act of 1899 (Sections 9 and 10) and the Clean Water Act (Section 404) The Corps requires a permit under the Rivers and Harbors Act for work in "navigable waters" and a permit under Section 404 for discharge of dredged or fill material in waters of the United States, including wetlands and other special aquatic sites. The EPA, USFWS, NMFS, and several other agencies provide comment on Corps permit applications. The EPA has provided the primary criteria for evaluating the biological impacts of Corps permit actions in wetlands and other special aquatic sites.

The state's authority in regulating activities in wetlands and waters at the site resides primarily with the State Water Resources Control Board (SWRCB) through Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne). The SWRCB, acting through the nine Regional Water Quality Control Boards (RWQCB), must certify that a Corps permit action meets state water quality objectives.

BCDC is authorized by the McAteer-Petris Act to analyze, plan, and regulate San Francisco Bay and its shoreline. It implements the San Francisco Bay Plan and regulates filling and dredging in the Bay, its sloughs and marshes, and certain creeks and tributaries. BCDC jurisdiction includes all tidal areas of the Bay up to the mean high tide line, marshland up to the five-foot contour line, and a shoreline band that extends inland 100 feet from the mean high tide line. BCDC permits are required for all work within either the Bay or the shoreline band.

The CDFG is authorized under the State Fish and Game Code Sections 1600-16167 to develop mitigation measures and enter into a Lake and Streambed Alteration Agreement (SAA) with applicants that propose a project that would obstruct the flow or alter the bed, channel, or bank of a river, stream, or lake in which there is a fish or wildlife resource. The CDFG provides comment on Corps permit actions under the Fish and Wildlife Coordination Act.

Special-Status Species At or Near the Project Site

The CNDDB lists of special-status animal species were considered in this assessment and are included in **Appendix H**. Habitat requirements for each of the sensitive animal species were assessed and compared to habitats present at the project site. Factors such as onsite habitat quality and known geographic distribution of individual species were considered in evaluating the likelihood of a species' occurrence. Based on the results of that analysis, one special-status marine mammal species (harbor seal), two special-status birds (California brown pelican and Cooper's hawk), and nesting and roosting bats may be affected by project activities. The project site also provides suitable habitat for four species of special-status fish identified as having moderate potential to occur at the project site. The status, ecology, and distribution of each of these species are described below.

Special-Status Marine Mammals

The Pacific harbor sea (*Phoca vitulina*) l is a subspecies of the most widely distributed pinniped inhabiting both temperate and sub-arctic coastal areas in the northern Pacific Ocean and is protected from harassment under the federal Marine Mammal Protection Act (Seal Conservation

Society, 1998). Harbor seals are typically found along the coast of the Pacific states in protected harbors and bays (Ingles, 1965). Male and female harbor seals are similar in appearance. Males are slightly larger, measuring up to 6 feet in length and weighing up to 300 pounds. Harbor seals inhabit near-shore coastal and estuarine areas from Baja California, Mexico, to the Pribilof Islands in Alaska. They are earless, and their pelage is typically covered with whitish spots. Harbor seals hind flippers are in a fixed position and unlike sea lions, harbor seals do not climb on rocks. On land, harbor seals use their hind flippers to undulate themselves forward. In the water, they propel themselves by lateral undulations of the tail and hind flippers (Ingles, 1965). Harbor seals generally do not make extensive pelagic migration, although they have been known to travel hundreds of miles to find food or suitable breeding habitat.

Populations of the harbor seal are known to occur throughout San Francisco Bay. The harbor seal is the only species of marine mammal that breeds year-round in the Bay. There are 12 haul-out (resting) sites and rookeries **(**nesting, breeding and pupping areas) within the Bay. The largest haul-out sites are Mowry Slough, Yerba Buena Island (YBI), and Castro Rocks, all in the Central Bay (Spencer, 1977). The closest known haul-out site near the project area is at the Alameda Breakwater Gap, approximately five miles from the Oakland Inner Harbor. Harbor seals use the Bay for foraging, resting, and reproduction. They are opportunistic feeders and may feed on fish, mollusks, and crustaceans. They mainly prey on yellowfin goby (*Acanthogobius falvimanus*), and this introduced species is the most common species in the harbor seal's diet. Other important prey species include northern anchovy (*Engraulis mordax*), Pacific staghorn sculpin (*Leptocottus armatus*), plainfin midshipman (*Porichthys notatus*), white croaker (*Genyonemus lineatus*), and Pacific herring (Harvey and Torok, 1994).

Pupping season in San Francisco Bay begins in mid-March and continues until about mid-May. Pups nurse for only four weeks, and mating begins immediately after pups are weaned. In the Bay, mating occurs from April to July, and molting season is from June until August (Kopec and Harvey, 1995). No harbor seals were observed during field reconnaissance conducted for this analysis in fall 2004/spring 2005.

Special-Status Fisheries

The Pacific Fishery Management Council (PFMC) describes and defines "Essential Fish Habitat" (EFH) on the Pacific coast. In the San Francisco Bay Area, EFH for groundfish fisheries (e.g., rockfish, flatfish, roundfish, sharks, and skates), salmon (Chinook salmon and coho salmon), and coastal pelagics (e.g., northern anchovy, Pacific sardine, Pacific [chub] mackerel, jack mackerel, and market squid), includes the Pacific coast to a distance of 200 miles offshore and the entirety of San Francisco Bay. Specific commercial fish species from each of the three EFH categories are managed through Fishery Management Plans created by the PFMC.

The four special-status fish species that were identified as potentially occurring at or near the project site are 1) Pacific herring, 2) steelhead (Central California Coast ESU [Evolutionarily Significant Unit] and Central Valley ESU), 3) coho salmon (Central California Coast ESU), and 4) Chinook salmon (Central Valley winter-run ESU, Central Valley spring-run ESU, and Central

Valley fall and late fall-run ESU). The paragraphs that follow provide a general description of their status, ecology, and distribution.

Pacific Herring (Clupea harengeus). The Pacific herring is a small schooling marine fish that enters estuaries and bays to spawn. It is both a popular sport fish and a commercially important species. This species is known to spawn along the Oakland waterfront and attach its egg masses to eelgrass, seaweed, and hard substrates such as pilings, breakwater rubble, and other hard surfaces. Adult Pacific herring typically congregate near spawning grounds several weeks to months before spawning (Barnhart, 1988). Spawning usually takes place between October and March (Miller and Schmidtke, 1956) with a peak between December and February (Barnhart, 1988). After hatching, juvenile herring typically congregate in San Francisco Bay during the summer and move into deeper waters in the fall (Barnhart, 1988). In San Francisco Bay, eel grass is not abundant, and herring are known to broadcast eggs on rocks, rocky jetties, pilings, sandy beaches, and other submerged objects (Eldridge and Kaill, 1973). An individual can spawn only once during the season, and the spent female returns to the ocean immediately after spawning (Miller and Schmidtke, 1956). The aquatic habitat within the Oakland Estuary provides good spawning habitat for Pacific herring. This species is protected under the Magnuson-Stevens Fishery Conservation and Management Act.

It is presumed that Pacific herring are seasonally present in the area of the project site. There is potential for this species to spawn in the project area because the area is within or near spawning habitat, as described above, and marina structures (such as dock pilings) provide suitable substrates on which egg masses could be attached.

Central Valley and Central California Coast Steelhead (Oncorhynchus mykiss). Steelhead populations in the Central California Coast ESU and Central Valley ESU are listed by NMFS as threatened under the federal Endangered Species Act. Steelhead possess the ability to spawn repeatedly, maintaining the mechanisms to return to the Pacific Ocean after spawning in freshwater (unlike Chinook or coho salmon, which spawn only once). Juvenile steelhead may spend up to four years residing in fresh water before migrating to the ocean as smolts or "residents." Central Valley steelhead typically migrate through San Francisco Bay from November through May after spending one year in fresh water. Both steelhead ESUs migrate through Bay waters between breeding areas and the Pacific Ocean.

Due to the absence of fresh water spawning areas, steelhead breeding does not occur in any streams in the city of Oakland. Migrating adult and juvenile steelhead may travel through Bay waters near the East Harbor and West Harbor entrances between December and May as they move between breeding sites and the Pacific Ocean. The presence of this species in the Oakland Inner Harbor would be incidental occurrences during migration periods.

*Central California Coast Coho Salmon (Oncorhynchus kisutch).*State-listed as endangered and federal listed as threatened, the Central California Coast coho salmon (*Oncorhynchus kisutch)* ESU typically conduct their upstream spawning migration from mid-November to late January. Coho salmon usually move upstream after heavy fall or winter rains open sandbars that form at

the mouths of coastal streams. Downstream migration of smolts to estuarine waters generally occurs in California populations between March and early June. Coho salmon typically spend their first year in fresh water and their next two years in salt water before returning to spawn in their natal streams. Some males, termed "jacks," return to spawn after one season in the ocean.

Breeding is not expected to occur in any streams in the city of Oakland due to the absence of suitable fresh water spawning areas. Migrating adult and juvenile coho salmon, likely move through Bay waters near the Oakland Inner Harbor from November to May. This species may incidentally occur in the Oakland Inner Harbor during this period.*Central Valley Winter-Run, Fall-Run, and Spring-Run Chinook Salmon (Oncorhynchus tshawytscha).* The population of Chinook salmon in San Francisco Bay comprise four races: fall-run, late fall-run, spring-run, and winter-run. These races are distinguished by the seasonal differences in adult upstream migration, spawning, and juvenile downstream migration. Chinook salmon (*Oncorhynchus tshawytscha*) are anadromous fish, spending three to five years at sea before returning to fresh water to spawn. These fish pass through San Francisco Bay waters to reach their upstream spawning grounds. In addition, juvenile salmon migrate through the Bay when returning to the Pacific Ocean.

The Central Valley (Sacramento) winter-run Chinook salmon, state- and federally-listed as endangered, migrate through San Francisco Bay from December through July with a peak in March (Moyle, 2002). Spawning is confined to the mainstem Sacramento River and occurs from mid-April through August (Moyle, 2002). Juveniles emerge between July and October, and are resident in their natal stream 5 to 10 months followed by an indeterminate residency period in estuarine habitats (Moyle, 2002).

The state- and federally-listed threatened Central Valley spring-run Chinook salmon migrate to the Sacramento River from March to September with a peak spawning period between late August and October. Juvenile salmon emerge between November and March, and are resident in streams for a period of 3 to 15 months before migrating to downstream habitats (Moyle, 2002).

The Central Valley fall-run and late fall-run Chinook salmon are a federal candidate for listing and a California Species of Special Concern. These salmon enter the Sacramento and San Joaquin rivers from June through December and spawn from October through December, with a peak in November.

Spawning is not documented along the Oakland waterfront due to the lack of suitable breeding habitat (cold fresh water streams). However, it is presumed that adult and juvenile (smolts) winter-run, spring-run, and fall-run Chinook salmon occur in waters adjacent to the project area during migrations to upstream spawning habitat in the mainstem of the Sacramento River.

Special-Status Birds

The California brown pelican (*Pelecanus occidentalis*), double-crested cormorant (*Phalacrocorax auritus*) and Cooper's hawk (*Accipiter cooperii*) are the only known special-status bird species with the potential to occur in the vicinity of the project site.

Nesting colonies of California brown pelican are listed as endangered under both the state and federal Endangered Species Acts. The California brown pelican is a common migratory species along the Bay shoreline and a common visitor to the Oakland Estuary; however, no nesting colonies are documented in the Bay Area or in the project vicinity. A brown pelican was observed in flight at the project site during the October 2004 site visit by ESA biologists (ESA, 2004). The double-crested cormorant, a California species of special concern, is a resident species that breeds in dense colonies along rocky coasts and offshore islands. Rookery sites for this species are protected by the CDFG. The closest documented rookery site is at the San Francisco Bay Bridge. Based on lack of suitable nest sites within the project site, this species is not expected to nest in or near the project site.

The Cooper's hawk is a California species of special concern and is known to occur within the urban areas of Oakland and near Lake Merritt. CNDDB reports one known occurrence of Cooper's hawk at Lakeshore Park (CNDDB, 2005). The ornamental trees at Lakeshore Park and in and around the project area provide suitable habitat for this species. Small urban-adapted birds such as pigeons and mourning doves are common throughout the area and provide a prey base for Cooper's hawks.

Special-Status Bats

The abandoned buildings and warehouse type structures on the project site have the potential to provide nesting and roosting habitat for special-status bats. Bat species such as pallid bat (*Antrozous pallidus*), Yuma myotis (*Myotis yumanensis*), and long-eared myotis (*Myotis evotis*) may be using older and/or abandoned buildings at the project site. There are no federally- or state-listed threatened or endangered bat species known to occur on the project site; however, wildlife nursery sites are recognized as a biological resource under Appendix G of the CEQA Guidelines, and destruction of any nursery sites that may occur on the site would have a significant effect on biological resources. No bat species were observed during field reconnaissance conducted for this analysis in fall 2004/spring 2005.

Special-Status Plants

Due to past urban development and land uses in and around the proposed project site, no intact natural habitats exist that could support special-status plants. No special-status plants were identified as occurring within the project vicinity, and none were observed during site reconnaissance conducted for this analysis in fall 2004/spring 2005.

Biological Resources Impacts Discussion

Significance Criteria

The CEQA Guidelines (Section 15206) specify that a project shall be deemed to be of statewide, regional, or areawide significance if it would substantially affect sensitive wildlife habitats including but not limited to riparian lands, wetlands, bays, estuaries, marshes, and habitats for rare and endangered species. In this EIR, a biological resources impact is considered to be

significant if it would meet any of the following criteria, which are adapted from CEQA, Appendix G of the CEQA Guidelines and the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG or USFWS;

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- Fundamentally conflict with any applicable habitat conservation plan or natural community conservation plan;

- Fundamentally conflict with the City of Oakland Tree Preservation and Removal Ordinance (Oakland Municipal Code [OMC] Chapter 12.36) due to removal of protected trees under certain circumstances. Factors to be considered in determining significance include the number, type, size, location, and condition of (a) the protected trees to be removed and/or affected by construction, and (b) the protected trees to remain, with special consideration given to native trees.[3]

  Protected trees include the following:

  Quercus agrifolia (California or coast live oak) measuring four inches diameter at breast height (dbh) or larger, and any other tree measuring nine inches dbh or larger except eucalyptus and *Pinus radiata* (Monterey pine); provided, however, that Monterey pine trees on City property and in development-related situations where more that five Monterey pine trees per acre are proposed to be removed are considered to be protected trees.

- Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect biological resources. Although there are no specific, numeric/quantitative criteria to assess impacts, factors to be considered in determining significance include whether there is substantial degradation of riparian and aquatic habitat through (a) discharging a substantial amount of pollutants into a creek, (b) significantly modifying the natural flow of water, (c) depositing substantial amounts of new material into a creek or causing substantial bank erosion or instability, or (d) adversely affecting the riparian corridor by significantly altering vegetation or wildlife habitat.

[3] Oakland Planning Code Section 17.158.280E2 states that "Development related" tree removal permits are exempt from CEQA if no single tree to be removed has a dbh of 36 inches or greater *and* the cumulative trunk area of all trees to be removed does not exceed 0.1 percent of the total lot area.

CEQA Guidelines Section 15380 further provides that a plant or animal species may be treated as "rare or endangered" even if not on one of the official lists if, for example, it is likely to become endangered in the foreseeable future.

Evaluation of Impact Significance

For purposes of this EIR, the analysis considered the following three principal components of the guidelines and criteria outlined above:

- Magnitude of the impact (e.g., substantial/not substantial);
- Uniqueness of the affected resource (rarity); and
- Susceptibility of the affected resource to perturbation (sensitivity).

The evaluation of significance must consider the interrelationship of these three components. For example, a relatively small magnitude impact on a state- or federally-listed species would be considered significant because the species is very rare and is believed to be very susceptible to disturbance. Conversely, a plant community such as California annual grassland is not necessarily rare or sensitive to disturbance. Therefore, a much larger magnitude of impact would be required to result in a significant impact.

Local Plans and Policies

Oakland General Plan policies and other applicable plans and policies that pertain to biological resources and wetlands, and that apply to the project, are listed in **Appendix F**. Key policies are identified and discussed in Section IV.A, Land Use, Plans, and Policies. General Plan policies that are also significance criteria or contain a regulatory threshold that the project must meet are addressed in this section.

Habitat Conservation Plan / Natural Community Conservation Plan

The potential for the project to "fundamentally conflict with a habitat conservation plan or natural community conservation plan" is discussed in Impact A.4, in Section IV.A, Land Use, Plans, and Policies, as it is a significance criterion for assessing land use consistency as well as biological resources. As discussed under Impact A.4, and supported by the analysis provided in this section, the project would not conflict with an applicable habitat conservation plan or natural community conservation plan, and the impact would be less than significant. The Clinton Basin Wetland Restoration and Enhancement Project (previously implemented by the Port of Oakland and RWQCB in 2002), exists at the southwest edge of the mouth of Clinton Basin and is intended for habitat conservation. As discussed in detail under Impact I.2, below, construction activities required for the project may adversely affect the restored area and result in a significant impact, Mitigation Measure I.2b (Wetland Avoidance) includes specific measures to reduce this potential impact to less than significant.

Project Impacts

Less than Significant and Beneficial Impacts

The CEQA Guidelines (Appendix G) specify that a project will normally have a significant impact on the environment if it will physically affect communities or species protected by adopted environmental plans and goals of the communities where it is located. Impacts are generally considered less than significant if the habitats and species affected are common and widespread in the region and the state. Impacts are considered beneficial if the action causes no detrimental impacts and results in an increase of habitat quantity and quality. As with the proposed project, existing contaminated conditions on portions of the project site may cause adverse health effects to biological resources (through the soils contamination and uncontrolled stormwater runoff over contaminated conditions and directly into the estuary). The project would result involve measures aimed at uncontrolled stormwater drainage conditions and at further reducing hazardous onsite conditions and would thus result in potentially beneficial effects on biological resources.

The proposed project would not have the potential to substantially reduce the habitat of a fish or wildlife species or cause a fish or wildlife species population to drop below self-sustaining levels, nor would it restrict the range of a rare or endangered plant or animal community or reduce the range of a rare or endangered plant or animal. Thus, the project would not have a significant impact on sensitive natural communities or interfere with fish or wildlife movement. The proposed project would not conflict with either the City of Oakland's Creek Protection Ordinance or the Tree Protection and Tree Preservation and Removal Ordinance. Implementation of mitigation measures recommended in this EIR section would further ensure that these impacts would be less than significant.

Construction Impacts on Marine Mammals

Impact I.1: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on special-status mammal species, specifically the Pacific harbor seal. (Less than Significant)

Incidental occurrences of Pacific harbor seal (*Phoca vitulina)* are known in the Oakland Inner Harbor. One known harbor seal haul-out site is located at the Alameda Breakwater Gap, approximately five miles from the project site. However, this site is not known as a breeding or pupping site (Caltrans, 2002).

Loud sounds, both in air and under water, could have adverse impacts on marine mammals, causing stress and increased risk of mortality (Gisiner, 1998). Pulsed sounds such as pile-driving can cause temporary hearing loss also known as Temporary Threshold Shifts (TTS) (Greene, 1998). Loss of hearing, either temporary or permanent, can affect the behavior of marine mammals and alter their ability to process acoustic signals used for migration and other behaviors (Gisiner, 1998).

Pile-driving associated with the construction/renovation of marina facilities and structures could result in a disturbance to marine mammals if they are present in the project area. The effects of elevated sound pressure levels (SPLs) on marine mammals may include avoidance of an area, tissue rupturing, hearing loss, disruption of echolocation, masking, habitat abandonment, aggression, pup/calf abandonment, annoyance, and helplessness. If present during pile-driving activities, harbor seals may temporarily cease normal activities, such as feeding, or raise their heads up above water in response to the noise. However, existing evidence shows that most marine mammals tend to avoid loud noises and will likely move away from the project site (Fed. Reg., 2003).

State and federal resource agencies have not developed specific guidance or significance criteria to establish the thresholds for determining potentially adverse noise impacts upon marine mammals. However, similar projects recently permitted and constructed in the Bay Area, including the Bay Bridge project, have established the significance criteria that are currently being used by the Corps and NMFS for relatively small marine projects that involve pile-driving.

Because the one known harbor seal haul-out site is located approximately five miles from the project site, and the site is not known as a breeding or pupping area, any individual Pacific harbor seals that occur within the Oakland Inner Harbor would be considered an incidental occurrence. Furthermore, it is anticipated that individual harbor seals would be deterred from entering the project work area due to noise and increased human presence from construction at the project area. Therefore, prolonged presence of harbor seals within the project area is not anticipated.

Mitigation: None Required.

Construction Impacts on Waters of the U.S. (Wetlands)

Impact I.2: Construction activities required for the project would result in a substantial adverse effect on potentially jurisdictional wetlands or waters of the U.S. under the jurisdiction of the Corps, waters of the state under the jurisdiction of the Regional Water Quality Control Board (RWQCB), and wetlands under the jurisdiction of BCDC. (Potentially Significant)

As described below, portions of the project site area support wetlands and “other waters of the U.S.” that are under the regulatory jurisdiction of the Corps, RWQCB, and BCDC. Disturbances would occur within drainages, wetland areas, and creek channels at points where excavation would be required. This disturbance would affect both areas classified as wetlands and channels that are considered “other waters of the U.S.”

Shoreline of the Project Site

Construction activities in and around Clinton Basin, the Ninth Avenue Terminal, and Lake Merritt Channel would temporarily affect potentially jurisdictional waters. The project would have temporary impacts on potentially jurisdictional waters along the Oakland Inner Harbor

shoreline with the construction of new open spaces and Shoreline Park. Impacts on these potentially jurisdictional waters would include the removal of vegetation and impacts on water quality from sedimentation or other debris during grading.

The southwest edge of Clinton Basin, near the proposed South Park, has been restored in accordance with a restoration plan implemented by the Port of Oakland in coordination with the RWQCB. Construction activities within Clinton Basin and along the shoreline in this area have the potential to temporarily affect this restored area.

Interior Areas of Project Site

Site preparation for the project would permanently fill potentially jurisdictional waters within the project site, which consist of two seasonal pools at the southeastern portion of the parcel east of Clinton Basin and a narrow ditch that carries stormwater runoff into Clinton Basin. These waters would be filled or excavated during the grading and construction of residential and commercial structures.

Tidal Areas

Tidal areas in and around the project site fall under BCDC jurisdiction and under Corps jurisdiction in accordance with Section 10 of the Rivers and Harbors Act. Construction activities that would occur within the open water areas, including Clinton Basin, would include construction to upgrade the Clinton Basin Marina, relocation of the 5th Avenue Marina at the foot of 5th Avenue, and installation of the seawall at the proposed Shoreline Park. These activities have the potential to affect jurisdictional waters, which consist of Lake Merritt Channel and the waters within Clinton Basin and Brooklyn Basin. Potential effects include 1) impacts on water quality from dredging or pile-driving activities to install new marinas or remove existing marinas, 2) sedimentation in channels and in the Bay adjacent to the construction areas during demolition of existing structures, and 3) sedimentation in channels and in the Bay resulting from grading and land clearing activities and construction of new structures, roads, and open spaces.

Fill and excavation in areas considered to be jurisdictional waters would require permits and agreements from the appropriate regulatory agencies. Failure to proceed without permits or approvals would be in violation of these regulations.

Mitigation Measure I.2a: *Corps-Verified Wetland Delineation*. A preliminary identification of potentially jurisdictional areas was conducted in 2004 (LSA, 2004), and the project sponsor submitted the draft potentially jurisdictional wetland delineation to the Corps in July 2005. The project sponsor shall obtain Corps verification of the preliminary identification of jurisdictional areas prior to submitting permit applications. A verified wetland delineation would be required prior to the submittal of regulatory permit applications.

Mitigation Measure I.2b: *Wetland Avoidance*. Section 404 first requires that projects avoid or minimize adverse effects on jurisdictional waters to the extent practicable. To the extent feasible, the final project design shall minimize effects on wetlands and other waters in

accordance with Section 404 of the Clean Water Act . Areas that are avoided shall be subject to Best Management Practices (BMPs), as described in Mitigation Measure I.2.d below. Such measures shall include installation of silt fencing, straw wattles, or other appropriate erosion and sediment control methods or devices. Equipment used for the removal of debris and concrete riprap along the estuary edge will be operated from land using backhoes and cranes. Construction operations along Clinton Basin and Shoreline Park shall be barge-mounted or shall involve water-based equipment such as scows, derrick barges, and tugs.

Additionally, the existing restoration project at the southwest end of Clinton Basin, implemented by the Port of Oakland, shall be protected during construction activities. The extent of this area shall be clearly marked by a qualified biologist prior to the start of any grading or construction activities and a buffer zone established. All construction personnel working in the vicinity of the restoration area shall be informed of its location and buffer zone.

Mitigation Measure I.2c: ***Obtain Regulatory Permits and other Agency Approvals.*** **Prior to the start of construction activities for the project, the project applicant shall obtain all required permit approvals from the Corps, the RWQCB, BCDC, and all other agencies with permitting responsibilities for construction activities within jurisdictional waters of other jurisdiction areas. Permit approvals and certifications shall include but not be limited to Section 404/Section 10 permits from the Corps, Section 401 Water Quality Certification from the RWQCB, and BCDC permit.**

Section 404/Section 10 Permits. Permit approval from the Corps shall be obtained for the placement of dredge or fill material in waters of the U.S., if any, within the interior of the project site, pursuant to Section 404 of the federal Clean Water Act.

Construction along the estuary edge below MHW elevation will be considered dredging by the Corps and will require a Section 10 permit. In addition, dredging of Clinton Basin will also require a Section 10 permit.

Section 401 Water Quality Certification. Approval of Water Quality Certification (WQC) and/or Waste Discharge Requirements (WDRs) shall be obtained from the RWQCB for work within jurisdictional waters. Preparation of the Section 401 Water Quality Certification applications will require an application and supporting materials including construction techniques, areas of impact, and project schedule.

BCDC Permit. Permit approval from BCDC shall be obtained for placement of solid material, pilings, floating structures, boat docks, or other fill in the Bay, and/or dredging or other extraction of material from the Bay and within the 100-foot shoreline band inland from mean high tide line along the length of the project site. Project activities subject to this permit approval would include dredging for rebuilding the marina in Clinton Basin and replacement of the 5th Avenue Marina with a new marina that would contain approximately 170 boat slips. The proposed project would include the removal of approximately 33,780 square feet of solid Bay fill as part of the shoreline design and the placement of 74,110 square feet of solid Bay fill for the creation of a village green at Clinton Basin. The project would also include the removal of approximately 129,920 square

feet of pile-supported fill with the removal of a portion of the Ninth Avenue Terminal wharf. Additionally, floating fill would be required to create the two proposed marinas.

The project would be required to comply with all BCDC permit conditions, which typically include requirements to construct, guarantee, and maintain public access to the Bay; specified construction methods to assure safety or to protect water quality; and mitigation requirements to offset the adverse environmental impacts of the project.

Mitigation Measure I.2d: ***Best Management Practices (BMPs).*** **The project applicant shall implement standard BMPs to maintain water quality and control erosion and sedimentation during construction, as required by compliance with the General National Pollution Discharge Elimination System (NPDES) Permit for Construction Activities and established by Mitigation Measure D.1 to address impacts on water quality. Mitigation measures would include, but would not be limited to, installing silt fencing along the edges of the project site to protect estuarine waters, locating fueling stations away from potential jurisdictional features, and isolating construction work areas from the identified jurisdictional features. The project applicant shall also implement BMPs to avoid impacts on water quality resulting from dredging activities within the Bay, as identified in the *Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region* (LTMS) (Corps, 2001). These BMPs include silt fencing and gunderbooms or other appropriate methods for keeping dredged materials from leaving the project site.**

Mitigation Measure I.2e: ***Compensatory Mitigation*****. The project applicant shall provide compensatory mitigation for temporary impacts to, and permanent loss of, waters of the U.S., including wetlands, as required by regulatory permits issued by the Corps, RWQCB, and BCDC. Measures shall include but not be limited to 1) onsite mitigation through wetland creation or enhancement, 2) development of a Mitigation and Monitoring Plan, and 3) additional wetland creation or enhancement or offsite mitigation.**

Onsite Mitigation through Wetland Creation or Enhancement. The project applicant shall further enhance the shoreline from Lake Merritt Channel to Clinton Basin. The primary objective of the enhancement shall be to improve the habitat value for shorebirds, gulls, ducks, and other avian life that frequent the area. Components of the restoration plan shall include 1) restoration of the tidal marsh, 2) enhancement of roosting areas for shorebirds and water birds, and 3) increase in habitat diversity. Shoreline enhancements shall include removal of debris, including concrete riprap, and . excavation of the shoreline at Channel Park to create marsh vegetation along this area. Excavation shall provide a shoreline slope that falls between the MTL elevation (approximately -2.4 mean sea level) to the MHW”) to allow for the colonization of marsh habitat and the creation of high marsh habitat.

Mitigation and Monitoring Program Prior to the start of construction or in coordination with regulatory permit conditions, the project applicant shall prepare and submit for approval to the Corps, RWQCB, BCDC and CDFG a mitigation and monitoring program that outlines the mitigation obligations for temporary and permanent impacts to waters of the U.S., including wetlands, identified in this EIR. The program shall include baseline information from existing conditions, anticipated habitat to be enhanced, thresholds of success, monitoring and reporting requirements, and site-specific plans to compensate for wetland losses resulting from the project.

The Oak to Ninth Project Mitigation and Monitoring Plan shall include, but not be limited to, the following:

- Clearly stated objectives and goals consistent with regional habitat goals.
- Location, size, and type of mitigation wetlands proposed.
- A functional assessment of affected jurisdictional waters to ensure that the EPA's "no net loss of wetland value" standard is met. The functional assessment shall also ensure that the mitigation provided is commensurate with the adverse impacts on Bay resources in accordance with BCDC mitigation policies. The assessment will provide sufficient technical detail in the project design including, at a minimum, an engineered grading plan and water control structures, methods for conserving or stockpiling topsoil, a planting program including removal of exotic species, a list of all species to be planted, sources of seeds and/or plants, timing of planting, plant locations and elevations on the mitigation site base map, and maintenance techniques.
- Documentation of performance, monitoring, and adaptive management standards that provide a mechanism for making adjustments to the mitigation site. Performance and monitoring standards shall indicate success criteria to be met within 5 years for vegetation, animal use, removal of exotic species, and hydrology. Adaptive management standards shall include contingency measures that shall outline clear steps to be taken if and when it is determined, through monitoring or other means, that the enhancement or restoration techniques are not meeting success criteria.
- Documentation of the necessary long-term management and maintenance requirements, and provisions for sufficient funding.

Additional Wetland Creation or Enhancement or Offsite Mitigation. If permanent and temporary impacts on jurisdictional waters cannot be compensated for onsite through the restoration of wetland features incorporated within proposed open space and park areas, the project applicant shall negotiate additional compensatory mitigation for these losses with the applicable regulatory agencies. Potential options include the creation of additional wetland acreage onsite or the purchase of offsite mitigation.

Significance after Mitigation: Less than Significant.

Construction Impacts on Fisheries

Impact I.3: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on fisheries resources in the Oakland Inner Harbor. (Potentially Significant)

Construction activities within Clinton Basin and along the shoreline edge have the potential to affect fisheries resources within the Oakland Inner Harbor. Specifically, dredging and pile-driving have the potential to cause direct impacts to Pacific herring and migrating salmonids if

these species were to occur. Occurrences of Pacific herring are known within the Oakland Inner Harbor, and suitable herring spawning habitat is known to occur within this area. Incidental occurrence of migrating salmonids may also occur during migration periods as these species move from the ocean to their fresh water spawning habitat. Potential short-term, construction-related impacts to these species could occur during on-land and in-bay pile-driving activities, dredging, grading and excavation, construction of the new breakwater, the removal of existing marinas, and the installation of new marinas. Removal of existing marinas and associated dredging activities could result in increased sediment and other solids being brought into the water column within Clinton Basin and in the Oakland Inner Harbor.

In particular, pile-driving associated with the construction of new marinas in Clinton Basin and construction of a seawall east of the Ninth Avenue Terminal could indirectly affect migrating salmonids and other fish in the proposed project area. Potential impacts that may be associated with these activities include harmful sound pressure levels associated with pile-driving; increased turbidity due to construction of the seawall or other in-water construction and dredging; water quality degradation from the use of pressure-treated wood used in pilings, docks, and boardwalks; and increased predation on native fisheries including juvenile salmonids due to the addition of cover for predatory fish species.

Potential Impacts of Dredging on Fisheries

Dredging activities may occur within Clinton Basin and could cause temporary increase in turbidity. If a listed salmonid is found in the project area, increases in turbidity may interfere with migratory behavior of adult and juvenile fish, but the fish are likely to avoid these areas and return when concentrations of solids are lower (NMFS, 2001). Therefore, any impacts are expected to be temporary and minor.

Potential Impacts of Pile-Driving Activities on Fisheries

If listed salmonid species are present in the project area, increased sound pressure levels during pile-driving activities could result in significant impacts to such species if sound pressure levels exceed 180 decibels. Several salmonid species, including coho salmon, Chinook salmon, and steelhead, are potentially present in the project area between the period between November 1 and May 31 during migratory periods as they move from the ocean to freshwater spawning areas.

Indirect Impacts on Salmonids Due to Increased Predation

NMFS indicated that the addition of new docks, pilings, breakwaters, and other in-water structures may provide increased opportunities for predatory fish to prey upon juvenile listed salmonids. The project would largely replace the existing pilings, docks, and other in-water features with equivalent structures and would not substantially increase the number of in-water structures. Therefore, an increase in the number of predatory fish is not expected. Similarly, the composition of fish species using the shallow-water aquatic habitats is not expected to change following project implementation.

Mitigation Measure I.3: *Protection of Fish and Migrating Salmonids*. The project applicant shall implement measures for protection of salmonids and Pacific herring during dredging projects and for indirect impacts on the San Francisco Bay "Essential Fish Habitat" (EFH) that are identified in the *Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region* (LTMS) (Corps, 2001).

The Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region (LTMS) (Corps, 2001) identifies specific work windows and Best Management Practices (BMPs) to protect salmonids and Pacific herring during dredging projects and to reduce indirect impacts to the San Francisco Bay EFH. The LTMS was developed during formal consultation among the NMFS, USFWS, and CDFG to address impacts on sensitive fisheries and designated critical habitats under their respective jurisdictions and to standardize mitigation for dredging projects. The Biological Opinion (BO) resulting from the LTMS presents specific restrictions on the timing and design of dredging and disposal projects. As the LTMS states, if the dredging project can be accomplished during the identified work windows, the project is authorized for incidental take under the federal Endangered Species Act of 1973, as amended. The LTMS serves as the federal and state pathway for determining potential impacts of dredging and dredge disposal projects on fish species, with timing of construction as the single significance criterion.

As identified in the LTMS, restricting dredging and other in-water construction activities to the specified work periods would avoid the direct and indirect impacts on juvenile or adult herring or salmonids that would otherwise result from dredging-related increases in turbidity or changes in water quality. Impacts of dredging operations on coho salmon, Chinook salmon, steelhead, and Pacific herring would therefore be less than significant, provided that dredging activities are conducted within the work windows identified in the LTMS. For waters in central San Francisco Bay, the construction work window for dredging activities in Pacific herring habitat is between March 1 and November 30 (Corps, 2001). The dredging work window for salmonid species in central San Francisco Bay is June 1 through November 30. These work windows are summarized in **Table IV.I-1**.

Implementation of BMPs and adherence to construction timing as outlined in the LTMS would reduce impacts on special-status fish species. As feasible, BMPs, including silt curtains and gunderbooms, shall be implemented to isolate the work area and prevent silt and sediment from entering the estuary.

Potential impacts resulting from pile-driving activities in the estuary would be avoided or reduced to a less-than-significant level by either avoiding pile-driving activities between November 1 and June 1 or assuring that pile-driving would result in noise levels below 150 decibels at 10 meters. Proposed construction work windows for pile-driving activities are also presented in **Table IV.I-1.** Any pile-driving work occurring outside of these work windows would be conducted in accordance with NMFS directives and Corps permits to reduce potential impacts on fish species.

The quantity of in-water features (such as pilings and pier structures) under the proposed project would be comparable to existing conditions, therefore an increase in the number of predatory fish is not expected. Similarly, the composition of fish species using the shallow-water aquatic habitats is not expected to change following project implementation.

TABLE IV.I-1

CONSTRUCTION WORK WINDOWS FOR IN-WATER PILE-DRIVING AND OTHER IN-WATER ACTIVITIES

Fish Species	Work Activity	Construction Work Windows for Project Activities, by Month											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pacific herring	Pile-driving						W	W	W	W	W	(W)	
	Other In-Water Activities			W	W	W	W	W	W	W	W	W	
Chinook salmon	Pile-driving						W	W	W	W	W	(W)	
	Other In-Water Activities						W	W	W	W	W	W	
Steelhead	Pile-driving						W	W	W	W	W	(W)	
	Other In-Water Activities						W	W	W	W	W	W	

"W" indicates work window when the identified construction activities will minimize impacts to fisheries, in accordance with specific guidance provided by the LTMS (Corps, 2001) for dredging and dredge disposal related activities.

"(W)" indicates possible work window. Frank Filice with the San Francisco Department of Public Works indicated that a letter from NMFS (on another project) established a June 1 to November 30 work window for pile-driving activities (Filice, personal communication). The actual project construction work window will be determined by the Corps in consultation with NMFS during the permitting phase of the project.

Significance after Mitigation: Less than Significant.

Construction Impacts on Nesting Habitat

Impact I.4: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on nesting habitat for breeding raptors and passerine birds, including Cooper's hawk. (Potentially Significant)

Construction activities in and around the project area may temporarily affect birds and raptors. Temporary impacts would result from ground clearing, grading, pile-driving, excavation, demolition, tree removal, and general human presence. Direct impacts may include mortality to individual birds and raptors from building demolition or tree removal. Indirect impacts may include nest failure or nest abandonment from construction noise and increased human presence in the area.

Raptors and passerine birds (song birds) nest throughout the project area, including in ornamental trees located on the project site. California Fish and Game Code Sections 3503 and 3503.5, and the Migratory Bird Treaty Act, protect raptors and passerines and their eggs and nests from incidental "take." Disturbance due to construction could result in reproductive failure for raptors and birds within the project corridor.

Three special-status birds have at least moderate potential to occur in the project area. Two of these, double-crested cormorant and brown pelican have moderate or high potential to occur on the site (LSA, 2004) However, the special-status designation for cormorants only applies to rookeries (nesting colonies) and there has been no evidence of rookeries within the project area (LSA, 2004). Additionally, brown pelicans are known to occur within the area and could roost on numerous docks, piers, and shoreline areas within and adjacent to the project area Brown pelicans would be temporarily affected by project development but could continue to forage and roost along the project shoreline after development.

Cooper's hawks could be directly and indirectly affected by the proposed project if they were to occur within the vicinity of the construction. The larger ornamental trees on the site provide suitable habitat for Cooper's hawks. This species is known to nest within the urban areas of the East Bay (Pericoli and Fish, 2004) and the CNDDB reports one known occurrence at Lakeside Park along the north end of Lake Merritt, less than five miles from the project site (CNDDB, 2005).

Mitigation Measure I.4a: *Timing of Construction.* To the extent feasible, construction activities shall be conducted outside the breeding season for birds and raptors (August 1-January 30) Trees and shrubs that could provide potential nesting habitat may be removed during this period to avoid future nesting within the project site.

Mitigation Measure I.4b: *Preconstruction Surveys.* If seasonal avoidance is infeasible, the following measures shall be required to avoid potential adverse effects on nesting special-status raptors and other nesting birds:

- **A qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within 500 feet of construction activities. Preconstruction surveys should occur no later than two weeks prior to the start of construction activities.**

- **If active nests of raptors or other bird species are found during preconstruction surveys, a no-disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction <u>shall be determined in consultation</u> with the CDFG and shall be based on existing noise and human disturbance levels at the project site.**

- **If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees, shrubs, and buildings that have been determined to be unoccupied by special-status birds or that are located more than 500 feet from active nests may be removed.**

Significance after Mitigation: Less than Significant.

Project Impacts on Nesting and Roosting Bats

Impact I.5: The project could have a substantial adverse effect, either directly or through habitat modifications, on special-status nesting and roosting bats. (Potentially Significant)

Existing abandoned or underused buildings (i.e., buildings containing uses with low activity, such as the Ninth Avenue Terminal building) on the project site could provide nesting or roosting habitat for special-status bat species, including pallid bat (*Antrozous pallidus*), long-eared myotis (*Myotis evotis*), fringed myotis (*Myotis thysansodes*), long-legged myotis (*Myotis volans*), Yuma myotis (*Myotis yumanensis*), and Townsend's western big-eared bat (*Corynorhinus townsendii*).

Bats are known to use abandoned buildings, mines, caves and other darkened structures as nursery and roosting sites. Although the project site lacks suitable foraging habitat and/or fresh water that would pose as an attractant for insects that bats might forage, it is likely that Lake Merritt or its channel to the estuary could provide ample foraging opportunities for any species of bat likely roosting on the project site. Given the proximity of Lake Merritt to the project site, and the presence of abandoned or underused structures that exist in the area, it is possible for bats to be located on the project site.

Mitigation Measure I.5: Before demolition of abandoned or underused buildings on the project site, such as the Ninth Avenue Terminal building, a qualified biologist who is familiar with bat biology and who is able to recognize signs of bats using abandoned buildings shall conduct pre-demolition building surveys in order to adequately make a determination on the presence of bat nurseries.

If abandoned or underused buildings slated for destruction are being used by bats as nursery sites, demolition shall be postponed until young are reared and able to forage on their own. This determination shall be made by a qualified biologist specializing in bat biology.

If bats are found to be roosting in abandoned or underused buildings on the project site, the bats shall be actively relocated to a temporary roosting structure (preferably onsite) during demolition activities. In addition, permanent bat roosting structures ("bat boxes") shall be created in order to properly mitigate the effects of a loss of roosting structure. The design of the bat boxes shall conform to the specifications appropriate to the species of bats found on the project site and vicinity, and shall be approved by a qualified bat biologist knowledgeable in the design of bat boxes. The bat boxes shall conform to the architectural design of the project buildings to reduce the visibility and obtrusiveness of the boxes and to avoid vandalism or disturbance to bat colonies.

Significance after Mitigation: Less than Significant.

Project Lighting and Shadow Impacts

Impact I.6: Increased lighting and shading associated with the new project buildings could have a substantial adverse effect, either directly or through habitat modifications, on biological resources. (Less than Significant)

The project would develop new residential and retail land uses and new public parks, increasing the overall lighted area on the project site. New development could pose an attractant to migrating/flying birds and have adverse effects on other wildlife species. Various studies have examined the potential hazards of lighting on flying birds (e.g., Kerlinger, 2000; Dewey and Campbell, 2000; California Energy Commission, 1995). Many of the studies have focused on relatively large structures such as wind turbines and wind farms, which have been identified as a hazard to migratory and flying birds. Despite the recognized threat that such structures can pose to migratory birds, many structures and much urban lighting poses no recognized threat to flying birds (Dewey and Campbell, 2000). Factors other than the mere presence of lighting on structures generally contribute to the degree of hazard to flying birds. The primary factors contributing to bird impacts are the geographic location of the structure relative to preferred migratory routes and the altitude and intensity of lighting.

The project would incorporate relatively low-height, low-intensity lighting on docks, with standard exterior lighting on new and remodeled buildings. Project lighting would be consistent with existing lighting at Jack London Square, along the Oakland Embarcadero, and along the Bay shoreline. This existing lighting has not been demonstrated to pose a significant hazard to flying birds. As a result, outdoor lighting associated with the proposed project is not expected to pose a strike hazard to migratory and flying birds. Because an increased bird strike or wildlife hazard is not anticipated, no specific mitigation measures are proposed.

The project would also include construction of buildings and other structures significantly taller than existing structures on the site. Increased building height would cause larger shaded areas in the terrestrial and aquatic environment in the vicinity of the project area. Increased shading could reduce water temperatures in open water areas. Currently, there is insufficient peer-reviewed information on the effects of shading on biological resources on open water areas to reach a conclusion about the nature and extent of potential impacts of building shade on such areas. Open water areas are subject to wind and tidal action, which are much stronger determinants of biological conditions. Effects on wetland vegetation, however, are somewhat better known and discussed below.

Plants have the ability to survive under various light and shade regimes. Wetland species occupy the full range of these conditions, usually based on photosynthesis pathways. Quantifying effects of shade on any individual species is poorly understood due to the interaction of multiple factors in nature. For example, Callaway (1992) determined that shade was critical to the survival of blue oak (Quercus douglasii) seedlings, but that at least one other factor (acorn predation) was reduced by shade and protection from herbivores may have been as important as shade tolerance. Due to

the obvious complexity of the physical phenomenon of moving shade, and the equal complexity of plant interaction, scientific studies of shade relevant to a CEQA process are limited.

San Clements (2003) studied the effects of shading by bridges on estuarine wetlands in an attempt to improve environmental analysis and quantify impacts. Although performed in North Carolina, the study sites occupied the same range of brackish wetlands that might be expected in extant vegetation and restored wetlands in the Oak to Ninth Project area. The species used in the thesis was principally *Spartina*, a different species from the Bay Area's native spartina but one that has the same ecological light requirements. The San Clements study measured photosynthetically available light, soil nitrogen and attributes of plant vigor such as numbers of flowers and stems. Results only identified effects when the Height-to-Width ratio (HW) of the shadow source (e.g., building, bridge, etc.) was less than 0.5, and there was no measurable effect when the ratio was greater than 0.7. Thus the shade of a bridge 100 ft wide, by this standard, would have no effect on wetland vegetation if higher than 70 ft (0.7 HW). The study showed that at a certain distance from the source of the shadow, shade has no effect. Furthermore, San Clements' effects were limited to the area immediately under and adjacent to the bridges under study, i.e. the direct vertical projection of the shade at noon during the summer solstice. Extrapolating to the current project, measurable effects would only be likely immediately adjacent to buildings because that is where the shadow lasts the longest. **Figure IV.K-21** and **Figure IV.K-27** (see Section IV.K, Visual Quality) show that the wetland restoration area would not be shaded at noon even during the seasons when shadows are longest (spring and autumn) and would be outside the area of measurable impact. The conclusion is therefore, that building shade cast on habitats, primarily the wetland restoration area, is a less than significant impact. (Overall potential shadow impacts associated with the project are discussed in EIR Section IV.K, Visual Quality.)

Mitigation: None Required.

Tree Preservation and Removal

Impact I.7: The removal of any protected trees identified within the project site would be conducted in compliance with the City of Oakland's Tree Preservation and Removal Ordinance and would not result in a significant impact. (Less than Significant)

The Oakland Tree Preservation and Removal Ordinance (Oakland Municipal Code Chapter 12.36) requires the project sponsor to obtain a permit from the City of Oakland Office of Parks and Recreation for the removal of protected trees or if work associated with project construction might damage or destroy a protected tree. A "protected tree" is a coast live oak four inches or larger in diameter measured four-and-a-half feet above the ground (diameter at breast height), or any other species nine inches in diameter at breast height or larger, except eucalyptus and Monterey pine trees. The removal of a protected tree would require that an appropriate replacement tree be planted on the project site.

Most of the project site is expansive paved area and developed with commercial, industrial, and storage-related structures. Unpaved areas and vegetation on the site is minimal. Approximately five to six mature trees exist on the project site, and several mature street trees existing along the Embarcadero, primarily along the frontage of the Jack London Aquatic Center parking lot. Ornamental trees also exist along Estuary Park. The project would remove existing trees and would replace and protected trees removed, pursuant to a detailed landscape plan that the project sponsor would be required to prepare and submit to the City for review and approval. As depicted in the illustrative development plan, **Figure III-3** in the Project Description (Chapter III), the project would provide extensive new trees (and other landscaping) throughout the project site, including along new public streets and open spaces. Tree removal and characteristics of replacement trees (e.g., species, size, location) would require approval by the Public Works Agency and the Office of Parks and Recreation, respectively, consistent with the City's Tree Preservation and Removal Ordinance. The project sponsor would obtain a tree permit for the removal and replacement of any protected trees for the project and comply with the City's Tree Preservation and Removal Ordinance, and therefore the impact would be less than significant.

Temporary and or direct impacts to birds and raptors that could result from tree removal are addressed in Impact I.4, above.

Mitigation: None Required.

Cumulative Impacts

Cumulative Context

The geographic context used for the assessment of cumulative biological resources impacts consists of the areas of Lake Merritt and Lake Merritt Channel, the Oakland Estuary, and central San Francisco Bay.

Cumulative Impacts on Biological Resources

Impact I.8: Construction activity and new development resulting from the project, in conjunction with other foreseeable development in the city and along its shoreline, could result in impacts on wetlands, other waters of the U.S., and special-status species. (Less than Significant)

Assuming concurrent implementation of the project with other reasonably foreseeable future projects in the vicinity, adverse cumulative effects on biological resources could include construction impacts on wetlands, other waters of the U.S., and special-status species. The project and other future projects in the area would be required to comply with local, state, and federal laws and policies and all applicable permitting requirements of the regulatory and oversight agencies intended to address potential impacts on biological resources, specifically wetlands, other waters of the U.S., and special-status species. Additionally, new projects would be required

to demonstrate that they would not have significant effects on these biological resources, although it is possible that some projects may be approved even though they would have significant, unavoidable impacts on biological resources. Therefore, the effect of the project on biological resources, in combination with other foreseeable projects, would be less than significant.

Mitigation: None Required.

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J. Population, Housing, and Employment

This section addresses existing conditions, trends, and impacts of the project related to population, housing, business activity, and employment. Specifically, the analysis focuses on the inducement of population growth and on displacement of housing, people, businesses, and jobs, as well as on potential indirect physical impacts. Appropriate mitigation measures are identified when necessary.

Introduction

The following setting identifies existing conditions and trends for the project site, and then focuses on surrounding areas of Oakland. The citywide and regional context for population, housing, and employment is presented, along with identification of the relationship between jobs and housing. Project housing, population, and employment are quantified and described along with the project's contributions to citywide growth, providing the context for considering and understanding potential physical environmental impacts analyzed in this and other sections of the EIR.

As initially indicated above, the impact assessment of the project focuses on the inducement of population growth and on displacement of housing, people, businesses, and jobs. The impact analysis also considers the potential for indirect physical impacts, such as through ripple effects that could result in physical deterioration and urban decay due to the retail development proposed for the project. The discussion also addresses potential indirect impacts associated with potential housing market effects of the project.

Setting

Project Site

Property on the project site is owned by the Port of Oakland and occupied by 21 tenants. Those establishments provide employment for about 230 workers. There is no housing or residential population located on the project site.

Given the expanse of the project site, five geographic "subareas" (**Figure IV.J-1**) have been identified to organize the setting discussion of existing businesses and employment for the project site and outparcels encompassed by the project site.

Existing Business Activity and Employment

There is a mix of primarily industrial business activities on the project site. They include warehouse and wholesale activities, boat building and repair, equipment and container storage, cotton storage, a ready-mix concrete plant, construction storage, metal recycling, glass fabrication, longshore training, and retail furniture liquidation. There also is a small office for the Oakland Police Department. Overall, the largest number of tenants and business activities on the project site are industrial and marine-related support uses.

Most of the 231 workers employed at the project site are involved in the industrial business activities there and work in the more traditional blue-collar occupations. They include workers involved in production, transportation, material-moving, and maintenance and repair occupations. They also include onsite managers. In addition, there are workers employed in the retail and wholesale business activities on the site, including those in the sales and related (inventory/stock clerks, movers) occupations, and in the managerial and clerical/record-keeping occupations.

The business activities and associated employment are located throughout the large Oak to Ninth project site, as summarized in **Tables IV.J-1** and **IV.J-2** and in the map presented in **Figure IV.J-1**. At the western end of the site, there are four business operations located in subareas 1 and 2 of the project site, on both sides of Lake Merritt Channel. Employment of 91 workers is estimated for these parts of the project site, 51 jobs in subarea 1 (west side of Channel) and 40 jobs in subarea 2 (east of Channel to Fifth Avenue area). In addition to the business operations, subarea 1 also includes the Jack London Aquatic Center and Estuary Park with a small amount of associated employment.

TABLE IV.J-1

EMPLOYMENT ON THE OAK TO NINTH PROJECT SITE

Subarea[a]		Employment (2004)[b]
1	West of Channel	51
2	Channel to Fifth Avenue Area	40
4	East of Fifth Avenue Area and West of Clinton Basin	45
5	East of Clinton Basin	95
Total Project Site		**231**

[a] The subareas are identified on the map in Figure IV.J-1. Subareas 1, 2, 4, and 5 include property owned by the Port of Oakland and define the project site. Subarea 3 is privately-owned property in the Oak to Ninth Avenue area that is not included within the project site.
[b] Estimated by Hausrath Economics Group based on data for properties, tenants, and leases from the Port of Oakland and on field work.

SOURCE: Hausrath Economics Group, July-August 2004.

There are 16 tenants/uses in the eastern parts of the project site, on either side of Clinton Basin, including 14 businesses and two local government entities (the Oakland Police Department and the Port of Oakland). Employment for 140 workers is estimated for these areas, 45 jobs in subarea 4 (west of Clinton Basin and east of Fifth Avenue area) and 94 jobs in subarea 5 (east of Clinton Basin). The maritime and marine-related business activities are primarily located in

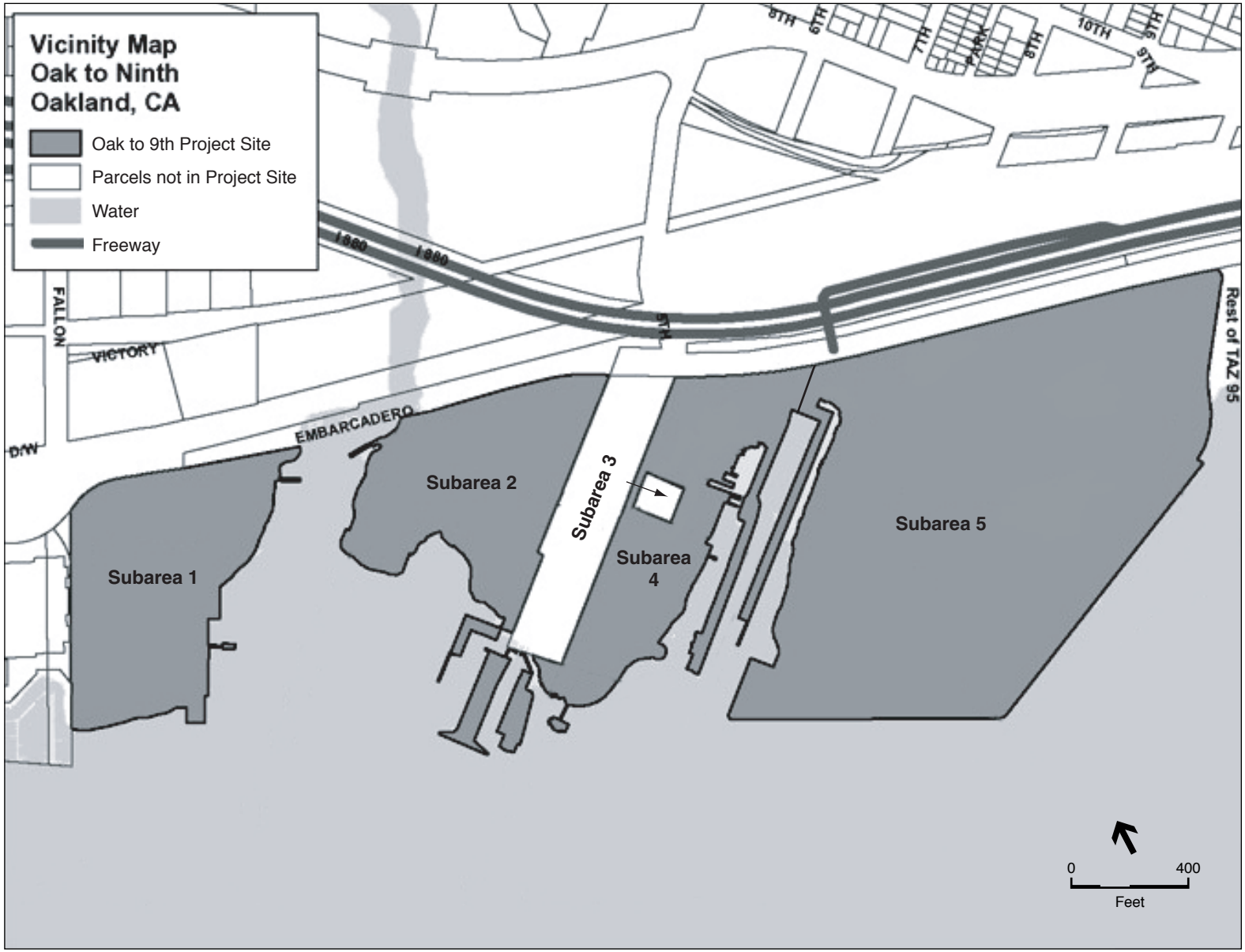
TABLE IV.J-2

PROJECT SITE TENANTS, BUSINESS ACTIVITIES, AND EMPLOYMENT

Subarea[a]	Number of Tenants/ Uses[b]	Estimated Employment[c]	Tenant/Business Names[b]	Business Activities/Uses[b]
1	2	51	Cash & Carry	Wholesale grocery
			Jack London Aquatic Center/Estuary Park	Public park and aquatic center
2	3	40	Golden State Diesel Marine	Marine engine repair and storage
			Telemedia Communications Systems Inc.	Telecommunications equipment sales and storage
			Kaiser Sand and Gravel Co./Berkeley-Oakland Ready Mix	Concrete and cement plant and storage
4	7	45	East Bay Glass Co.	Fabrication, manufacturing, and storage
			KTVU	Equipment storage
			Port of Oakland	Storage
			Philbrick Boat Works	Boatbuilding and storage
			Thunderbird Properties	Boat repair and storage
			Ship Shape Marine	Marine storage
			Oakland Marine Service	Floating barge/storage
5	9	95	Air-Sea Containers	Container storage; warehouse/ office
			Morespace	Storage
			National Furniture Liquidators, Inc.	Retail furniture operation
			Oakland Police Dept.	Office
			Pacific Maritime Association	Training for longshore personnel
			Lakeside Non-Ferrous Metals, Inc.	Recycling of non-ferrous metals
			Pacific Rim Transportation, Inc.	Container trucking and storage
			Vortex Marine Construction, Inc.	Marine construction yard and docking of barge
			Transmeridian Warehouses, Inc./ Ninth Avenue Terminal	Cotton storage
Total	**21**	**231**		

[a] The subareas are identified on the map in Figure IV.J-1.
Port of Oakland, July 2004 and field work by Hausrath Economics Group, August 2004.
[c] Estimated by Hausrath Economics Group using square footage data for properties and tenants/leases from the Port of Oakland and field observations.

SOURCE: Hausrath Economics Group and Port of Oakland, July-August 2004.



SOURCE: Hausrath Economics Group, 2005

Oak to Ninth Avenue . 202622

Figure IV.J-1
Oak to Ninth Subareas

these parts of the project site. The Ninth Avenue Terminal, formerly operated as a breakbulk terminal by the Port of Oakland, is located on the east side of Clinton Basin in subarea 5.

Trends in Activity

Historically, the Oak to Ninth District of the Estuary waterfront developed as an industrial and warehousing district oriented to and served by the mainline railroad and the cargo-handling facilities at the Ninth Avenue Terminal. Today, the area continues to be dominated by industrial uses, although the cargo-handling industries and levels of industrial activity have declined. The Ninth Avenue Terminal remained in use by the Port of Oakland as a breakbulk terminal until its closure in 1998.

The industrial business activities currently located on the project site value the location because of the large open land areas available for outside storage and various industrial activities, the area's good access to I-880 with proximity to the central parts of the region, and because of the site's relative isolation from residential and commercial uses. There continues to be market interest in the area for industrial business activities.

Little change has occurred in the facilities and physical conditions of the project site in recent years. The site's landowner, the Port of Oakland, has continued to hold the land and lease it as-is, in anticipation of reuse and redevelopment of this waterfront property for new uses in the future.

Tenure of Businesses and Lease Terms

The length of time that existing businesses have been operating on the project site ranges from two to 40 years. Of the 18 business tenants located on the site (excluding the Aquatic Center/Estuary Park, the Port of Oakland, and the Oakland Police Department), five businesses have been at this location for two to five years, six business for five to 10 years, five businesses for 10 to 16 years, and two businesses for about 40 years. The long-term tenants include the Cash & Carry wholesale grocery operation in subarea 1 west of the Channel and the sand and gravel and ready-mix concrete operations on the east side of the Channel in subarea 2.

Almost all of the businesses on the project site are now on month-to-month or short-term leases. Many had longer-term leases that have expired and converted to a month-to-month basis. Businesses accept the lack of long-term location security and choose to remain in the area and continue operations there for as long as possible. The two tenants with operations in the area since the mid-1960s have longer-term leases that extend to 2009 in one case (the Cash & Carry wholesaler) and to 2015 in the other (the sand and gravel and ready-mix concrete operations).

Adjacent Fifth Avenue Point Area

There are privately-owned parcels near the middle of the Oak to Ninth District (see subarea 3 on the map in **Figure IV.J-1**) that are not included in the project site although they are surrounded by it. The area is an enclave of artist studios, artisan workshops, and small businesses occupying the older industrial building stock there. It is estimated that about 108 people work in this area in

a mix of arts and crafts, manufacturing, light industrial, professional service, and water-related business activities (see **Table IV.J-3** below).

TABLE IV.J-3

EMPLOYMENT AND POPULATION FOR FIFTH AVENUE POINT AREA ADJACENT TO THE PROJECT SITE

Subarea[a]		Employment[b]	Households[c]	Population[c]
3	Fifth Avenue Point Area	108	17	33

[a] See map in Figure IV.J-1. Subarea 3 is privately-owned property in the Oak to Ninth Avenue area that is not included within the project site.
[b] Estimated by Hausrath Economics Group based on property data from the Port of Oakland and the Alameda County Assessor and on field work.
[c] 2000 Census data. Current conditions are assumed to be the same as identified by the most recent Census data.

SOURCE: Hausrath Economics Group, July-August 2004.

The 2000 Census identified 17 households residing in the artist and artisan work-live studios in the area with a population of 33 residents. That same population continues to reside in the area today.

The levels and types of business activity, employment, and residential population in this area evolved over time and have remained fairly stable. Most of the businesses and residents are tenants, who rent the studios and other space in the area.

Surrounding Areas

The project site is somewhat separated from surrounding areas of Oakland by the I-880 freeway and rail lines and railroad property to the north and by the waters of the Estuary on its east and south sides. Beyond those separations, surrounding areas include the rest of the Oak to Ninth Avenue District, other parts of the Estuary waterfront to the west (the Jack London District) and to the east (the San Antonio/Fruitvale Waterfront District), downtown Oakland to the northwest (above I-880 to Grand Avenue and north to I-580), and the San Antonio area neighborhoods to the north and northeast (above I-880 between Lake Merritt and the Channel and Fruitvale Avenue). Employment, households, and population in these surrounding areas are summarized in **Tables IV.J-4** and **IV.J-5** and described in this section. **Table IV.J-4** identifies existing conditions and **Table IV.J-5** summarizes future trends. Background on the estimates and more detailed data for surrounding areas are provided in **Appendix D.4**.

Estuary Waterfront

Oakland's Estuary waterfront extends from the Jack London District on the west to 66th Avenue on the east, including all of the lands on the waterside of I-880. The area includes three districts: the Jack London District, the Oak to Ninth District, and the San Antonio/Fruitvale District. In total, approximately 13,420 people are employed in a wide range of commercial and industrial

TABLE IV.J-4

EMPLOYMENT, HOUSEHOLDS, AND POPULATION FOR OAK TO NINTH PROJECT SITE AND SURROUNDING AREAS, 2005

	Employment	Households	Population
Estuary Waterfront (South of I-880, Brush St./MLK Jr. Way east to 66th Avenue)[a]			
Oak to Ninth District			
Project Site	231	-	-
Rest of District	613	17	33
Jack London District	7,180	1,350	2,430
San Antonio/Fruitvale District	5,400	640	1,490
	13,424	2,007	3,953
San Antonio, north of I-880 (North of I-880 to I-580, Lake Merritt and Channel east to Fruitvale Ave.) [b]			
Lower San Antonio	6,300	11,630	37,420
Rest of Area	5,510	10,820	30,100
	11,810	22,450	67,520
Downtown Oakland, north of I-880 (North of I-880 to I-580, I-980 east to Lake Merritt and Channel)			
I-880 to Grand Ave.	61,860	8,170	18,150
Grand Ave. to I-580	13,810	10,500	18,420
	75,670	18,670	36,570
Total Project Site and Larger Surrounding Area	**100,904**	**43,127**	**108,043**
City of Oakland Overall	**198,470**	**155,400**	**417,350**

[a] The extreme western end of the area covered by the *Estuary Policy Plan*, between Adeline Street and Brush Street inland of the railroad and maritime facilities, is not included in the data for surrounding areas.

[b] The data shown here for the San Antonio covers an area that extends east to Fruitvale Avenue and that includes a part of the adjacent Fruitvale District, between 28th Avenue and Fruitvale Avenue in the vicinity of International Boulevard. The data for the Lower San Antonio subarea covers an area that approximates the Lower San Antonio neighborhood using the cumulative scenario database.

SOURCE: Oakland Cumulative Growth Scenario as updated for *Oak to Ninth Avenue Project EIR*, November 2004.

business activities along the Estuary waterfront. Approximately 3,960 people now live in this area in 2,010 households. The Oak to Ninth project site is located in the central portion of the Estuary waterfront.

Jack London District

To the west of the project site, this formerly industrial district is now a major destination for retail, dining, and entertainment activities in Oakland and is poised for growth of these activities with the redevelopment of Jack London Square that has just begun. The District also has become a desirable office location for professional service firms and other office businesses, and the Port of Oakland's offices are in this area. The historic wholesale produce market remains in the Jack London District along with selected industrial and distribution uses, although those business

TABLE IV.J-5

TRENDS FOR SURROUNDING AREAS AND THE CITY OF OAKLAND, 2000, 2005, AND 2025 (without Oak to Ninth Avenue Project)

				2005–2025	
	2000	2005	2025	Change	Percent
Employment					
Estuary Waterfront	12,940	13,420	17,740	4,320	32%
San Antonio, north of I-880	11,520	11,810	12,590	780	7%
Downtown Oakland, north of I-880	70,620	75,670	91,660	15,990	21%
City of Oakland	185,160	198,470	240,950	42,480	21%
Households					
Estuary Waterfront	640	2,010	3,330	1,320	66%
San Antonio, north of I-880	22,190	22,450	23,060	610	3%
Downtown Oakland, north of I-880	17,790	18,670	25,810	7,140	38%
City of Oakland	150,790	155,400	171,980	16,580	11%
Total Population					
Estuary Waterfront	1,420	3,950	6,510	2,560	65%
San Antonio, north of I-880	66,310	67,520	68,390	870	1%
Downtown Oakland, north of I-880	31,790	36,570	49,150	12,580	34%
City of Oakland	399,480	417,350	448,460	31,110	7%

NOTE: The numbers presented above for 2025 reflect the No Project scenario, where existing conditions on the Oak to Ninth project site are assumed to remain as-is (2005) in the future.

SOURCE: Oakland Cumulative Growth Scenario as updated for *Oak to Ninth Avenue Project EIR*, November 2004.

activities have been declining over time as the area transitions to higher-density uses. Employment in the Jack London District in 2005 is estimated at 7,180. It is projected to increase to 10,960 jobs by 2025, reflecting a 53 percent increase in employment in this area over the next 20 years.

The eastern parts of the Jack London District have been transforming into a new urban neighborhood. The conversion of industrial buildings to work-live and residential lofts along with the development of new loft housing will have increased the population in the District from 248 households and 396 residents at the time of the 2000 Census to approximately 1,360 households and 2,440 residents by the end of 2005. This growth is part of a larger trend of higher-density new housing development in downtown Oakland, attracting new residents to downtown and infusing new vitality into Oakland's central area. Additional housing growth is anticipated in the Jack London District over the next 20 years, with projections showing 2,380 households and 4,160 residents in the District by 2025.

The western end of the Oak to Ninth project site (subarea 1) is adjacent to the Jack London District and to the loft district in the eastern parts of that District.

Rest of Oak to Ninth District, North of Embarcadero (Not Part of Project Site)

In addition to the Oak to Ninth project site and the Fifth Avenue Point area on land that extends to the Estuary on the south side of the Embarcadero, the Oak to Ninth District also includes inland areas north of Embarcadero, between Oak Street, I-880, and Lake Merritt Channel. This relatively small area includes a mix of active, light industrial business activities with current employment of about 410 jobs. The area is expected to remain active and stable in the future with no major changes anticipated.

San Antonio/Fruitvale District of Estuary Waterfront

Beyond the Oak to Ninth project site to the east lies the San Antonio/Fruitvale District of the Estuary waterfront. This large district with several subareas includes a broad mix of commercial and industrial business activities as well as residential uses. Overall, current employment in this District is estimated at approximately 5,400 jobs. There also are about 640 households with 1,490 people residing in this District by the end of 2005, most in the Kennedy Tract subarea along the waterfront in the vicinity of 29th and Fruitvale Avenues.

Immediately to the east of the Oak to Ninth project site is the Embarcadero Cove subarea with a mix of largely water-oriented commercial uses. There is a mix of restaurant, hotel/motel, boat-sales, and office business activities oriented to the waterfront and a small boat marina. There also are light industrial businesses and larger-scale office uses. There is potential in this subarea for intensification of activity and new development for commercial and recreation-oriented activities in the future.

Beyond Embarcadero Cove to the east, are several subareas, that move from heavy industrial and light industrial activities with some commercial activities in the Brooklyn Basin and Con Agra subareas to a mix of residential, warehousing, service-oriented uses, and artisan work-live spaces in the Kennedy Tract. Of note is the recent development of new loft housing along the waterfront in the Kennedy Tract subarea, accommodating 260 additional households and about 500 new residents in that area. Beyond, the waterfront extends further east from the large Owens Brockway industrial facility to the 42nd Street and High Street area with a mix of warehouse, light industrial, commercial, and big-box retail uses, to the Tidewater area with light industrial and service-oriented uses.

Overall, the San Antonio/Fruitvale District of the waterfront includes many older industrial uses and facilities and much of the area remains isolated from the rest of the City by the I-880 freeway, the railroad tracks and rail rights-of-way, and the lack of access inland. The area also is bisected by through connections to Alameda via the Park Street and High Street bridges. Throughout this district, there are potentials for change and redevelopment to a mix of commercial, residential, recreational, and light industrial uses in the future with improved access to and along the shoreline and increased recognition of the waterfront amenities available there.

San Antonio District

The San Antonio District of Oakland is located across the I-880 freeway and the railroad rights-of-way to the north and northeast of the project site.[1] The San Antonio is a largely residential community extending from the east side of Lake Merritt and the Channel to approximately Fruitvale Avenue and 28th Avenue, and north to I-580.[2] The parts of this District located south of East 22nd Street and east of approximately Park Boulevard and 3rd Avenue are known as the Lower San Antonio.

The San Antonio neighborhoods include mixed housing types with single family detached and attached units and apartment buildings. There are approximately 22,400 households residing in the San Antonio, north of I-880, with a population of 67,500 residents. About 52 percent of these households and 55 percent of the population reside in the Lower San Antonio community, in the southern parts of the area. (See **Table IV.J-4**.)

The neighborhood-oriented commercial activities in the San Antonio are concentrated along the transportation corridors. They include the Eastlake Business District along International Boulevard. and East 12th Street at the western end of the District,[3] and the San Antonio Commercial District located further east on the same streets. Commercial uses also occur along Foothill Boulevard, and there is a community shopping center and surrounding neighborhood commercial district near Lake Merritt, in the vicinity of East 18th Street and Park Boulevard. The San Antonio also includes older industrial properties south of East 12th Street near the railroad and freeway. Employment in the San Antonio currently is estimated at approximately 11,800, as shown in **Table IV.J-4**.

The San Antonio is characterized by the diversity of its population which contributes to its multi-cultural character. The 2000 Census identified that the largest shares of the area's population are represented by Asian residents (34 percent), Hispanic or Latino residents (27 percent), and black or African-American residents (23 percent), followed by the share for white, non-Hispanic residents (12 percent). The Eastlake Business District includes an eclectic and diverse selection of businesses including many Southeast Asian-owned stores oriented to the growing Asian population nearby. Many of the Hispanic or Latino residents reside in the eastern portions of the area, adjacent to the nearby Fruitvale District.

Compared to Oakland's population overall, the San Antonio includes proportionally more family households and a younger population with more children, particularly in the Lower San Antonio.

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[1] Parts of the larger San Antonio located below the I-880 freeway and along the Estuary are included in the San Antonio/Fruitvale District of the Estuary Waterfront described in the prior subsection.

[2] The data describing population and employment for the San Antonio as part of the surrounding areas covers an area that extends east to Fruitvale Avenue and that includes a part of the adjacent Fruitvale District between 28th Avenue and Fruitvale Avenue in the vicinity of International Boulevard.

[3] More description of the Eastlake Business District is provided later in this section as part of the assessment of potential indirect physical impacts of retail development proposed for the project. Further consideration of the Eastlake District including analysis of retail sales data for the District, also is provided in Appendix D.2: Analysis of Potential for Indirect Physical Impacts from Retail Development Proposed for the Oak to Ninth Avenue Project.

Household incomes of residents in the San Antonio are below citywide median income, and a larger share of San Antonio residents are renters than is true for the city overall.[4]

Through the combined efforts of the local community and the public and nonprofit sectors, streetscape improvements are providing pedestrian enhancements and new landscaping in parts of the area, and there are business retention and attraction efforts, a façade improvement program, and various business assistance, workforce development, and community education efforts underway to support neighborhood and economic development in the area. There also are efforts underway to preserve affordable housing for existing residents of the Lower San Antonio, including financial and education assistance for residents and the identification of potential sites and other incentives to encourage affordable housing development in the neighborhood.

Further growth in the area over the next 20 years is anticipated to include some additional housing on infill sites and improvement of business activity in the commercial districts which will support some employment growth over time.

Downtown Oakland

Downtown Oakland is located to the north and northwest of the project site. It includes the Jack London District described above and other districts in the central parts of downtown extending inland from the I-880 freeway to Grand Avenue, including the County/Metro Center/Museum area extending west from Lake Merritt Channel, Chinatown, Old Oakland, City Center area, Kaiser Center area, and the Uptown District. Downtown Oakland is the major employment center in Oakland and represents the largest concentration of business activity and employment in the Bay Area outside of downtown San Francisco. (Concentration measured in terms of total amount and density of employment within a definable area.)

Currently, there are approximately 62,000 people employed in the central parts of downtown Oakland from I-880 north to Grand Avenue. Office employment in both private sector and government office activities represents over three-quarters of all employment downtown. The rest includes employment in retail, restaurant, entertainment, and hotel activities and employment in various service, education, cultural, manufacturing and wholesale, auto-related, and non-office public sector activities. The larger Downtown/Oakland Central area extending further north from Grand to I-580 includes additional business activity and employment in office, retail, auto-related, and medical/hospital uses, bringing total employment for the larger area from I-880 to I-580 to approximately 76,000. Downtown employment represents a significant share, about 38 percent, of total employment in Oakland.

Business activity and employment in downtown Oakland are anticipated to continue to grow in the future, given the area's central location in the region, its good transportation accessibility, and its role and competitive position within the region's office market. Employment downtown is anticipated to increase by about 21 percent, or 16,000 jobs, by 2025, to a total of approximately

[4] The population and household characteristics summarized are based on 2000 Census data for Census Tracts that approximate the boundaries of the San Antonio and Lower San Antonio areas. Tables including the Census data referenced are included in Appendix D.1 of this EIR. See Tables D.1-1 and D.1-2.

92,000 in the larger Downtown/Oakland Central area from I-880 to I-580. With the Jack London District included, employment in the total Downtown/Oakland Central area in 2025 is forecast at approximately 103,000.

In addition to its role as an employment center, downtown Oakland is becoming increasingly desirable as a location for higher-density new housing development. This growth is part of a larger trend back to urban living that is bringing new residents downtown and creating new vitality for Oakland's central area. New housing since the 2000 Census has added about 900 households to downtown's collection of neighborhoods including Chinatown, Old Oakland, Lake Merritt, and other parts of downtown. By 2010, an additional 2,000 to 2,400 households are anticipated to be added downtown in housing projects that are under construction, already approved, or currently in the planning process. The new housing covers a range of housing prices and rents, including new units at affordable levels. By 2025, another 4,700 to 5,000 additional households are forecast for the Downtown/Oakland Central area from I-880 to I-580, which by then would be home to about 49,000 residents.

City of Oakland and the Region

Oakland is the third largest city in the Bay Area region and the largest city in the East Bay. Population, housing, and employment growth is occurring in Oakland and projected to continue in the future, bolstering Oakland's role as a centrally-located place of residence and place of employment within the large Bay Area region.

Population and Housing

Existing Conditions and Trends

The 2000 Census identified 399,480 people living in Oakland, about six percent of the total population of the Bay Area (see **Table IV.J-6**). The number of people occupying housing in the city (household population) totaled 392,310 in 2000, with an additional 7,170 people living in group quarters such as dormitories, group homes, nursing homes, shelters, correction facilities, etc. There were 150,790 households in Oakland in 2000 and an average household size of 2.6 persons per household.

The 2000 census also identified 157,510 housing units in Oakland (see **Table IV.J-7**). Of the occupied housing units (150,790), 59 percent were renter-occupied and 41 percent owner-occupied. From 1990 to 2000, Oakland's housing stock increased by 2,771 units. However, the number of households in the city grew by 6,269 during the 1990s, reflecting increased occupancy of the existing housing stock, as the overall housing vacancy rate declined from 6.6 percent in 1990 to 4.3 percent in 2000 (see **Table IV.J-7**). The city's population increased by 27,240 residents during that period as a result of household growth and an increase in the population in existing households.

TABLE IV.J-6

POPULATION, HOUSEHOLDS, AND EMPLOYMENT FOR OAKLAND, INNER EAST BAY, AND BAY AREA REGION: 1990, 2000, AND 2025 (Without Oak to Ninth Avenue Project)

				1990–2000		2000–2025		
	1990	2000	2025	Change	Annual Rate	Change	Annual Rate	
Total Population								
Oakland [a]	372,240	399,480	448,460	27,240	0.71%	48,976	12%	0.46%
Inner East Bay [c]	649,840	688,220	768,760	38,380	0.58%	80,550	12%	0.44%
Total Bay Area [d]	6,020,150	6,783,760	8,222,660	763,610	1.20%	1,438,900	21%	0.77%
Households								
Oakland [a]	144,520	150,790	171,980	6,270	0.43%	21,190	14%	0.53%
Inner East Bay [c]	260,350	271,400	303,310	11,050	0.42%	31,910	12%	0.45%
Total Bay Area [d]	2,245,870	2,466,020	2,981,330	220,150	0.94%	515,310	21%	0.76%
Employment								
Oakland [b]	173,270	185,160	240,950	11,890	0.67%	55,790	30%	1.06%
Inner East Bay [c]	353,640	368,890	476,230	15,250	0.45%	107,340	29%	1.03%
Total Bay Area [d]	3,201,010	3,744,880	4,930,040	543,870	1.58%	1,185,160	32%	1.11%

a U.S. Census data for 1990 and 2000. For 2025, Oakland Cumulative Growth Scenario as updated for Oak to Ninth Avenue Project EIR, November 2004, assuming the No Project scenario.
b Oakland Cumulative Growth Scenario as updated for Oak to Ninth Avenue Project EIR, November 2004, assuming the No Project scenario.
c Inner East Bay includes Oakland and nearby cities of Albany, Berkeley, Emeryville, Piedmont, Alameda, and San Leandro. Data and projections for nearby cities from ABAG, Projections 2002.
d Totals for the Bay Area are from ABAG, Projections 2002 except data and projections for Oakland per note a above substitute for the ABAG figures for Oakland.

SOURCES: U.S. Census; ABAG Projections 2002; Oakland Cumulative Growth Scenario, November 2004.

TABLE IV.J-7

CHANGES IN HOUSING STOCK IN OAKLAND, 1990–2000

	1990		2000		Change
Total Housing Units	154,737		157,508		2,771
Occupied Housing Units	144,521	93.4%	150,790	95.7%	6,269
Vacant Housing Units	10,216	6.6%	6,718	4.3%	(3,498)
Owner-occupied Housing	60,153	41.6%	62,489	41.4%	2,336
Renter-occupied Housing	84,368	58.4%	88,301	58.6%	3,933

SOURCE: U.S. Census, 1990 and 2000.

New Housing Development in Oakland

Since 2000, the city's housing supply has been increasing substantially with about 5,000 new units (4,980) anticipated to be developed in Oakland by the end of 2005 (see **Table IV.J-8**). This represents a substantial change from past trends where very little new housing was developed in Oakland in prior decades. In the 1970s and 1980s, housing development bypassed Oakland and other inner city areas in favor of the suburbs. In the 1990s, regional trends began to change. Household and population growth occurred in existing housing in Oakland, decreasing the city's vacancy rate and increasing persons per household. Most of the 2,771 units added in Oakland during the 1990s were built in the latter part of the decade as the region's housing market began to rediscover Oakland. Strong regional housing demand, fewer remaining locations for development in the suburbs, renewed interest in center city living particularly in proximity to employment centers, and a relatively affordable land supply for such a central Bay Area location were all factors in favor of renewed housing development in Oakland. In addition, new housing development has been encouraged in Oakland by regional and local Smart Growth land use policies and by other local efforts such as the Mayor's 10K Housing Initiative to attract new housing development to downtown Oakland and bring 10,000 additional residents downtown.

TABLE IV.J-8

HOUSING GROWTH IN OAKLAND
(without Oak to Ninth Avenue Project)

	Additional Housing Units	Annual Average
1990–2000[a]	2,771	277
2000–2005[b]	4,980	996
2006–2025[c]	17,220	861

[a] 2000 Census.
[b] Housing units in projects anticipated to be completed by the end of 2005.
[c] Housing in approved projects, in projects in pre-development and planning, and housing on housing opportunity sites and other sites considered likely to be developed by 2025, without the proposed Oak to Ninth Avenue Project.

SOURCE: City of Oakland Housing Element; Oakland Cumulative Growth Scenario, November 2004.

As identified in Oakland's Housing Element, new housing is being built in downtown Oakland and in many other parts of the city, including West Oakland, East Oakland, North Oakland, and along the Estuary waterfront. Most of the new housing is multi-family housing. New housing development is focused around the city's BART stations, along transit corridors, in the downtown area, and in mixed-use neighborhoods. Lofts and other new housing are also being built in older industrial areas of the City. New housing in Oakland includes units covering a range of prices and rents, reflecting Oakland's land use policies encouraging higher-density development and the investment of substantial public funding for affordable housing.

The market success of recent housing developments in Oakland and the continuing demand for housing have increased developer interest in building additional new housing in Oakland. About 6,300 new units are now anticipated to be built over the next five years, 2006 to 2010, in projects already approved, in projects in the pre-development and planning process, or on sites considered likely to be developed in this timeframe. Beyond 2010, projections anticipate additional housing development of about 11,000 units (without the proposed project) through 2025. By 2025, the projections include development of the housing opportunity sites identified in Oakland's Housing Element as well as new housing on other, additional sites. In total, the development of about 22,200 new units by 2025 (without the proposed project) would increase Oakland's housing supply by 14 percent over the housing stock identified in the 2000 Census.

Population and Household Projections

Population projections for Oakland indicate growth of approximately 21,200 households and 49,000 residents from 2000 to 2025 without the proposed project (see **Table IV.J-6**). This growth reflects the continuing development of new housing in Oakland (described above) and projected demographic trends. In both the city and the region, average household size is projected to decline over time, reflecting the aging of the population, particularly the increase in the proportion of the population over age 55. In Oakland, the development of higher-density housing in the downtown area and other locations also is anticipated to attract households with fewer people and smaller than average household sizes. Thus, population is projected to increase by 12 percent through 2025, while households and housing units are projected to grow by 14 percent.

Regional Market Context for Housing Prices and Rents

Recent Trends

Throughout the state and the region, housing production has not kept pace with the demand for housing associated with employment growth, in-migration, and household formation. Between 1990 and 2000, about 187,000 housing units were added in the nine Bay Area counties (an eight percent increase). During the same period, the number of employed residents increased by 456,000 (14 percent) and the number of jobs increased by 548,000 (17 percent). Housing prices and rents also increased, reflecting this imbalance.

More recently, housing production levels have increased at the same time that employment opportunities have fallen off dramatically. Nevertheless, historically low mortgage rates have contributed to maintaining for-sale housing demand, price levels, and price increases, in spite of

the significant slowdown in economic activity in the region. Apartment rents, however, leveled off in 2001 and have declined in most parts of the Bay Area as a result of the slow economy and the ability of some renters to become homebuyers because of low interest rates. Rental unit vacancy rates also have increased.

Housing Prices and Rents

Housing prices in the Bay Area are among the highest in the country. In 2004, prices for new and existing homes in the Bay Area averaged $543,875. From 1993 through 2004, average house prices in the region more than doubled, increasing 110 percent. Average home prices in Oakland and Alameda County are below those in the higher-priced markets, with prices for new and existing homes averaging $483,166 for Alameda County in 2004. However, increases in home prices in Alameda County were similar to regional trends, with prices increasing by 113 percent from 1993 through 2004. Housing price increases in parts of Oakland have actually exceeded regional trends in recent years, as relatively lower-priced housing in Oakland is "discovered" and becomes more desirable *vis-à-vis* higher-priced housing in surrounding areas. For example, over the four years from April 2000 to April 2004, market prices for existing single family homes increased by 77 percent in East Oakland, 69 percent in Oakland overall, and 66 percent in Alameda County overall, showing larger increases in prices for areas with relatively lower-priced housing. (Real Estate Research Council of Northern California, 2004.)

Information for larger rental apartment complexes show average apartment rents for the Bay Area at $1,278 per month at the end of 2004, and average rents for apartments in Alameda County at $1,194 per month, just below the regional average (Real Estate Research Council of Northern California, 2004). In both cases, rents peaked in 2001, and have declined thereafter as rental vacancy rates have increased. This trend has also occurred in Oakland. In 2005, average apartment rent in Oakland was $1,200 per month, and apartment vacancy rate was 6.9 percent (City of Oakland CEDA web site, 2005).

Oakland's Housing Market Reflects Regional Context

Housing market conditions in Oakland reflect the broader regional housing market context. While housing prices and rents in Oakland have generally been below those in many other parts of the Bay Area, regional housing demand and higher prices and rents in other areas have been increasing demand for housing in Oakland and putting upward pressure on Oakland's housing prices and rents. Increasing market interest in higher-density urban living and in housing in closer-in locations with access to employment centers are also supporting demand for housing in Oakland and providing the market for new housing now under development in Oakland.

Employment

Employment in Oakland was estimated at 185,160 in 2000, representing about five percent of all employment in the region (see **Table IV.J-6**). Business Activity and employment grew substantially in Oakland in the late 1990s, reflecting strong economic trends throughout the region and an enhanced market position for Oakland, particularly within the region's office market. While regional trends favored growth in the suburbs in prior decades, recent trends "back

to the center" are now recognizing the value of Oakland's central location, its good transportation/transit accessibility, and its relative affordability as a business location. These factors are anticipated to become increasingly important in the future, enabling Oakland to retain and enhance its competitive position as a business center for the region.

Since 2000, employment in Oakland has remained relatively stable with job growth occurring locally in some sectors despite the downturn in the region's economy. During this period, employment declined substantially in other parts of the region, particularly in the South Bay and in San Francisco, due primarily to declines in the region's high technology industries. The diversity of Oakland's economy has lessened the effects of the region's economic downturn and helped maintain relatively high occupancy rates for the city's office, commercial, and industrial space markets.

As the region's economy rebounds from its recent slowdown, economic growth is forecast for the future. Projections for Oakland show growth of about 56,000 jobs from 2000 to 2025 (see **Table IV.J-6**). That growth represents about a 30 percent increase in employment in Oakland, and a rate of growth similar to that forecast for the region overall. Downtown Oakland is anticipated to remain strong and to grow as a major office center. Growth is anticipated in the transportation-related sectors centered on the city's growing airport and seaport, and in medical and health services, in retail, restaurant, and entertainment activities, and in professional and personal services. Activities in existing and new neighborhood commercial districts are anticipated to grow, supported by the growth of housing and population in the city.

Employed Residents and Jobs/Housing Relationship

Employed Residents and Places of Work

In 2000, 174,740 people living in Oakland were employed according to the U.S. Census, representing 62 percent of the working age population (the population 16 years of age and older) and 95 percent of the civilian labor force (those 16 years of age and older working or looking for work). It is estimated that the number of employed residents in Oakland has increased since 2000, to about 181,200 employed residents in 2005, as new housing and population have been added in the city. In the future, the number of employed residents is anticipated to increase at a faster rate than the growth of population, due to the growth of higher-density new housing in Oakland with proportionally more adult residents in their working years and to regional demographic trends related to the overall aging of the population and higher labor force participation rates.

Census data indicate that in 2000, about 39 percent of the employed residents of Oakland held jobs in Oakland. Another 16 percent worked in nearby cities of the Inner East Bay, and 18 percent worked in San Francisco. About 19 percent worked elsewhere in Alameda and Contra Costa counties outside the Inner East Bay, and the remaining eight (8) percent worked in other locations, most in other Bay Area counties. (ABAG, 2000 Census.)

Oakland residents working in Oakland in 2000 held 37 percent of the jobs in Oakland. Residents of nearby cities and other parts of Alameda and Contra Costa counties held another 46 percent of

the City's jobs, and residents of other Bay Area communities held the remaining 17 percent of jobs. (ABAG, 2000 Census.)

Relationship of Jobs and Housing

As described above, Oakland is both a place of residence and a place of employment. The total number of jobs in the city (185,200 in 2000) is relatively similar to the total number of employed residents (174,700 in 2000) (see **Table IV.J-9**). The overall relationship between jobs and employed residents in an area identifies the extent to which a community enjoys a balanced mix of land uses thereby offering job opportunities to local residents and housing opportunities for workers employed in local jobs. The resultant mix of who lives in Oakland and who works in Oakland and the extent to which these are the same individuals results from a complex set of interactions and decision factors that determine where people choose to live and work, how much they spend for housing, and their travel patterns. Jobs/housing balance evolves over time and reflects the role and location of particular areas within the larger regional context. Regional planning efforts in the Bay Area seek to "balance" the number of jobs and the number of employed residents, or to improve existing imbalances, for purposes of achieving goals related to improved housing availability and affordability, commute distances, congestion, and air quality.

Data and projections for Oakland indicate that Oakland has a good balance of jobs and housing as it continues to have a relatively similar number of jobs and employed residents. In the future, the rate of growth of employed residents is anticipated to exceed the rate of growth in the number of jobs so that the city's ratio of jobs to employed residents becomes even more "balanced" over time, as shown in **Table IV.J-9**. The substantial growth of housing that is projected for Oakland in the future will increase the city's role as a place of residence. The relationship of jobs to employed residents in Oakland is very similar to that for the nine-county Bay Area overall. Data for the Inner East Bay, including Oakland and its nearby cities, show that this larger surrounding area has a somewhat higher ratio of jobs to employed residents than Oakland alone.

TABLE IV.J-9

TRENDS IN JOBS AND EMPLOYED RESIDENTS: 1990-2025
(without Oak to Ninth Avenue Project)

				1990-2000		2000-2025	
	1990	2000	2025	Change	Annual Rate	Change	Annual Rate
Total Jobs							
Oakland [a]	173,270	185,160	240,950	11,890	0.67%	55,790	1.06%
Inner East Bay [c]	353,640	368,890	476,230	15,250	0.42%	107,340	1.03%
Total Bay Area [d]	3,201,010	3,744,880	4,930,040	543,870	1.58%	1,185,160	1.11%
Employed Residents							
Oakland [b]	162,490	174,740	229,090	12,250	0.73%	54,350	1.09%
Inner East Bay [c]	312,070	320,020	411,190	7,950	0.25%	91,170	1.01%
Total Bay Area [d]	3,147,610	3,611,370	4,646,590	463,760	1.38%	1,035,220	1.01%
Ratio Jobs-to-Employed Residents							
Oakland	1.07:1	1.06:1	1.05:1				
Inner East Bay	1.13:1	1.15:1	1.16:1				
Total Bay Area	1.02:1	1.04:1	1.06:1				
Employed Residents as Percent of Population							
Oakland	44%	44%	51%				
Inner East Bay	48%	46%	53%				
Total Bay Area	52%	53%	57%				

[a] Oakland Cumulative Growth Scenario as updated for *Oak to Ninth Avenue Project EIR*, November 2004; assuming the No Project scenario.
[b] U.S. Census data for 1990 and 2000. For 2025, Oakland Cumulative Growth Scenario as updated for *Oak to Ninth Avenue Project EIR*, November 2004 assuming the No Project scenario.
[c] Inner East Bay includes Oakland and nearby cities of Albany, Berkeley, Emeryville, Piedmont, Alameda, and San Leandro. Data and projections for nearby cities from ABAG, *Projections 2002*.
[d] Totals for the Bay Area are from ABAG, *Projections 2002* except data and projections for Oakland per note a above substitute for the ABAG figures for Oakland.

SOURCES: U.S. Census; ABAG *Projections 2002*; Oakland Cumulative Growth Scenario, November 2004.

Project Population and Employment and Contributions to Citywide Growth

This discussion quantifies and describes the growth and other changes in population and employment associated with the proposed project. Growth and change are considered from the perspectives of the project site and of citywide growth of housing, population, and employment in Oakland. Population and employment changes in and of themselves, are not normally considered to be significant environmental effects under CEQA. However, these changes and effects can be indicators of other impacts, and they can have influence on the significance of those impacts. Thus, the description of population and employment changes that follows is included to provide context for considering and understanding potential physical environmental impacts associated with changes in housing, population, and employment that are analyzed later in this section and in other sections of this EIR (*e.g.*, traffic, public services, and air quality). In addition, the description also identifies beneficial aspects of the project in terms of expanded housing choices, increased business activity, and employment opportunities.

Housing and Population

The project would increase the supply of housing in Oakland, and expand the housing choices available. The 3,100 units proposed would be built in four phases over approximately 11 years. The new housing would include one-bedroom, two-bedroom, and three-bedroom units, with the largest number being two-bedroom units. There would be a mix of types of housing including one-level condo/apartment-style units and flats, two-level townhouse-style units, and higher-ceiling loft-style housing. The project is anticipated to include both ownership and rental housing, with the majority of units being offered for sale. The project proposes market-rate housing covering a range of prices and rents depending on the size, type, and location of units as well as views and other amenities.

The new housing would accommodate a mix of types and sizes of households. At full development, the project is anticipated to accommodate 2,976 households, assuming a long-term average vacancy rate of four percent, consistent with citywide data. Project population is estimated to include 5,061 people, reflecting an average household size of 1.7 persons per household (see **Table IV.J-10**). (Background on the population estimates and more detailed tables are provided in **Appendix D.3**.)

The project would create a new residential neighborhood along the Estuary waterfront. Because the neighborhood would consist entirely of new higher-density housing in multi-family development, the number of persons per household would be smaller than average for Oakland overall. In addition, project households are anticipated to include proportionally more adults and fewer children. A relatively high percentage of project residents are anticipated to be workers.

TABLE IV.J-10

SUMMARY OF POPULATION AND EMPLOYMENT ESTIMATES FOR PROPOSED OAK TO NINTH AVENUE PROJECT

	Housing Units [a]	Households [b]	Population [c]	Employed Residents [c]	Sq. Ft. Space [a]	Employment [d]
Built and Occupied by 2010	1,139	1,093	1,859	1,316	69,000	208
Built and Occupied after 2010	1,961	1,883	3,202	2,269	131,000	415
Total Project	3,100	2,976	5,061	3,585	200,000	623

[a] OaklandHarborPartners,September21,2004.
[b] Assumes long-term average vacancy of approximately four percent, consistent with citywide data.
[c] Estimated by Hausrath Economics Group considering Census data, data and information for new housing developments, and data and projections from the Association of Bay Area Governments (ABAG) and State Department of Finance (DOF).
[d] Estimated by Hausrath Economics Group considering potential uses as described by Oakland Harbor Partners and employment densities for similar uses and developments.

SOURCE: Oakland Harbor Partners; Hausrath Economics Group.

Housing on the project site would have a strong appeal to workers because of its central location and its proximity to places of employment in downtown Oakland, elsewhere in Oakland, in nearby cities of the Inner East Bay, in downtown San Francisco, and in other closer-in parts of the region around San Francisco Bay.

Project residents are anticipated to include existing Oakland residents attracted by the types of new housing offered in the project and its location along the waterfront. The project would provide opportunities for Oakland renters seeking to become first-time homebuyers and for single family homeowners desiring to downsize.

It is anticipated that Phase 1 of the project that would occur to the east of Clinton Basin (in northern section of subarea 5 in the map in **Figure IV.J-1**) could be completed by 2010. Representing about 37 percent of project housing, Phase 1 would include 1,139 new housing units occupied by 1,093 households and a population of 1,859 people. The rest of the project (Phases 2 through 4) (in the rest of subarea 5 and in subareas 4, 2, and 1 in the map in **Figure IV.J-1**) would be completed after 2010 and would include 1,961 housing units occupied by 1,883 households and a population of 3,202 people. **Table IV.J-10** above summarizes the household and population estimates for the project.

The project and associated changes in land uses and density for the project site would increase the supply of land for large-scale, higher-density residential development in Oakland. Given the strong demand for housing in the region and the relative shortage of land for housing development, the project would increase the amount of housing developed in Oakland and the growth of households and population in the city in the future. Thus, from a citywide perspective, housing developed in the project would represent additional housing in Oakland over and above

what would otherwise be built. **Table IV.J-11** presents the cumulative growth projections for Oakland with the project. These are the projections used for the citywide cumulative analyses in this EIR. (Background on the Cumulative Growth Scenario and more detailed tables are provided in **Appendix D.4**.)

TABLE I.J-11

HOUSING, HOUSEHOLDS, POPULATION AND EMPLOYMENT FOR OAKLAND WITH THE OAK TO NINTH AVENUE PROJECT

	2000	2005	2010	2025	2000-2025 Change	2000-2025 Percent	Annual Rate
Housing Units	157,510	162,490	169,880	182,810	25,300	16%	0.60%
Households	150,790	155,400	162,530	174,950	24,160	16%	0.60%
Population	399,480	417,350	431,670	453,520	54,040	13.5%	0.51%
Employed Residents	174,740	181,230	198,340	232,680	57,940	33%	1.15%
Jobs	185,160	198,470	231,770	241,340	56,180	30%	1.07%
Ratio Jobs-to-Employed Residents	1.06:1			1.04:1			

SOURCES: U.S. Census 2000; Oakland Cumulative Growth Scenario with Project, November 2004.

Business Activity and Employment

In addition to new housing, the project also proposes 200,000 square feet of retail/commercial space located throughout the project, nearly all of it to be developed as ground-floor space in residential buildings. The retail/commercial space is anticipated to accommodate a wide variety of types of businesses and other activities involved in retail, service, small office, cultural, and recreational activities. **Table IV.J-12** identifies the types of uses and business activities that are anticipated. The goods and services and shopping opportunities to be provided would serve project residents and other residents of Oakland as well as residents of nearby communities.

It is estimated that business activities in the retail/commercial space in the project would support employment of about 574 people. In addition, onsite employment involved in project management and maintenance would include 49 people. In total, employment in the project is estimated at 623 (see **Table IV.J-12**). This total includes entrepreneurs and small business owners as well as individuals hired to work in businesses and other uses located in the project. Employment opportunities would cover a range of types of occupations and skill levels, potentially including jobs involved in retail sales, food service, personal services, professional services, educational and health services, accounting and record-keeping, management, real estate leasing and sales, maintenance, and arts and crafts/creative endeavors.

TABLE IV.J-12

RETAIL/COMMERCIAL USES AND EMPLOYMENT ESTIMATES FOR PROPOSED OAK TO NINTH AVENUE PROJECT

Use	Sq. Ft. Space	Employment

Retail/Commercial: neighborhood streets	41,000	117
Flexible ground-floor space on interior streets for smaller retail and commercial uses. Could accommodate eating places, local service uses, small offices, galleries, and small retail shops.		
Central area neighborhood retail	42,000	112
Centrally-located retail space for neighborhood commercial uses along the project's Main Street. Could accommodate neighborhood-serving grocery, specialty food tenants, a drug store, and retail shops.		
Waterfront retail/restaurant	79,000	264
Water-oriented retail space around Clinton Basin for visitor-serving retail and restaurant uses. Active eating, drinking, and retail uses along the waterfront and new marina are envisioned. Small offices for the harbor master and marina could be included.		
Retail/commercial: park-oriented	20,000	51
lexible, ground-floor space in the vicinity of Estuary Park, the Aquatic Center, and Channel Park. Could accommodate services for outdoor activities and expansion space for the Aquatic Center.		
Community, cultural, recreation uses	18,000	30
Reuse of a portion of the Ninth Avenue Terminal shed building. Space could accommodate community, cultural, and recreation-oriented service uses.		
Project management and maintenance	n.a.	49
Onsite employment associated with project leasing and management, building and grounds maintenance, and parking area management and maintenance.		
TOTAL PROJECT	**200,000**	**623**

NOTE: Amount of space and description of uses based on inputs from Oakland Harbor Properties as of September 2004. Employment estimates developed by Hausrath Economics Group considering potential uses and employment density factors for comparable retail uses and other retail developments.

SOURCE: Oakland Harbor Partners, September 2004; Hausrath Economics Group.

About one-third of the retail/commercial space and associated business activity and employment would be included in parts of the project anticipated to be completed by 2010 (Phase 1) and two-thirds in the rest of the project to be developed after 2010. Thus, employment estimates for the project include 208 jobs by 2010 and 415 jobs after 2010, with a total of 623 jobs at full development (by 2025) (see **Table IV.J-10**).

It is anticipated that the project would accommodate additional business activity and employment in Oakland. Project businesses and other uses would serve project residents and capture additional spending that the new residents would bring to Oakland. The new retail/commercial businesses also would add to the total retail/commercial offerings available in Oakland, attracting spending that would otherwise occur outside the city. The project's retail/commercial space would add to the supply of space for small businesses, entrepreneurs, and artisans, encouraging more of those activities and providing options for them to locate/remain in Oakland.

Changes in Business Activity and Employment as the Project Replaces Existing Industrial Uses on the Site

Development of the project would replace the primarily industrial business activities currently on the project site. The site would be needed for new development over time so that complete clearance of the project site initially prior to development is not anticipated.

As the new development would begin at the eastern end of the project site, the land located in areas east of Clinton Basin (in subarea 5 in the map in **Figure IV.J-1**) would be the first needed for development. As of the analysis for this EIR, there are nine tenants with 95 employees located east of Clinton Basin. Project development would continue to proceed from east to west, with industrial uses (remaining at that time) having to move from the project site as land is needed for development. Based on the EIR analysis of existing uses, there are an additional 12 tenants with 136 employees in the remainder of the site that would eventually leave the site except for the Jack London Aquatic Center which would remain.

Table IV.J-13 shows the net changes in employment on the site over time. An overall net increase of 393 jobs is identified, after accounting for employment in new uses in the project, existing employment at the Aquatic Center that would remain, and employment in existing types of industrial uses that would leave the project site.

Transition of land uses and business activities as would occur on the project site is already underway along the Estuary waterfront. A large share of formerly industrial and warehouse uses in the Jack London District to the west have already transitioned to retail, dining, entertainment, and loft housing uses. To the east, parts of the waterfront remain in industrial use while other parts once used for industrial activities are now occupied by hotel, office, retail, work-live, and new residential uses and development. While industrial uses still remain on the project site, the levels of industrial activity there have declined over time. The City's *Estuary Policy Plan* also anticipates the transition of the Oak to Ninth waterfront from former cargo-handling industrial and warehouse uses to a mix of new uses in the future.

TABLE IV.J-13

CHANGES IN EMPLOYMENT ON THE PROJECT SITE AS A RESULT OF PROJECT DEVELOPMENT

		Project Site Employment	Change in Employment
2004/05	Existing Uses [a]	231	
	2004/05–2010:		
	Existing uses leaving (subarea 5) [b]		(95)
	New uses in project (phases 1, 2, and 3) [c]		+208
			+113
2010	Existing Uses Remaining and Project (Phases 1, 2, and 3)	344	
	2010–2025:		
	Existing uses leaving (subareas 1, 2, and 4) [b,d]		(135)
	New uses in project (phases 3-8) [c]		+415
			+280
2025	Project and Existing Aquatic Center	624	
	Net Change in Employment		+393

[a] See Table IV.J-1 earlier in this section.
[b] Based on project phasing from Oakland Harbor Partners, September 2004.
[c] See Table IV.J-10
[d] The existing Aquatic Center remains in Subarea 1 on the project site.

SOURCE: Oakland Harbor Partners; Hausrath Economics Group.

Construction Period Employment and Business Activity

As the project is developed, it would support construction employment and generate construction spending (for building materials, equipment, supplies, services, etc.). The large size of the project and its phased development would provide a source of employment over 10 to 12 years. It is estimated that approximately 4,950 person-years of construction employment would be required to develop the project over the eight phases. This direct employment would include jobs involved in preparing the site, constructing the project, and managing project construction (both onsite and offsite at developer's and builder's offices). The construction job opportunities generated would span a range of skills from unskilled laborers to highly-skilled trades. Construction project management would support supervisory, administrative, and clerical jobs in addition.

Construction activity and associated employment and spending would also generate indirect and induced economic activity that would support additional business activity and employment. Increases in *indirect* business activity and employment would result from the purchase of building materials, equipment, and supplies for construction, the delivery of materials and supplies to the construction site, the services involved in the design and planning of the project (engineering, architectural, etc.), and additional business activity and employment as these suppliers and service providers increase their levels of activity, resulting in ripple effects throughout the economy. Increases in *induced* business activity and employment would be

generated by the additional household spending of direct and indirect construction period workers, and would include the ripple effects as the increased consumer spending reverberates throughout the economy.

It is estimated that project construction would support approximately 5,940 indirect and induced person-years of employment, in addition to direct construction employment. The indirect and induced employment generated would represent a range of job opportunities for different occupations and skill levels. The economic activity associated with these jobs would also benefit a range of types of businesses in many sectors of the economy.

The employment and spending benefits generated by the project's construction activity would occur in Oakland, elsewhere in Alameda County, and in other parts of the region. Construction workers likely to be employed on the project would live in Oakland, in other parts of the East Bay, and in communities throughout the greater Bay Area. The indirect benefits of construction sector spending would support economic activity and employment where those sources of materials, supplies, and services are located. The induced benefits from household consumption spending would occur near the places of residence and places of work of those employed by the construction firms and linked businesses.

A summary of construction period employment for the project is provided in **Table IV.J-14**.

Population, Housing, and Employment Impacts Discussion

Significance Criteria

Appendix G of the CEQA *Guidelines* and the City of Oakland identify criteria related to population and housing for use in evaluating whether the project would have a significant impact on the environment under CEQA. These criteria focus on the inducement of population growth and the displacement of population and housing necessitating the construction of replacement housing. In addition, the potential for displacement of businesses and employment necessitating the construction of replacement facilities or increasing distances traveled is a related consideration relevant to the project.

TABLE IV.J-14

ESTIMATED CONSTRUCTION PERIOD EMPLOYMENT FOR PROPOSED OAK TO NINTH PROJECT

	Construction Period Employment (Person-years)
Direct Employment	4,950
Construction labor and management [a]	
Indirect Employment	3,010
Resulting from construction spending for materials, equipment, supplies, services, etc. [b]	
Induced Employment	2,930
Resulting from household consumer spending of direct and indirect employment [c]	
Total Construction-related Employment	10,890

[a] Based on SRRI study results showing 1.35 direct jobs per housing unit built in the Oakland PMSA in 2003, adjusted upward to 1.5 direct jobs per unit to reflect higher-than-average per-square-foot construction costs for the higher-density construction types proposed for the project. The SRRI study results were used to derive a factor of 1.5 jobs per 1,000 sq. ft. of commercial space for estimating direct employment for the retail/commercial space in the project (including employment for tenant improvements).

[b] Based on SRRI study multipliers for the region, resulting in 0.6074 indirect jobs per direct job, and 0.3687 induced jobs per direct and indirect jobs.

NOTE: The construction period employment estimates are based on the results of the recent SRRI study identified as the source below. The employment estimates do *not* include estimates of jobs associated with site clean-up or other work not typically involved in residential development. That employment would be in addition to the estimates in this table.

SOURCE: Sacramento Regional Research Institute (SRRI), *The Economic Benefits of Housing in California*, March 2004; Hausrath Economics Group.

Although a project's social and economic effects, *per se*, are not considered to be significant environmental effects under CEQA, those aspects of a project might affect other conditions in an area that are evaluated for environmental impacts under CEQA. Thus, this section also assesses whether socioeconomic implications of the project may or may not result in indirect changes in the physical environment, such as through ripple effects that could lead to physical deterioration and urban decay. The assessment focuses on the potential for indirect physical effects as a result of the retail development proposed for the project and as associated with potential housing market effects of the project.

Based on both City of Oakland significance criteria and the CEQA *Guidelines*, a project would have a significant effect on the environment if it would:

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere, in excess of that contained in the City's Housing Element.

- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere, in excess of that contained in the City's Housing Element.

- Displace substantial numbers of businesses and jobs, necessitating the construction of replacement facilities elsewhere, in excess of that contemplated in the City's *General Plan*; or displace businesses and jobs, increasing distances traveled between industrial uses and the markets they serve.

- Induce substantial population growth in a manner not contemplated in the *General Plan*, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads and other infrastructure), such that additional infrastructure is required but the impacts of such were not previously considered or analyzed.

- Have social and economic effects that result in indirect changes in the physical environment, such as in ripple effects that would lead to physical deterioration and urban decay.

The project is evaluated relevant to the above criteria in the rest of this section.

Local Plans and Policies

Oakland General Plan policies and other applicable plans and policies that pertain to housing, jobs, and related effects, and that apply to the project, are listed in **Appendix F**. Key policies are identified and discussed in Section IV.A, Land Use, Plans, and Policies.

Project and Cumulative Impacts

Displacement of Substantial Housing, People, Businesses, or Jobs

Impact J.1: The project would not displace substantial numbers of existing housing units; nor would the project displace substantial numbers of people, necessitating construction of replacement housing. (No Impact)

There is no existing housing and no residential population on the project site. Therefore, development of the project would not require the demolition of any housing units nor displace any people residing on the project site.

Mitigation: None Required.

Impact J.2: The project would displace existing businesses and jobs, but not in substantial numbers necessitating construction of replacement facilities, or resulting in substantial increases in distances traveled. (Less than Significant)

Development of the project would require that existing industrial businesses located on the project site find new locations for their business operations as leases expire and are not renewed or are terminated because sites are needed for development. The EIR analysis identified 18 existing businesses and two public agencies employing 230 workers that would be required to move as a result of project development (assuming that they still remain on the site until it is

needed for development). Although the length of time that existing businesses have been operating on the project site ranges from two to 40 years, all but two of the 18 business tenants have leases that are now on a month-to-month or short-term basis. With such lease arrangements, business owners are aware of the lack of long-term security at this location. Nevertheless, the Oak to Ninth Avenue location has made good economic sense for these business operations. Two of the tenants with operations in the area since the mid-1960s have longer-term leases that extend to 2009 in one case and to 2015 in the other. If those properties are needed for development prior to lease expirations, financial arrangements with business leaseholders would be required to "buy out" remaining lease terms.

As the new development would occur in phases over time, complete clearance of the project site prior to project development is not anticipated. In the short term, some existing businesses might choose to move from the project site before the time that their location is needed for development. Those that remain would eventually be required to relocate. It is not anticipated that existing types of industrial businesses could be accommodated in the project.

There could be economic implications for businesses and business owners. Businesses required to relocate would incur expenses associated with searching for a new location and moving to a new site. They also could incur expenses associated with re-establishing themselves at a new location. Space costs are likely to be higher at a comparable new location, as well. The need to relocate also could result in a business closure.

It could be difficult for some of the existing types of industrial businesses to find comparable locations for their business operations. The marine-oriented businesses (boat building, boat repair, uses with barges, etc.) seek locations near the water, the maritime-support uses desire proximity to the Port of Oakland, and the construction-related uses value proximity to construction projects in the central parts of the region. In Oakland, there is increasing competition for older, industrial locations from higher-value uses, resulting in higher industrial space costs and fewer remaining industrial location options for these types of businesses.

The City's General Plan designates areas for industrial uses along the I-880 corridor in East Oakland and for Port of Oakland operations and ancillary uses in the harbor area, and there is land along the waterfront that still remains in industrial use. Thus, some of the businesses relocating from the project site may be able to find other locations in Oakland. Other potential options for relocation could include locations in older industrial areas along the I-880 corridor in San Leandro or Hayward, or along the I-80 corridor in Richmond. It is unlikely that replacement facilities would be developed to accommodate industrial uses relocating from the project site. Instead, it is more likely that businesses would relocate to existing, older facilities, thereby lowering vacancies in remaining industrial areas in Oakland and other central parts of the East Bay.

There is the potential that distances traveled could increase between industrial uses relocated elsewhere and the markets they serve. To the extent such effects occurred, the impacts of the project are anticipated to be less than significant. A main reason is that most of the industrial businesses are likely to relocate to older industrial areas in Oakland and other central parts of the

East Bay along the I-80/I-880 corridor within proximity of Oakland, thereby minimizing changes in travel distances as much as possible. The areas designated for industrial uses in Oakland's General Plan are located close to the project site. Another reason is that there would be a relatively small number of businesses affected, from a citywide and subregional perspective. From the perspective of impacts of the project, it also can be noted that the City's *Estuary Policy Plan* anticipates the transition of the Oak to Ninth waterfront from former cargo-handling industrial and warehouse uses to a mix of new uses in the future.

From a cumulative regional perspective, the transition of older industrial areas in the central parts of the region to residential uses (as proposed by the project) raises policy issues of balancing the benefits of locating higher-density housing in central locations like Oakland with the benefits of retaining locations for industrial and goods movement uses in central areas within proximity of the growing population and business markets that they serve.

Mitigation: None Required.

Inducement of Substantial Population Growth

Impact J.3: The project would not induce substantial population growth directly by proposing new housing, or indirectly through infrastructure improvements. (Less than Significant)

Project Population Growth

The project would add 3,100 housing units to Oakland's housing stock, increasing households by approximately 2,976 and increasing population by approximately 5,061. For comparison, the population growth accommodated in the project would represent just over one percent of the city's population, both currently (2005) and as projected for 2025 under the Oakland Cumulative Growth Scenario, as shown in **Table IV.J-15**. Similarly, population growth in the project would be within about one percent of ABAG's projections for Oakland. Therefore, the project would not directly result in substantial population growth over and above that which currently exists in Oakland or that which is anticipated for Oakland in the future.

TABLE IV.J-15

PROJECT POPULATION GROWTH COMPARED TO EXISTING AND PROJECTED FUTURE POPULATION IN OAKLAND

	Households	Population
Proposed Project	2,976	5,061
City of Oakland, 2005 [a]	155,400	417,350
Project as Percent of City	1.9%	1.2%
City of Oakland, 2025 [b]	174,950	453,520
Project as Percent of City	1.7%	1.1%
ABAG *P2002* for Oakland, 2025 [c]	168,640	449,500
Project as Percent of City	1.8%	1.1%

[a] Assumes occupancy of new housing anticipated to be completed by the end of 2005.
[b] Oakland Cumulative Growth Scenario including the project, as analyzed in this EIR.
[c] Association of Bay Area Governments, *Projections 2002*.

SOURCE: Oakland Cumulative Growth Scenario, November 2004; Hausrath Economics Group.

Infrastructure-induced Population Growth

The project would involve the redevelopment of an older industrial area with low-density existing uses. Project development would require onsite infrastructure improvements to accommodate the proposed higher-density residential and retail/commercial development and provide access for recreational use of the waterfront. The infrastructure improvements would be specific to the project site and existing, abutting roadways and to development of the proposed project. The infrastructure improvements would not induce substantial additional population growth in other areas.

The project represents redevelopment of an underutilized site within an already developed urban area located at the center of the region. Compared to the development of vacant land in outlying locations that would require the construction of new roads, sewer lines, and other infrastructure extending to the new development, the infrastructure required for the project would involve primarily onsite improvements to accommodate redevelopment to higher densities than existing uses. The relative isolation of the project site from surrounding properties also would mean that infrastructure improvements on the site would not be available to connect to nearby areas. The project site is largely surrounded by the waters of the estuary and by the I-880 freeway and adjacent rail yards and tracks.

The only adjacent area to potentially benefit from infrastructure improvements on the project site would be the privately-owned Fifth Avenue Point area that is within the Oak to Ninth District south of Embarcadero and surrounded by the project site (subarea 3 in the map in **Figure IV.J-1** earlier in this section). Potentially, circulation and utility improvements for the project could make it easier to undertake and extend such improvements in the Fifth Avenue Area. Such benefits could facilitate upgrading and additional development in this adjacent area in the future,

potentially including additional housing and population growth. Because of the smaller size of the Fifth Avenue Area relative to the larger project site, however, additional population growth would be relatively small compared to growth on the project site and to population in the city of Oakland overall. Thus, potential effects of project infrastructure on development in the adjacent Fifth Avenue Area would not induce substantial population growth under the threshold for a significant impact.

Mitigation: None Required.

Impact J.4: The project would not induce substantial population growth in a manner not contemplated in the General Plan, with infrastructure requirements not previously considered or analyzed. (Less than Significant)

The project proposes a higher density of development and more population growth in the Oak to Ninth area than contemplated in the *Estuary Policy Plan* and Oakland General Plan. The additional growth would result in a higher level of population growth in Oakland than previously analyzed until this EIR. Population growth in the project would represent an increase in citywide population growth 2005 to 2025, of about 16 percent under Oakland's Cumulative Growth Scenario. However, as described above, the additional population growth in the project would not be considered as substantial induced growth as it would represent just over one percent of the city's total population both currently (2005) and as projected for 2025 under Oakland's Cumulative Growth Scenario and the ABAG projections (see **Table IV.J-15**).

The significance of the additional population growth for other potential environmental effects (such as potential transportation and public service impacts, for example) are evaluated in other sections of this EIR.

Development of the project site as contemplated in the Estuary Policy Plan and General Plan focuses on commercial and recreational uses and does not reflect the higher-density housing development now proposed. In either case, however, infrastructure improvements would be required to redevelop the site for new uses. The project would not require additional infrastructure that differs substantially from that previously considered or analyzed.

Mitigation: None Required.

Impact J.5: The project would not induce substantial population growth as a result of business and employment growth proposed in the project. (Less than Significant)

Retail/commercial businesses and recreational, cultural, and other activities to be accommodated by the project would support 623 jobs. That level of employment growth would represent less than one percent (0.3 percent) of total jobs in Oakland, both currently and as projected by the City's Cumulative Growth Scenario and the ABAG projections through 2025. Thus the project

would not result in substantial growth of employment over and above that which currently exists in Oakland or which is anticipated in Oakland in the future.

Employment growth accommodated in the project would support the growth of households and population to provide the additional workers. The housing to be developed in the project, however, would accommodate 2,976 additional households in Oakland with 3,585 additional employed residents. By comparison, the increase in employed residents in the project would be nearly six times larger than the increase in jobs in the project. Thus, the project would not indirectly induce additional population growth (beyond that accommodated by the project) as a result of employment growth in the project.

Mitigation: None Required.

Potential for Indirect Physical Impacts

This section considers whether social and economic effects of the project may or may not result in indirect changes in the physical environment, such as through ripple effects that could result in physical deterioration and urban decay. Although a project's social and economic effects are not considered to be significant environmental effects under CEQA (CEQA Guidelines, Section 15064(e)), those aspects of a project might affect other conditions in an area that are evaluated for environmental impacts under CEQA. The assessment in this section focuses first on the potential for indirect physical effects as a result of the retail development proposed for the project. It then addresses the potential for indirect physical effects associated with potential housing market effects of the project.

Potential Indirect Impacts of Proposed Retail Development

Analysis was done to addresses the retail market effects of the project and whether the proposed addition of 200,000 sq. ft. of retail/commercial space in the project could cause ripple effects of store closures and consequential long-term vacancies that would result in physical deterioration and urban decay. Public comments on the Notice of Preparation raised concerns about the potential effects of project retail development on existing neighborhood commercial districts and corridors in Oakland, and specifically on the Eastlake District located along International Boulevard and East 12th Street north of the project across the I-880 freeway.

A recent Court of Appeals decision concerning proposed shopping center development (*Bakersfield Citizens for Local Control v. City of Bakersfield, et. al. (2004) 124 Cal. App. 4th 1184)* reconfirmed that CEQA requires analysis of a project's potential to indirectly cause physical deterioration and urban decay. The Court held that certain retailers, including Supercenters, large-scale retailers (such as big-box stores and "category killers"), retailers operating 24 hours a day seven days a week, and others may pose unique potential indirect environmental impacts. The retail development in the project does not propose to include those types of large-scale or discount retail uses. However, the potential for indirect physical impacts is still assessed in this EIR as public concerns have been raised about the potential for physical

deterioration and urban decay in neighborhood retail districts and corridors as a result of the retail development proposed in the project.

In assessing the potential impact of the proposed retail development, the analysis addressed the following:

- Extent that Oakland is currently underserved or overserved by retailing;
- Types of retailing envisioned for the project, and the retail sales likely to occur in retail businesses to be located there;
- Additional retail spending to be contributed by residents of new housing in the project;
- How additional spending from project residents would compare to additional sales in project businesses;
- Whether the types of retailing in the project would compete with or complement the types of retailing in the Eastlake District and other surrounding neighborhood retail districts and corridors in Oakland;
- Extent and potential significance of other retail development anticipated in Oakland; and
- Conclusions about the potential for indirect physical impacts of the retail development proposed for the project.

The subsections that follow summarize the results of the retail analysis which is presented in more detail in **Appendix D.2**.

Market Context: Oakland Is Underserved By Retailing

Compared to Alameda County and the Bay Area overall, Oakland has substantially less retailing than would be anticipated for a city of its size. Per capita retail sales data summarized in **Table IV.J-16** provide a comparative measure of overall retail activity at the state, regional, and county levels and for retailing in Oakland and its nearby cities of the Inner East Bay. The data show that total retail sales per capita in Oakland are substantially lower (about 40 percent lower) than total sales per capita for Alameda County and the Bay Area overall. Among the different types of retailing, per capita sales in Oakland are low in all categories except service stations. The differences are quite substantial in many of the retail categories.

The low retail sales per capita in Oakland indicate that there is substantial “leakage” of spending by Oakland residents to retail establishments outside of Oakland because of the limited retail opportunities available locally. It also indicates the likelihood that Oakland residents may be spending less overall on retailing because of the lack of retail options within convenient access. Per capita sales data for the Inner East Bay, combining Oakland with its neighboring cities, shows that the Inner East Bay overall is also underserved with retailing relative to other parts of Alameda County and the rest of the region.

Given this market context, new retail development does not necessarily mean competition for sales from existing merchants in Oakland. Retail development is needed in Oakland to better serve the retailing needs of local residents. City economic development efforts are focused on

attracting additional retailing to Oakland to improve retail opportunities for residents and to keep more local spending in Oakland.

Mix of Retailing and Other Uses Envisioned for New Space in the Project

A mix of retail and other commercial uses are envisioned to occupy the 200,000 sq. ft. of retail/commercial space proposed for the project, along with community, cultural, and recreational uses. Just over two-thirds of the space is anticipated to be occupied by retail uses, potentially including a neighborhood-serving grocery, specialty food tenants, a drug store, smaller retail shops, galleries, restaurants, cafés and other eating places, and snack shops. Retail sales for these types of retail tenants are estimated to total approximately $37 million annually. Other uses and tenants in the rest of the space are envisioned to include small offices (health-related, professional services, real estate, financial services, project office), local service uses (dry cleaning, laundry, hair salon/barber shop), a fitness center or health club, the harbor master/marina office, space for Aquatic Center expansion and/or other recreation-oriented activities, community facilities, and cultural uses/exhibit space. A potential scenario for the retail, commercial, and other space is summarized in **Table IV.J-17**.

TABLE IV.J-16
2003 PER CAPITA TAXABLE RETAIL SALES, SELECTED AREAS

	California	Bay Area	Alameda County	Inner East Bay /a/	Oakland	Berkeley	Emeryville	Alameda	San Leandro
2003 Total Population (January 1)	*35,612,116*	*6,960,314*	*1,487,685*	*702,878*	*408,513*	*103,954*	*7,492*	*74,295*	*80,879*
Retail Category									
Apparel stores	426	498	349	299	118	422	6,713	141	705
Home furnishings and appliances	424	519	536	583	253	660	24,807	116	532
Other retail stores	1,529	1,817	1,689	1,656	1,146	2,486	30,029	1,000	1,708
General merchandise stores /b/	1,419	1,513	1,280	907	322	477	2,185	794	4,714
Food stores /b/	545	552	493	483	417	586	2,402	489	660
Eating and drinking places	1,125	1,277	1,037	1,098	903	1,736	7,863	954	1,147
Bldg. materials and farm implements	862	917	1,000	736	512	893	n/a	225	2,455
Auto dealers and auto supplies	1,883	1,813	1,970	1,480	1,308	1,490	n/a	1,140	3,293
Service stations	778	762	762	713	760	496	1,904	557	1,033
Total Taxable Retail Sales /b/	**$8,992**	**$9,669**	**$9,116**	**$7,955**	**$5,740**	**$9,247**	**$75,903**	**$5,417**	**$16,247**

NOTE: The 2003 data were the most current available at the time of the analysis in March 2005.

/a/ Inner East Bay taxable sales data available for Alameda, Berkeley, Emeryville, Oakland, and San Leandro. Inner East Bay population also includes Piedmont and Albany.
/b/ The retail sales data are for taxable sales. However, not all sales in food stores and drug stores are taxable, so that total retail sales in those categories are higher than shown above. It is estimated that taxable sales represent about 30 percent of total sales in food stores, and approximately 46 percent of sales in drug stores.

Source: State of California, Department of Finance, E-5 City/County Population and Housing Estimates, 2004, Revised 2001-2003, with 2000 DRU Benchmark. Sacramento, California, May 2004; State Board of Equalization Taxable Sales in California Annual Report 2003; Hausrath Economics Group.

TABLE IV.J-17

POTENTIAL RETAIL/COMMERCIAL SCENARIO FOR OAK TO NINTH PROJECT, BY USE AND TYPE OF RETAILING

	Total Space (Sq. Ft.)	Retail Space (Sq. Ft.)	Estimated Retail Sales ($ 2004/05)
By Type of Space and Use			
Retail/commercial: neighborhood streets (on interior streets)	41,000	15,000	$2.2 mil.
Central area neighborhood retail (along project's Main Street)	42,000	42,000	14.1 mil.
Waterfront retail/restaurant (around Clinton Basin and Marina)	79,000	71,000	19.9 mil.
Park-oriented/recreational uses (in vicinity of Estuary Park and Channel Park)	20,000	5,000	0.6 mil.
Community, cultural, recreation uses (reuse of portion of Ninth Avenue Terminal)	18,000	3,000	0.4 mil.
Total Project	**200,000**	**136,000**	**$37.2mil.**
By Type of Retailing			
Convenience Retail/Groceries		45,500	$14.6 mil.
Eating and Drinking		58,000	16.8 mil.
Comparison/Specialty Retail		32,500	5.8 mil.
Total Project		**136,000**	**$37.2 mil.**

Source: Oakland Harbor Properties; Hausrath Economics Group.

Project Residents Would Contribute Additional Retail Spending

The Oak to Ninth Avenue project is primarily a residential development that includes retail/commercial space. The additional households to reside in the new housing units in the project would generate additional spending for a variety of retail goods and services. It is estimated that retail expenditures by project residents would total approximately $95 million annually. Their estimated expenditures by type of retailing are summarized in **Table IV.J-18**.

Overall Net Addition of Retail Spending from the Project

Overall, the additional retail spending to be contributed by project residents (approximately $95 million) is estimated to be larger than the amount of retail sales to be captured by the retail development in the project (approximately $37 million). Thus, in the aggregate, the project would contribute a net addition of retail spending to the overall market context. This net addition would support additional retail business activity over and above the amount of retail activity to be accommodated in the project.

TABLE IV.J-18

ESTIMATED RETAIL SPENDING BY PROJECT RESIDENTS

Retail Category	Average Annual Spending per Household /a/ ($ 2002/03)	Total Spending ($ 2002/03)
Groceries and Convenience	$8,359	$24.9mil.
Eating and Drinking	4,418	13.1mil.
Comparison and Specialty		
Apparel and Footwear	3,401	10.1mil.
Household Furnishings and Equipment	3,579	10.7mil.
Specialty and Other Comparison Goods	2,223	6.6 mil.
	9,203	27.4mil.
Vehicle-related	9,606	28.6mil.
Building Materials	360	1.1mil.
Total Retail Spending	**$31,946**	**$95.1mil.**

/a/ Data from U.S. Bureau of Labor Statistics, *2002-2003 Consumer Expenditure Survey for U.S. Western Region* " for consumer units" or households with income of $70,000 or more. The estimates of spending may be conservative for the purposes of this study as the survey data from 2002-03 has not been inflated. More recent data on retail expenditures are limited, and it is possible that 2004/05 expenditures have not increased very much from 2002/03 levels.

SOURCE: U.S. Bureau of Labor Statistics, *2002-2003 Consumer Expenditure Survey*; Hausrath Economics Group.

Spending and Sales By Types of Retailing and Consideration of Spending Patterns for the Project

Not all of the spending of project residents would occur in the project and not all of the sales by project retail businesses would come from project residents. People tend to buy groceries and do other convenience shopping close to home. Given the types of convenience retail tenants anticipated for the project, the spending of project residents for groceries and other convenience items (drugs and drug store items, personal care products, paper products, alcoholic beverages, etc.) would provide the primary market support for the convenience retail tenants in the project. The convenience spending of project residents also would support retailers outside the project, primarily those in nearby parts of Oakland. Potentially, about half of the convenience retail expenditures of project residents could be spent within the project and about half outside the project (as evidenced by the comparison of project retail sales and additional spending by project residents in **Table IV.J-19**).

Spending for eating and drinking out and for comparison/specialty retailing typically occur over a larger area than convenience retail spending. The eating and drinking and comparison/specialty retail uses to be located in the project would be supported by spending of project residents and by others, particularly those attracted by the visitor-serving waterfront retail and restaurant uses. People employed in the project also would provide market support for the eating and drinking uses as would people coming to the project site for recreation. Much of the additional expenditures of project residents for eating and drinking out and comparison/specialty retailing would be spent outside the project, elsewhere in Oakland, in nearby cities, and beyond. This additional spending would represent substantial support for restaurants, other eating places, and comparison/specialty retailers in nearby and other areas, as shown by the data in **Table IV.J-19**.

TABLE IV.J-19

COMPARISON OF RETAIL SALES IN THE PROJECT AND ADDITIONAL RETAIL SPENDING BY PROJECT RESIDENTS

Type of Retailing	Estimates Sales in Project Retail Space (2004/05 $)	Estimated Retail Spending by Project Residents (Based on 2002/03 expenditure patterns)
Convenience Retail/Groceries	$14.6 mil.	$24.9 mil.
Eating and Drinking	16.8 mil.	13.1 mil.
Comparison/Specialty Retail	5.8 mil.	27.4 mil.
Vehicle-related	–	28.6 mil.
Building Materials/Supplies	–	1.1 mil.
Overall Totals	**$37.2 mil.**	**$95.1 mil.**

SOURCE: See prior Tables and associated text.

The additional expenditures of project residents also include vehicle-related spending (for vehicle purchases, gas and oil, and auto parts and supplies) and spending for home maintenance/building materials and supplies, as shown in **Table IV.J-19**. As those types of retailing are not anticipated to be located in the project, the additional spending would occur in surrounding areas and elsewhere in Oakland and nearby cities.

Project Retailing Would Complement Retailing in the Eastlake District and Other Neighborhood Retail Corridors; Spending of Project Residents Would Likely Provide Market Support for Neighborhood Districts

Specific consideration was given to potential effects of the project on the Eastlake District and other neighborhood retail corridors in surrounding parts of Oakland. A key issue is how the market orientation and types of retail tenants in the neighborhood districts compare to those for the retailing envisioned for the project. The analysis found that there are notable differences in the types of retailing between surrounding neighborhood retail districts/corridors and the retail proposed for the project. The differences occur because of the rich ethnic and cultural diversity in surrounding Oakland neighborhoods which is clearly reflected in the types and market orientations of businesses in the neighborhood retail districts. Thus, rather than competing, the project and surrounding neighborhood districts are anticipated to be complementary, in that each district would offer different types of goods and services with its own particular market orientation. In addition, project residents could provide market support for retail establishments in surrounding neighborhood areas, particularly for ethnic-oriented foods and eating places and other goods and services of types not available in the project.

The Eastlake Business District is comprised of a unique mix of businesses, many of which are Southeast Asian owned and operated. The area includes Southeast Asian restaurants and other eating places and markets specializing in Southeast Asian produce and other foods. There also are ethnically-oriented apparel and specialty stores. These retailers are catering to neighborhood residents and others seeking the types of specialized foods and other goods and services available here. The unique ethnic character of retailing in the Eastlake District differentiates it from the

types of retailing envisioned in the project. As a result, the retail development in the project is not anticipated to adversely affect retailing in the Eastlake District by drawing customers and tenants away from the area. Further, the specialized character of retailing in the Eastlake could attract spending from project residents, providing merchants with additional market support as a result of the project. In addition, auto-related businesses in the Eastlake also could attract spending from project residents.

Further to the east is the larger Fruitvale Business District. The Fruitvale District has emerged as an active multicultural commercial area with a strong Latino identity. The Fruitvale District includes a rich business mix offering ethnic foods, music, jewelry, and clothing from Mexico, El Salvador, and other countries. Retailing in this district serves nearby residents and others from surrounding areas who are attracted by the ethnic orientation and specialty foods and other goods and services available here. Like the Eastlake, the Fruitvale District has a specific ethnic market orientation that makes it unique and different from retailing anticipated in the project and from that located in other parts of Oakland. Here again, retail development in the project is not anticipated to compete with retailing in this area. Instead, it is likely that project residents could contribute additional spending in the Fruitvale District.

Anticipated To Be Market Support for Other New Retail Developments in Addition to the Project and Existing Retailing

In addition to the retail space in the project, there are other new retail developments underway in Oakland. They include: the Hegenberger Gateway Project (Hegenberger and I-880) under development for a Wal-Mart store and other retailers (245,000 sq. ft. in total) and other potential retail development on a nearby six-acre site (up to 90,000 sq. ft.); rebuilding of an Albertson's grocery store near Lake Merritt (East 18th Street near Lakeshore Avenue) into a larger, modern store (37,000 sq. ft. after expansion); a new Whole Foods grocery store (56,000 sq. ft.) near downtown Oakland (Harrison Street/27th Street/Bay Place); and the Jack London Square redevelopment to include additional space for restaurant, retail, and possible entertainment uses (up to 260,000 sq. ft.) plus a new hotel, conference facility, cinema, and office space to be developed over the next five to 10 years.

Evaluation of these new retail uses within the context of existing retailing, resident spending patterns, growth of retail spending, and development of the project indicates that there is anticipated to be sufficient market support for the project and the other new retail developments as well as for existing retailing. Substantial growth of retail spending is projected for Oakland in the future as a result of the growth of households and population and the real growth of household incomes over time. Growth of spending as well as reduction in leakage of sales could support substantial additional retail activity in Oakland.

Conclusion: Project retail development would not lead to significant indirect physical impacts. (Less than Significant)

Based on the retail market context and analysis of the potential effects of the project, the proposed addition of retail development in the project is not anticipated to create competition for existing retail districts in Oakland, draw customers and tenants from existing areas, and cause

ripple effects of store closures and consequential long-term vacancies that would result in physical deterioration and urban decay. The project is not expected to have such effects on existing neighborhood commercial districts and corridors in surrounding areas of Oakland, and specifically not on the Eastlake District.

Potential Indirect Impacts From Housing Market Effects of the Project

The following analysis addresses the potential housing market effects of the project and whether those effects could result in indirect physical environmental impacts. The housing market effects, *per se*, are economic and social effects that are not considered to be significant environmental effects under CEQA.

Public comments on the Notice of Preparation raised concerns about the potential effects of the project on the supply of affordable housing in Oakland and on housing rents and prices in existing neighborhoods surrounding the project. Some of the comments raised concerns about economic and quality of life implications of potentially higher housing rents/prices as a result of the project. Those socioeconomic effects, while important public policy considerations, are not environmental impacts under CEQA. However, other comments expressed concerns that higher housing rents and prices could lead to residential displacement, an increase in homeless families/persons, and requirements for additional shelter beds and the need to build new shelters. Comments also expressed concern about increased physical deterioration of housing and neighborhoods because of overcrowding (due to higher rents/prices) and inability to provide for adequate upkeep, maintenance, and repairs (because housing rents/prices require large shares of household income reducing ability to make expenditures for upkeep, maintenance, and repairs). These latter concerns raise questions of indirect physical impacts as a result of economic and social effects. Thus, the potential housing market effects of the project are addressed in this section as the basis for evaluating whether those effects could be anticipated to result in indirect physical environmental impacts.

The analysis summarized below first addresses the *direct* effects of the project on the overall supply of housing in Oakland, on the supply of affordable housing, and on the relationship between jobs and housing. Second, consideration is given to the potential for *indirect* effects on housing rents and prices in Oakland and particularly in surrounding neighborhoods. Then, the potential for *indirect physical impacts* is addressed focusing on residential displacement and increased physical deterioration of housing and neighborhoods.

Additions to the Housing Supply in Oakland

The project would increase the supply of housing in Oakland by 3,100 units and expand the housing choices available to Oakland residents and others in the housing market. The new housing units would include a mix of sizes and types of multi-family housing. Both ownership and rental housing is anticipated, with the majority of units to be offered for sale. The project proposes market-rate housing covering a range of prices and rents depending on size, type, and location of units within the project. From a citywide perspective, the housing developed in the

project would represent additional housing in Oakland over and above what would otherwise be built without the project.

Development of Affordable Housing

The project also would result in additional affordable housing development in Oakland. Because the project site is located within two redevelopment project areas, development of the project would generate tax increment monies to the Redevelopment Agency, 25 percent of which are to be used to increase, improve, and preserve the supply of low- and moderate-income housing. These funds would be used by the Agency to assist the private and nonprofit sectors in providing affordable housing in the redevelopment project areas. The portions of the project site east of Lake Merritt Channel are located within the *Central City East Redevelopment Plan* (CCERP) Project Area, and the portion of site west of Lake Merritt Channel is within the *Central District Urban Renewal Plan* (CDURP) Project Area.

In addition, state law requires that at least 15 percent of all housing developed in redevelopment project areas adopted after 1975 be affordable to very-low-/low- and moderate-income households.[5] Of these affordable units, at least 40 percent must be affordable to very-low-income households. The Redevelopment Agency is obligated to meet this provision for a redevelopment project area in the aggregate, over a 10-year period. Under this law, development of the project would require at least 420 low- to moderate-income units in the Central City East Redevelopment Project Area, at least 168 to be affordable to very-low-income households (based on the 2,800 units proposed east of Lake Merritt Channel). The affordable units could be included in the project (as part of the 2,800 units) or developed elsewhere in the Central City East Redevelopment Project Area. Project housing proposed for development in the Central District Urban Renewal Plan Project Area (300 units proposed west of Lake Merritt Channel) would not be subject to this affordable housing requirement.[6]

Provision of the required affordable units would be supported by the tax increment monies generated for affordable housing in the Central City East Redevelopment Project Area in the future (from development of the project, other new development, and increases in values of existing property over time) and by other affordable housing development in the Redevelopment Area besides that funded by the tax increment. It also could require funding from the project to the extent that the requirement for affordable housing could not otherwise be met.

Improvement of City's Jobs/Housing Relationship

The large amount of housing to be developed in the project would increase the housing opportunities in Oakland relative to the number of jobs in the city. The projections show that the 3,100 housing units to be developed in the project would accommodate 2,976 additional

5 The 15 percent inclusionary requirement covers all new and substantially rehabilitated dwelling units developed by private, non-profit, or public entities or persons other than the Redevelopment Agency; housing development by the Agency would be subject to other inclusionary housing requirements, pursuant to Health & Safety Code Section 33413(d)(1).)

6 The Central District Urban Renewal Plan was adopted in 1969 prior to the effectiveness date for this affordable housing requirement, and, pursuant to the Plan as amended, the affordable housing production requirements apply only to project areas adopted after January 1, 1976 (Health & Safety Code Section 33413(d)(1)).

households with 3,585 additional employed residents. By comparison, job growth in the project would accommodate 623 workers, indicating a net increase of 2,962 or nearly 3,000 employed residents in Oakland as a result of the project. Affordable housing development from tax increment monies generated by the project would increase the additional housing resulting from the project as well as the number of households and employed residents residing in Oakland. Thus, the project would improve the overall relationship between jobs and employed residents and housing in Oakland.

Potential Effects on Housing Rents and Prices in Oakland and in Neighborhoods Surrounding the Project

In order to evaluate the project's potential to affect rents and prices for housing in Oakland and to determine whether such effects, if anticipated, could have physical effects subject to CEQA analysis, it is important to identify the factors involved and the different types of effects that could occur.

As described below, there are broader citywide and regional housing market factors and trends that will be more important than the project in determining housing rents and prices in Oakland. Within that context, however, the project would affect both the *supply* of and *demand* for housing. On balance, the large amount of housing to be added in the project is anticipated to have the more influential effect overall, and would contribute to easing upward pressures on housing rents and prices over what would otherwise exist without the project. In specific nearby areas, the project also could have effects on housing demand and rents/prices that would not be evidenced in other areas or at the overall citywide level.

Competitive Regional Housing Market Context is Influencing Housing Rents and Prices in Oakland. As described in the Setting section, housing market conditions in Oakland reflect the broader regional housing market context of the Bay Area. While housing prices and rents in Oakland have generally been below those in other, central parts of the Bay Area, strong regional housing demand, higher prices and rents in other areas, and renewed interest in center city living have been increasing demand for housing in Oakland and putting upward pressure on housing prices and rents. These conditions are supporting new housing production in Oakland, which has recently reached historically high levels. There also has been increased demand for existing housing in Oakland's neighborhoods, particularly relatively lower-cost housing, because of the difficulties of producing new units at lower price/rent levels. Market pressures will continue to increase for housing in Oakland, particularly older housing at prices/rents below the average for housing in the central parts of the region.

Housing demand and prices and rents have been increasing in neighborhoods surrounding the project site as a result of these broader citywide and regional housing market factors and trends. These market forces and recent trends are anticipated to continue, independent of whether or not the project is developed.

Within this broader housing market context, the project would affect the supply of housing in Oakland and the demand for housing in some parts of Oakland, as described below. From the broader market perspective, however, the project would be a relatively small part of the bigger

picture of cumulative growth and change and other factors influencing housing market conditions (such as interest rates, state/federal housing policies, local and regional land use policies, regional economic growth, etc.). Thus, the broader housing market context will be more important than the project in determining housing rents and prices in Oakland in the future.

The Project Would Increase Housing Supply and Reduce Upward Pressures on Housing Prices and Rents. As described above, the project would increase the supply of housing in Oakland with the addition of a large number of market-rate housing units. It also would support the development of additional affordable housing, and would improve the jobs/housing relationship, meaning more housing opportunities relative to jobs. Greater housing supply would mean less competition for available housing. New housing opportunities in the project would capture demand that otherwise would focus on existing housing and other new housing development. Greater housing availability and less competition for housing would mean less upward pressures on housing rents and prices over what would otherwise exist without the project. Thus, from an overall housing market perspective, the project would provide benefits for housing availability and affordability in Oakland.

The Project Would Have More Focused Effects on Housing Demand, Increasing Market Interest in Housing Nearby. Development of the project would create a new neighborhood with park and waterfront amenities along the Estuary and would enhance the attractiveness of that part of Oakland. It would continue the redevelopment of the Estuary waterfront that is already occurring in Oakland. The success of the project, its large scale, and the attractiveness of the park and waterfront improvements there, would enhance potentials for additional new housing development by increasing market interest from both households/housing consumers (increasing demand) and housing developers (seeking locations to increase supply). The additional interest in housing is anticipated to focus on the adjacent Fifth Avenue Point area and on other locations along the Estuary waterfront and could extend inland to locations along Lake Merritt Channel. In this context, the project would affect the prices and rents that households are willing to pay for new housing in other similar waterfront settings nearby, increasing market interest and the willingness to pay for similar types of higher-density new housing. (Also see discussion of Growth Inducing Impacts in Chapter VI.)

The project also could enhance the desirability of existing housing in adjacent and nearby areas that offer proximity and access to the waterfront park areas and other amenities in the project. However, such effects would be limited by the relative isolation of the Oak to Ninth waterfront. The project site is actually somewhat distant and is physically separated from inland neighborhoods in surrounding areas by the I-880 freeway and the rail lines and railroad rights-of-way. Thus, the project is not anticipated to noticeably increase demand for existing housing in surrounding inland neighborhoods or to noticeably affect housing rents and prices there.

As the potential housing demand effects of the project would vary by location and have different implications in different areas, consideration is given below to potential effects in each of the nearby and surrounding areas. The evaluation focuses on potential effects that could increase rents and prices for existing housing or encourage new housing development that would replace

existing housing, as those are the types of housing market effects that could lead to displacement and indirect physical impacts on the environment.

- **Adjacent Fifth Avenue Point Area -** In this adjacent area, the project's potential effects would be those focused on increases in housing demand. Creation of a new neighborhood on the project site (along with development of park and waterfront amenities) would enhance the desirability of the privately-owned Fifth Avenue Area surrounded by the project site. Market values of property would increase as would interest in additional new development there in the future. Although not a residential area, there are a small number of existing work-live studios that could become more desirable depending on the condition of the older structures, and rents for existing space could be higher in the future as a result of the project.

- **Surrounding Estuary Waterfront and Lake Merritt Channel -** The project would continue the redevelopment of the Estuary waterfront that is already occurring in the Jack London District to the west and along Embarcadero Cove and the Kennedy Tract to the east. The project would further enhance existing potentials for additional new housing development along the waterfront by increasing market interest from both households/housing consumers and landowners and housing developers. Additional new housing development along the waterfront in the future is anticipated to occur on sites with older industrial uses. The effect of the project in enhancing housing demand along the waterfront is not anticipated to substantially affect existing housing areas. Most older, existing housing along the waterfront is in the Kennedy Tract area, where new housing is already being developed, independent of the project.

  The project also is likely to increase market interest and demand for new housing in the vicinity of the Lake Merritt Channel, particularly if improvements are made along the Channel to connect Lake Merritt to the Estuary. Oakland's Housing Element identifies housing opportunity sites on both sides of the Channel. The project could encourage development of these sites sooner than would occur without the project. The new residential development would not replace or substantially affect existing housing as development sites are outside of or on the fringes of existing neighborhoods.

- **San Antonio District, North of I-880 -** Concerns about potential housing demand effects of the project in the San Antonio District to the north and northeast of the project site, arise because of the large stock of older housing in the area and the demographic characteristics of residents. Compared to Oakland's population overall, the San Antonio includes proportionally more family households, household incomes are below citywide median income, and a larger share of residents are renters.

  Consideration of potential effects indicates that while the project could increase demand for housing in the western parts of the district, it is not anticipated to noticeably affect housing rents and prices in the San Antonio District overall. There are several factors that provide explanation.

One is that housing demand and housing prices and rents have been increasing in the San Antonio as a result of broader citywide and regional housing market factors and trends. In addition, renewed interest in downtown Oakland is already enhancing the desirability of parts of the San Antonio that border the downtown to the west. Existing market forces and recent trends are anticipated to continue, independent of the project. To some extent, the project also could contribute to enhancing demand for existing housing at the western end of the San Antonio District, in the vicinity of Lake Merritt Channel as there are connections to the project site at this end and the potential that additional new higher-density housing would be eventually developed here (to be encouraged by project development as discussed above).

Secondly, most of the housing in existing San Antonio neighborhoods would not have proximity and access to the project and the park areas and waterfront amenities to be available there. San Antonio neighborhoods are actually somewhat distant from the Oak to Ninth waterfront and are physically separated from the project by the I-880 freeway, the rail lines and railroad rights-of-way, and industrial and other business uses near the railroad and freeway. Thus, demand effects of the project would be limited by the lack of proximity and access.

Third, the large amount of new housing to be developed in the project (and in nearby downtown Oakland and eventually in the vicinity of Lake Merritt Channel) would capture demand that could otherwise focus on existing housing in the San Antonio, thereby easing upward pressures on prices and rents in the District, including broader market pressures independent of the project as well as any pressures that might result from potential effects of the project. Further, additional affordable housing to be developed as a result of the project could be built in the San Antonio District and/or in nearby areas. Increasing affordable housing opportunities in the district and nearby would further help to offset any potential demand effects of the project.

- **Downtown Oakland, North of I-880** - Housing demand effects of the project also would be limited in downtown Oakland to the north and northwest of the project site. Much of the downtown is somewhat distant from the project site, with the areas near Lake Merritt Channel and parts of Lake Merritt being the most likely to have connections to the project. If anything, the project could further enhance the desirability of new higher density housing development downtown which is already occurring in numerous downtown locations and being encouraged under the Mayor's 10K Housing Initiative.

Conclusion: Project housing market effects would not lead to significant indirect physical impacts. (Less than Significant)

As described above, the project would have effects on both the supply of and demand for housing. The large amount of housing to be added in the project as well as the additional affordable housing to be developed, are anticipated to have the most influential effects on housing market conditions overall and would contribute to easing upward pressures on housing prices and rents in Oakland.

In specific nearby areas, the project would have effects on housing demand that would not be evidenced in other areas or in the city overall. In some cases, the demand effects would enhance already existing market potentials and encourage additional new housing development sooner than it would otherwise occur. In some limited areas, the project would increase demand contributing upward pressures on prices and rents of existing housing. These demand effects are not anticipated to be substantial enough or widespread enough to significantly reduce housing options for individuals and households leading to displacement and homelessness and the need to construct replacement housing and/or new homeless shelters. Similarly, these demand effects are not anticipated to lead to increased physical deterioration of housing or neighborhoods. Further, the development of a large amount of additional affordable housing as a result of the project would provide options to help offset such effects.

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K. Visual Quality and Shadow

This section discusses existing visual conditions on the project site and the surrounding area and analyzes the potential for the project to affect those conditions. The section focuses on the visual character of the project area, views from surrounding public areas, internal views of the project site, and effects associated with light and glare, and shadow.

Setting

Visual Character and Views[1]

Project Site

The project site is located in a developed urban area along the Inner Harbor of the Oakland Estuary, southeast of downtown Oakland. This assessment of visual character focuses on the built environment as well as the estuary and its shoreline, important elements of the area's scenic quality.

The project area is predominantly industrial in nature characterized by expanses of open land interspersed with functioning and vacant commercial and industrial warehouses. The Embarcadero (the site's northern boundary) and elevated and at-grade portions of Interstate 880 (I-880) create a visual and physical edge between the project site and light industrial and institutional uses north of I-880. (See Section IV.A, Land Use, Plans, and Policies, for detailed description of specific land uses.) The estuary shoreline, which varies from natural marshes to broken concrete riprap and concrete seawalls (and timber piers), forms the project site's southern boundary and is not immediately visible from most sections of the Embarcadero due to existing site buildings and topography.

Throughout the project site and surrounding areas, buildings are generally built to the property lines and very little or no vegetation exists, except street trees along portions of the Embarcadero (primarily at the Jack London Aquatic Center) and ornamental trees and lawn area in Estuary Park. The visible west boundary of the site is a commercial warehouse (Cash & Carry) at Fallon Street, and the visible east boundary is the prominent Ninth Avenue Terminal building, which is not immediately visible from the Embarcadero due to existing site buildings. The project site is described below in three sections, Fallon Street o Lake Merritt Channel, the Channel to Clinton Basin, and Clinton Basin to Brooklyn Basin (Ninth Avenue Terminal).

Fallon Street to Lake Merritt Channel

West of Lake Merritt Channel, the visual environment is characterized by Estuary Park, the Jack London Aquatic Center, and a large commercial warehouse. Estuary Park is an approximately 7.7-acre public open space that contains a 3.5-acre grassy playfield, seating areas, walkways and

[1] The Setting section describes the existing characteristics of the project site and vicinity. More detailed descriptions of the existing site and vicinity are provided in the "Project Impacts" discussion, supported by photographs of existing conditions.

paths, and a boat launch facility and dock. The Jack London Aquatic Center is located in a two-story building (24 to 30 feet tall) north of the park, and is set back from the Embarcadero behind a surface parking lot and landscaping. Paved paths provide pedestrian access to boat launches that extend into the estuary and the channel. Immediately west of the Aquatic Center is a 25-foot-tall, 80,000 square-foot warehouse (Cash & Carry) that fronts the Embarcadero and is similar in appearance to warehouse buildings north and northwest of the Embarcadero, along Oak Street in the Mixed Use District defined in the Estuary Policy Plan. This building occupies the general location of proposed Project Parcel N.

Channel to Clinton Basin

The visual character of the central part of the project site, between Lake Merritt Channel and Clinton Basin, is defined by industrial and heavy manufacturing uses and one- to two-story warehouse/office buildings. Oakland-Berkeley Ready-Mix, a sand and gravel operation, is visible from the Embarcadero and the west side of Lake Merritt Channel, as well as from several viewpoints across the estuary and I-880. The sand and gravel operation is distinguished by its pair of silos and a long, angled conveyor belt that rises over 70 feet angled toward the estuary. The operation is partially concealed by a fence along the Embarcadero, but gravel piles, outdoor storage containers, and a fleet of concrete mixing trucks are visible from the Embarcadero. A low-rise 6,000-square-foot warehouse/office building (marine repair/storage and telecommunications) sits north of the sand and gravel operation and fronts the Embarcadero. These facilities occupy the general location of the proposed project Parcel M.

To the east of the sand and gravel operation is Fifth Avenue Point (not part of the project site). Fifth Avenue Point is an approximately six-acre work-live artist community that includes a mix of primarily light industrial and commercial work-live/office buildings and marina uses concentrated along 5th Avenue and an unnamed street to the west. This area is a dense collection of small-scale (8,000- to 15,000-square-foot) buildings that range in height from about 8 to 30 feet and that are oriented inward toward narrow roadways. The area's character reflects the surrounding light industrial landscape, with a mix of corrugated metal buildings and wood-shingled buildings, one of which is prominent at the intersection of 5th Avenue and the Embarcadero. Surrounding the larger buildings are low, flat-roofed portables, overhead utility lines, cyclone fencing, miscellaneous metal equipment, and dry boat storage.

At the foot of 5th Avenue, berthed boats are visible in the Fifth Avenue Marina. A large swath of vacant land with ruderal vegetation extends from 5th Avenue to Clinton Basin and is the site of a former PG&E power plant. Immediately north of this vacant parcel, large (12,000- to 18,000-square-foot), 20-foot-tall warehouses are visible from the Embarcadero between 5th and 6th Avenues. Smaller (4,000- to 8,000-square-foot) buildings front the Embarcadero, east of 5th Avenue, in the area of proposed project Parcels K and L.

Clinton Basin to Brooklyn Basin (Ninth Avenue Terminal)

From Clinton Basin to the easternmost end of the project site (Brooklyn Basin), the visual character consists of warehouses and offices of varied sizes, with the most prominent being a three-story, 45,000-square-foot warehouse (furniture sales) fronting the Embarcadero at 9th

Avenue and an adjacent two-story, 34,000-square-foot building (metal recycling). Smaller metal and concrete buildings house industrial, marine-related service and retail sales. From the Embarcadero, boat slips are visible in the closed Clinton Basin Marina. Dilapidated, unusable berths in a restricted access area are visible from viewpoints farther south where large debris is visible on the west shore of Clinton Basin. East of Clinton Basin and around 7th Avenue, shipping containers are stacked near the waterfront.

The Ninth Avenue Terminal is the largest structure in the area. The approximately 180,000-square-foot building is 40-foot-tall and 1,000-foot-long and is located at the easternmost portion of the site. Its expansive, paved wharf (or pier) fronts the estuary from Clinton Basin to Brooklyn Basin. The Terminal's bulkhead (the Embarcadero-facing facade) expresses a 1920s industrial vernacular. (See Section IV.E, Cultural Resources, for a detailed description of the Ninth Avenue Terminal.) Cyclone fencing separates general parking areas primarily for the Terminal offices from restricted areas where active loading occurs at the Terminal's docks. In these restricted areas, semi-trucks and containers are visible within the expansive paved areas, and heavy equipment for a marine construction operation and barges are visible in the estuary along the south edge and east site boundaries.

Project Vicinity

Most buildings and uses in the immediate project vicinity are of similar industrial character to those on the project site: mostly low- and mid-rise buildings industrial-type buildings.

North of the Project Site

I-880 lies north along the project site, running parallel, adjacent to, and above the Embarcadero starting at 5th Avenue, and reaching grade at about 9th Avenue. North of I-880 are large, low-rise Peralta Community College District office buildings, Bay Area Rapid Transit (BART) maintenance shop facilities, the Laney College campus, and the continuation of the Union Pacific Railroad line east of 5th Avenue. The San Antonio district is a neighborhood with residential uses of various densities and commercial uses along the east-west major corridors of International Boulevard and East 12th Street. Public storage warehouses are located on the north side of Embarcadero, across from the Jack London Aquatic Center.

West of the Project Site

The tallest and densest development in the vicinity is located approximately four to six blocks northwest of the project site, between Oak Street and Broadway. Just west of Fallon Street (the project site's western boundary), a contemporary four-story residential condominium complex known as The Portobello is visible. Low-rise buildings farther west (The Landing condominiums, television station buildings, restaurant/nightclub) are set back from the Embarcadero behind surface parking lots or obscured by restricted access gates.

Northwest of the project site, the Waterfront Warehouse District and Mixed Use District identified by the Estuary Policy Plan contain new multifamily residential projects, along with industrial and warehouse buildings that have been converted to multifamily units or work-live

lofts. Converted and new buildings in this area range from four the seven stories and the architectural character ranges from modern to historic traditional. Development in this area is generally built to lot lines and very little or no vegetation exists in public areas.

Farther west, one- and two-story warehouse buildings exist within the few blocks of the Produce Market District, as defined in the Estuary Policy Plan. A variety of building types and heights ranging from one to four stories (generally 12 to 48 feet) are located east of Broadway, in the Lower Broadway and Off-Price Retail District, as defined in the Estuary Policy Plan.

The nearby Jack London District, as defined in the Estuary Policy Plan, contains structures ranging from about 60 feet to 110 feet in height. These include Alameda County buildings; the 311 Oak, Allegro, 4th Street Lofts, and Safeway Lofts residential and live-work buildings; the Port of Oakland building at the Embarcadero and Washington Street; the Washington Street parking garage across from the Jack London Cinema; and the Amtrak pedestrian bridge at the Oakland Amtrak station, approximately four blocks east of the project site. The construction of recently approved buildings – namely the mixed-use Jack London Square Redevelopment Project, the 3rd and Broadway project in the Jack London District, and residential projects at 426 Alice and 300 Harrison in the Waterfront Warehouse District will add to the number of taller buildings in the vicinity.

East and South of the Project Site

East of the project site, low-rise (one- to three-story) buildings containing primarily hotel and marina uses front the Embarcadero and are closely bound by Brooklyn Basin on the south. The relatively new, three-story Homewood Suites hotel abuts the project site at 10th Avenue. Smaller, low buildings that contain a number of boat-related uses (sales, repair, berths/marina) extend eastward along the Embarcadero. Development in this area is less concentrated and industrial in nature than development on the project site and to the west and northwest. Landscaping and vegetation are more evident and public improvements to serve the newer development (roadway paving, curbs, sidewalks, landscaping) exist along this stretch of the Embarcadero east of the project site. The west end of Coast Guard Island lies approximately 600 feet east of the project site across Embarcadero Cove/estuary. This part of the island currently contains stacked shipping containers, which are the only structures on the island that are visible from the project site.

South of the project site approximately one-half mile across the estuary, marina facilities and low-rise, modern office buildings are visible along the city of Alameda's north shore.

View Corridors

View corridors are formed by buildings or other physical elements that guide lines of sight and control view directions available to pedestrians and motorists. View corridors include the total field of vision from a specific viewpoint. Public view corridors are areas in which views are available from publicly accessible places, such as city streets and parks.

To understand the extent to which the project would affect view corridors, photographs of existing views have been closely compared with photographic simulations of the project. Existing

view corridors in the project area (the existing setting) are discussed in detail in the Project Impacts section below. The analysis considers four categories of views of the site: short-range (up to 1,000 feet from the site), medium-range (1,000 to 1,500 feet from the site), long-range (more than 1,500 feet from the site), and internal views looking "through" the project site from points within the site. Representative public view corridors are from viewpoints along I-880, the Embarcadero, surrounding arterial streets, Estuary Park, San Antonio Park, and the city of Alameda shoreline.

As reported in the Initial Study Checklist prepared for the project (**Appendix A**), there are no designated scenic highways near the project site, and therefore there are no views of the project site from such locations.

Light and Glare

Sources of light and glare in the project area are generally limited to the interior and exterior lights of buildings and lighting visible through windows, in parking lots, and on city streets. These sources of light are typical of a developed urban area. Particularly intense light sources at the project site include isolated security lighting in the Jack London Aquatic Center parking lot, the Oakland-Berkeley Ready-Mix operation, Clinton Basin Marina, and throughout the paved wharf/pier around the Ninth Avenue Terminal.

Automobiles and water craft traveling in the area represent a source of glare, although nighttime traffic within and immediately adjacent to the project site is relatively low given the types of land uses on and near the site which generate daytime activity. Glare from I-880 traffic is not visible from the project site since the lanes of traffic traveling toward the site are elevated or oriented away from the site.

Shadow

Existing buildings on the project site and nearby are generally one to two stories (14 to 25 feet) in height and cast relatively minimal shadow. The tallest onsite buildings include the Cash & Carry warehouse (25 feet tall), the National Furniture Liquidators, Inc. warehouse (35 feet tall), and the Jack London Aquatic Center (24 feet tall), all located along the Embarcadero, and the Ninth Avenue Terminal (40 feet tall) along the eastern boundary of the project site. The conveyor belt and silos for the sand and gravel operation close to the shoreline are approximately 70 feet tall but not bulky enough to cast substantial shadow. Existing buildings in the Fifth Avenue Point community (not part of the project site) range from two to three stories in height. Shadow is cast by and upon buildings throughout this densely developed area during most of the day due to the relatively narrow width of 5th Avenue and its unnamed parallel roadway west of the buildings along 5th Avenue, coupled with the proximity and row configuration of the buildings. Overall, the extent of shadow from the existing low-rise development on the project site is relatively minimal, and shadows from existing development generally do not affect public parks or open spaces (Estuary Park or the existing shoreline) or historic resources (Ninth Avenue Terminal building). No solar collector facilities have been identified in the area.

Project Impacts

Significance Criteria

Based on Appendix G of the CEQA Guidelines and the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines, the project would have a significant visual quality impact related to visual character, views, light and glare, or shadows, if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state or locally designated scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings;
- Create a new source of substantial light or glare which would substantially and adversely affect day or nighttime views in the area;
- Introduce landscape that would now or in the future cast substantial shadows on existing solar collectors (in conflict with California Public Resource Code Section 25980-25986);
- Cast shadow that substantially impairs the function of a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar collectors;
- Cast shadow that substantially impairs the beneficial use of any public or quasi-public park, lawn, garden, or open space;
- Cast shadow on an historic resource, as defined by CEQA Section 15064.5(a) such that the shadow would materially impair the resource's historic significance by materially altering those physical characteristics of the resource that convey its historical significance and that justify its inclusion on or eligibility for listing in the National Register of Historic Places, California Register of Historical Resources, local register of historical resources, or a historical resource survey form (DPR Form 523) with a rating of 1-5; or
- Require an exception (variance) to the policies and regulations in the General Plan, Planning Code, or Uniform Building Code, and the exception causes a fundamental conflict with policies and regulations in the General Plan, Planning Code, and Uniform Building Code addressing the provision of adequate light related to appropriate uses;

The analysis of the project's effect on area-wide visual character focuses on changes to the existing aesthetic quality of the area that would result from the project. The analysis considers the project's overall design elements, including massing, articulation (to the extent it is specified), height, tower location, and ground-floor treatment. The analysis also considers the public improvements that would occur as part of the project, including new and improved open spaces, streets, and landscaping and streetscape treatments.

A significance determination considers the extent of change in the appearance of the project site from key public viewpoints due to the project, as well as the degree of visual contrast and/or compatibility in scale and character and the sensitivity of the affected view.

Local Plans and Policies

Oakland General Plan policies and other applicable plans and policies that pertain to visual quality (views, shadow, aesthetics, etc.) and related effects, and that apply to the project, are listed in **Appendix F**. Key policies are identified and discussed in Section IV.A, Land Use, Plans, and Policies. General Plan policies that are also significance criteria or contain a regulatory threshold which the project must meet are addressed in this section.

Project Impacts Discussion

The project was determined not to have a significant impact on scenic resources within a state scenic highway, since no state scenic highways exist near the project site (see Initial Study Checklist, **Appendix A**). Therefore, this analysis focuses on whether the project would substantially degrade the existing visual character of the site, nearby scenic vistas, and well as light and glare and shadow impacts. The analysis of project impacts on scenic vistas as viewed from publicly accessible viewpoints is supported by visual simulations of the project in its surroundings.

Impacts on Visual Character and Quality

Impact K.1: The project would construct new buildings that would be taller and have more bulk than existing buildings in the area along pedestrian and vehicular routes and adjacent to the Oakland Estuary, and would substantially demolish the Ninth Avenue Terminal building. This would substantially, but not adversely, alter the existing visual character and quality of the project area. (Less than Significant / Beneficial)

Overall Proposed Changes

The project would demolish most of the existing buildings on the project site and involve site grading, construction of new buildings, shoreline improvements (both natural and constructed), and the addition of publicly accessible open spaces for active and passive recreation. The project would replace existing visual elements on the site that have neutral or low aesthetic value. These include expansive paving, vacant swaths of unkempt open land, some deteriorated buildings, debris on land and along the shoreline, and cyclone fencing. Replacement of these elements has the potential to enhance the visual quality of the project site and the surrounding estuary area. New development and improvements would alter the site's existing visual character from a predominantly industrialized waterfront to a mixed-use residential area with retail, marina, and expansive open spaces. As a result, the project would not result in a demonstrable negative change in the visual character of the project site or its surroundings.

New Buildings and Towers

In general, the project's residential buildings would be six to eight stories (65 to 86 feet tall), with residential towers of 18 to 24 stories (180 to 240 feet) proposed on five parcels (Parcels A, H, J, K, and M) (see Figure III-5 in Chapter III, Project Description). With a maximum building height of up to 86 feet (excluding the five tower elements), the project buildings would be taller than

most existing structures on the site and in the immediate vicinity: the low-rise buildings east on the Embarcadero, the three-story hotel east of the project site on the east, the three-story Portobello condominiums immediately west, and existing and approved buildings in the Waterfront Warehouse District and Mixed Use District which range from 40 to 100 feet in height. Project buildings would be similar in scale to existing and approved buildings at nearby Jack London Square where approved buildings will range from approximately 111 to 175 feet tall.

While the proposed project buildings would be taller and more massive than most existing buildings in the immediately nearby area, the height of the buildings in and of itself would not degrade visual quality. It is anticipated that each building would be designed to include variations in street frontages and would employ architectural treatments such as facade articulation, cornices, varied massing, and upper level setbacks, particularly near Clinton Basin, to reduce bulk and apparent building height from long-range vantage points. The proposed site plan and building massing are intended to provide architectural variation, an attractive pedestrian- and community-scaled environment, and a distinctive architectural profile when viewed from distant viewpoints. The project buildings would create a new skyline along the linear, waterfront site. They would provide new orientation points and increase the area's physical distinction by introducing a well-planned development that would add variety and contrast to an expansive area that currently has little visual distinction.

The project would develop incrementally, likely multiple parcels at a time, over a period of approximately 11 years. The project sponsor proposes to develop the initial project phase(s) in the easternmost portion of the site, with subsequent phases likely to be constructed by other developers. As a result, while the overall mass, height, and site layout of later development phases would be consistent with the proposed Preliminary Development Plan (PDP), the project would incorporate varied and complementary architectural schemes.

Street-Level Design and Character

Aside from design considerations and physical impacts related to tower buildings (potential view obstruction and shading effects, discussed below), the way future buildings meet the street would define the aesthetic character of the pedestrian realm. Mid-rise residential buildings would be set back about 8 feet from the street, and the podiums of the tower buildings would be set back approximately 15 feet from the street. Residential buildings would be accessible from individual and shared entries at street level. Individual entryways visible from the street would reinforce the residential character of the buildings and create activity and visual interest at the building edge. There would also be landscaped areas along building frontages.

The project proposes streetscape improvements along all project streets. Sidewalks would range from approximately 9 to 16 feet wide. They would include decorative light stands and outdoor seating and would accommodate outdoor dining areas for restaurants. Additionally, public rights-of-way would be landscaped with street trees, which could add substantial amounts of greenery where there is currently little.

Clinton Basin Promenade

The project would create Harbor Lane as an east-west pedestrian promenade around and extending from each side of Clinton Basin. The promenade would include a mix of ground-floor pedestrian-oriented retail uses, outdoor seating in a "café zone," and streetscape treatments and landscaping. For commercial uses, project buildings would include double-height storefronts that would provide glass facades to maximize sunlight access to interior spaces. The project would promote a new sense of "place" by creating an identifiable center for the project area, with retail, dining, recreation, and neighborhood commercial development at primary public gathering areas (Gateway Park, and the Clinton Basin Marina) from which there would be views of the estuary and/or major open spaces.

Conclusion of Visual Character and Quality Impacts

Although visual quality is subjective, it can reasonably be concluded that the proposed buildings would not result in a substantial, demonstrable negative aesthetic effect. The project would result in noticeable changes in visual character due to the construction of new buildings, adaptive reuse of the Ninth Avenue Terminal Bulkhead Building, creation of large open spaces, and an overall intensification of development. The project would improve the visual quality of the area by redeveloping unsightly vacant and underused areas and surface parking lots, providing new parks and publicly oriented recreation venues, and implementing a streetscaping program (paving, landscaping, lighting, etc.) for new public streets throughout the project site and along the Embarcadero. The project would also further enhance existing, attractive facilities, such as the Jack London Aquatic Center and parking area.

In conclusion, while the proposed project would result in aesthetic changes within the estuary area, these changes are not necessarily adverse but would be considered a beneficial effect, particularly with implementation of design standards adopted as part of the project. Based on the above evaluation of the project's physical character, massing, and height relationships to other surrounding buildings, the project would not substantially degrade the existing visual character or quality of its site or its surroundings.

Mitigation: None Required.

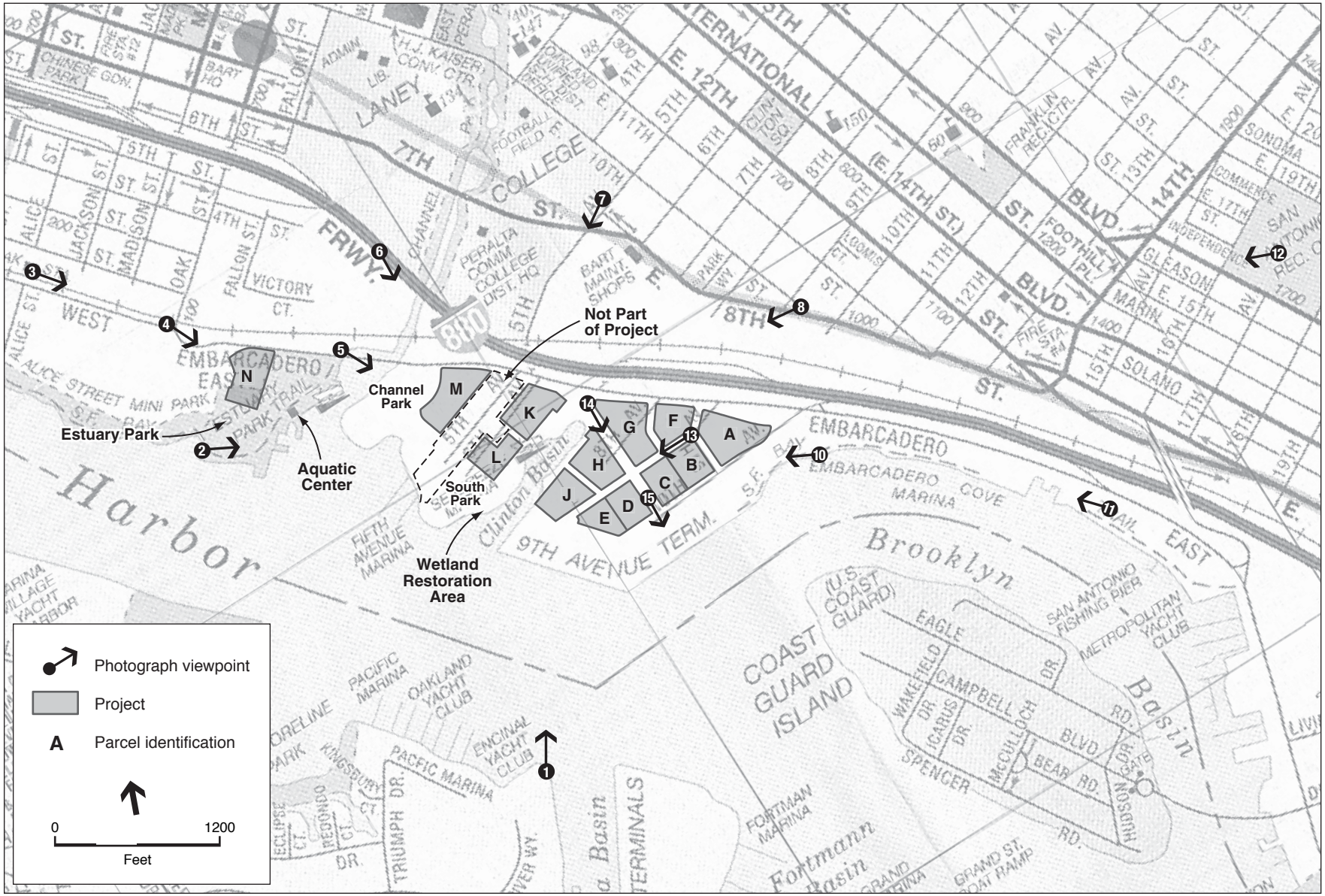
Impacts on Views and Scenic Vistas

Impact K.2: The project would construct new buildings that would be taller and have more bulk than existing nearby buildings which would result in changes to views from nearby public viewpoints, but that would not adversely affect scenic vistas of which the project site is a part. (Less than Significant)

The project would change the visual environment on the project site and would alter existing short-range views (up to 1,000 feet from the site), medium-range views (1,000 to 1,500 feet from the site), and long-range views (more than 1,500 feet from the site) from exterior public

viewpoints, as well as from within the site's interior (Estuary Park and points along the Embarcadero). The following analysis evaluates changes from specific public viewpoints and within scenic corridors and vistas.

Computer-generated visual simulations illustrating "before" and "after" visual conditions at the project site as seen from representative public viewpoints are presented as part of this analysis. **Figure IV.K-1** (p. IV.K-11) shows the viewpoint locations. Digitized photographs and computer modeling and rendering techniques were used to prepare the simulation images, which are based on plans and other design descriptions provided by the project sponsor. It is important to note that the images of the project shown in the simulations are intended to convey the general mass, height, and interrelationships of project buildings, individually and collectively, and are not intended to represent the architectural detail of the project. Also, to assess the worst-case impacts on views and scenic vistas, the simulated project depicts a maximum height and massing scenario (86-foot maximum podiums/buildings on most parcels and towers at a maximum 240 feet on Parcels A, H, J, K, and M), however the project that is ultimately constructed would not likely be built to these maximum heights.



SOURCES: Environmental Vision, Environmental Science Associates

Oak to Ninth Avenue . 202622

Figure IV.K-1
Viewpoint Location Map

Comparison of Existing and Proposed Views

From Alameda Shoreline: Figure IV.K-2 (Viewpoint 1 on p. IV.K-13) illustrates a view of the site from the Alameda shoreline looking north. In the existing view from this location, the project site is visible in long-range panoramic views. Foreground views are of a landscaped shoreline band. Mid-ground views encompass the Oakland Estuary's Inner Harbor waters. Oakland's downtown skyline is visible in the distance to the west. Looking directly to the north, beyond the project site, an elevated span of I-880 is visible, as are a few large buildings near Lake Merritt. The project site's maritime-industrial shoreline is characterized by cranes, the Oakland-Berkeley Ready-Mix silos and conveyer, finger piers, boats, and the Ninth Avenue Terminal building to the east. In the distance, the East Bay hills create a natural, though developed, backdrop.

The Viewpoint 1 simulation shows that with development of the project, the existing long-range views of the downtown Oakland skyline and portions of the East Bay hills in the background would remain. The maritime-industrial character of the project site would be replaced with a residential-commercial character, with more substantial landscaping in the proposed South Park at the mouth of Clinton Basin. Heavy machinery, cranes, and containers along the waterfront would be replaced by project buildings set behind publicly accessible parkland. New public open space would also be visible over the pier at proposed Shoreline Park (shown on the right side of the simulation).

The project's proposed towers on Parcels H, J, and K would be clustered and would create a visual focus at the center of the site, obstructing background views of a small portion of the East Bay hills; Tower M would be set in front of distant mid-rises near Lake Merritt. The height (65 to 86 feet) of the project's mid-rise buildings on Parcels B, C, D, and E (visible on the right side of the simulation, beyond Shoreline Park) would fall just below the ridgeline of the East Bay hills, which would still be distinguishable in the distant background. Overall, from Viewpoint 1, the project would result in noticeable changes to the existing view from this viewpoint but would not substantially affect any scenic vista, including long-range views of the East Bay hills or the downtown Oakland skyline.

From Estuary Park Shoreline: Figure IV.K-3 (Viewpoint 2 on p. IV.K-15) presents the existing view from Estuary Park looking east. Existing foreground views are characterized by expanses of lawn with benches, palm trees, and riprap lining the waterfront. In the mid-ground, a framed seating area is set in front of a stand of trees that currently lines the channel-side walkway to the pier (visible at the right side of the simulation). Masts of sailboats in the Fifth Avenue Marina are visible against the outline of the hills in the distance. The sand and gravel operation on the project site is visible in the background, behind the park's seating area.

As is apparent in the simulation from Viewpoint 2, mid-range views from Estuary Park would change with construction of the project. Foreground views would not change, but project towers on Parcels H, J, K, and M would be visible in the background and would rise above existing trees along Lake Merritt Channel. Other project buildings would be visible and would replace the view of the Berkeley-Oakland Ready Mix sand and gravel operation and equipment. The project would also change views beyond the expanded Fifth Avenue Marina, where trees and

Existing view from Alameda shoreline at Wind River office building looking north (VP1)

Visual simulation of proposed project

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-2
Simulation

landscaping in the proposed South Park would be visible. Sailboats and other marine craft would be visible and would continue to contribute to the maritime character of the site under project conditions. Project buildings would partially block long-range views of the East Bay hills at this location. However, although there would be noticeable changes to the existing mid- and long-range views, this would not be considered a substantial affect to any scenic vista, including existing long-range views of the East Bay hills.

From Amtrak Pedestrian Bridge at Jack London Square: Figure IV.K-4 (Viewpoint 3, on p. IV.K-17) provides a view from the Amtrak pedestrian bridge over the Embarcadero, looking east toward the project site. Foreground views are of offsite warehouse buildings on the north side of the rail tracks and the four-story Landing residential development south of the tracks and the Embarcadero. The slight curve of the tracks draws the eye to the mid-ground of the view, which consists of heavy machinery and conveyors of the sand and gravel operation, with the project site visible beyond. There are no substantial views of the estuary from this viewpoint. The ridgeline of the hills in the distance establishes the horizon.

With the project, buildings would replace industrial equipment from Viewpoint 3 and create a view of more intensive development. The four-story building on Parcel N (currently Cash & Carry warehouse) would be visible in the foreground, set against four of the project's towers in the background (on Parcels H, J, K, and in the distance and farthest north [left], Parcel A). The position of the project building on Parcel N in relation to the Embarcadero would create a strongly-defined street wall. From this vantage point, the height of the Parcel N building would appear similar to The nearby Landing residential development. The project's taller buildings would block some existing views of the distant hills although, as shown in the simulation, some hillside vistas would continue to exist at the left side of the view. Overall, from Viewpoint 3, the project would result in noticeable changes to the existing view but would not substantially affect any scenic vista, including the long-range views of the East Bay hills.

Existing view from Estuary Park shoreline looking east (VP2)

Visual simulation of proposed project

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-3
Simulation

From Oak Street at the Embarcadero: Figure IV.K-5 (Viewpoint 4, p. IV.K-18) presents existing views from the intersection of Oak Street and the Embarcadero. This is the initial view of the project site as approached from Oak Street or Jack London Square and is characterized by the westward curve of the Embarcadero in the foreground. The project site is visible in the mid-ground, adjacent to the four-story Portobello residential condominium complex. From this vantage point, the loading docks of the existing single-story warehouse (Cash & Carry) on the project site are visible on the south side of the Embarcadero; the warehouse frontage is visible just beyond the roadway curve. Some street trees are visible along the Embarcadero. Long-range views or views of the estuary are not available from this vantage point.

As simulated from Viewpoint 4, the project would alter short-range views due to the demolition of the Cash & Carry warehouse and construction of a residential building (Parcel N). The new building on Parcel N would be up to approximately 65 feet tall along the Embarcadero, up to 86 feet tall at portions set back from the Embarcadero, and approximately 30 to 50 feet tall at its central portion. The building would be larger than the warehouse it would replace, and portions would be taller than the adjacent Portobello residential complex. Its configuration would allow for views into its interior courtyard from the eastbound Embarcadero travel lanes, along which street trees and landscaping would be introduced. No other project buildings would be visible from this viewpoint. Overall, from Viewpoint 4, the project would result in noticeable changes to the existing view but would not affect any scenic vista.

Embarcadero at Lake Merritt Channel Bridge: Figure IV.K-6 (Viewpoint 5, p. IV.K-19) illustrates the existing view from the Embarcadero at Lake Merritt Channel looking southeast directly toward the project site. Foreground views are of the channel waters. Mid-ground views are of the project site and include the large vacant area on the east shore of the channel. A single-story building fronts the Embarcadero, and the silos and conveyor belt of the industrial sand and gravel operation on the project site are clearly visible in the background, as is one of the larger industrial sheds within the Fifth Avenue Point outparcel. Given the relatively low elevation of this viewpoint, there are no substantial views of distant hills or the estuary.

As simulated from Viewpoint 5 the proposed mid-rise podium building and highrise tower on Parcel M would be most visible. In the background, the towers on Parcels H and K would be visible above the Parcel M podium. From this viewpoint, the visual character of the shoreline would shift from predominantly industrial to a park setting (Channel Park). The channel edge would be lined with new contoured riprap, with

Existing view from Amtrak pedestrian bridge looking southeast (VP3)

Visual simulation of proposed project

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-4
Simulation

Existing view from Oak Street at Embarcadero looking southeast (VP4)

Visual simulation of proposed project

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-5
Simulation

Existing view from Embarcadero at Lake Merritt Channel looking southeast (VP5)

Visual simulation of proposed project

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-6
Simulation

meandering pedestrian pathways and new landscaping. Overall, from Viewpoint 5, the project would result in noticeable changes to the existing view but would not affect any scenic vista.

Interstate 880 Southbound: Figure IV.K-7 (Viewpoint 6, p. IV.K-21 presents existing views from southbound (eastward) I-880, near the Oak Street on-ramp looking southeast. This view is experienced as part of a dynamic view sequence while entering the freeway. In the foreground, an offsite surface parking lot, utility poles, and shipping containers are visible just below the freeway on-ramp. In the mid-ground, a narrow bridge over Lake Merritt Channel can be seen. To the southeast, industrial warehouses, the silos and conveyor of the sand and gravel operation, as well as other structures, are visible on the project site and in the Fifth Avenue Point outparcel (not part of the project site). Long-range views of the estuary or hills are not available from this location.

As simulated from Viewpoint 6, the project would not affect foreground views as the parking lot below the freeway and warehouses north of the Embarcadero are not located on the project site and would still be visible. As motorists continue southbound on I-880 and approach the project site, views would include the project site set behind the foreground parking and the channel shoreline. Nearing the site, the mid-rise buildings on Parcels K and M would come into view. Farther to the south, project towers would become more prominent, with towers on Parcels A, K, and M being most visible given their proximity to I-880. High-speed motorists along the freeway would catch fleeting views of project buildings while traveling southbound. Overall, from Viewpoint 6, the project would result in noticeable changes to the existing view but would not affect any scenic vista.

5th Avenue at 8th Street: **Figure IV.K-8** (Viewpoint 7, p. IV.K-22 presents existing views from 5th Avenue at 8th Street, looking south. In this expansive view, the wide intersection dominates foreground views, set in front of the collection of single-story BART maintenance buildings located on 7th Avenue in the mid-ground. The project site is set behind the BART maintenance shops and I-880. In the distance, an elevated portion of I-880 crosses over 5th Avenue, its height aligning with the horizon line in this view. The tops of crane equipment, utility lines, and taller buildings on the project site are visible above and below the freeway.

As simulated from Viewpoint 7, the project's mid-rise buildings (portions of the buildings on Parcels G, H, and K) would be seen behind the BART maintenance buildings and above the elevated portion of I-880. The four project towers closest to 5th Avenue and Clinton Basin (Parcels H, J, K, and M) would also be visible from this location and would create a varied, urban skyline where there is currently none. Overall, from Viewpoint 7, the project would result in noticeable changes to the existing view from this viewpoint, but would not substantially affect any scenic vista.

Existing view from Interstate 880 southbound near Oak Street on-ramp looking southeast (VP6)

Visual simulation of proposed project

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-7
Simulation

Existing view from 5th Avenue at 8th Street looking south (VP7)

Visual simulation of proposed project

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-8
Simulation

East 8th Street at 10th Avenue: **Figure IV.K-9** (Viewpoint 8, p. IV.K-24 presents existing views from East 8th Street looking west from 10th Avenue. The offsite Amtrak and Union Pacific Railroad tracks characterize the predominantly industrial visual setting from this viewpoint looking toward the project site. When trains are not passing this location, or on the infrequent occasions when freight train cars are not stored in this area (as depicted in **Figure IV.K-9)**, long-range views of the project site, the Oakland Estuary, and San Francisco would likely be seen from Viewpoint 8.[2]

As simulated from Viewpoint 8, almost the entire expanse of the project, including five towers and four mid-rise structures, would be visible from this location. The tower on Parcel A would be located toward the foreground in this view, and the towers on Parcels J, H, K, and M would be visible in the distance. The crane equipment and taller buildings on the project site are partially visible in the distance, located behind cyclone fencing and railcars in the foreground. Although I-880 and the railroad right-of-way would remain in the immediate view, the project buildings would partially obstruct views of the Oakland Estuary and of the city of San Francisco beyond during the infrequent occasion that freight train cars are not stored in front of the project site. Overall, from Viewpoint 8, the project would result in changes to the existing view but would not substantially affect any scenic vista.

Interstate 880 Northbound: **Figure IV.K-10** (Viewpoint 9, p. IV.K-25 presents the existing view of the project site from northbound I-880 looking southwest. Views of the project site from this location are experienced as part of a dynamic view sequence while driving along the freeway in either the northbound or southbound direction (see southbound I-880 view, **Figure IV.K-7**, Viewpoint 6). Currently, the visual setting near this portion of I-880 is relatively undefined, with foreground views of the lane of southbound traffic and the offsite (unused) railroad track spur that parallels Embarcadero, and mid-ground views of two warehouses on the project site (furniture sales and metal recycler) and the Ninth Avenue Terminal on the east edge of the project site. Long-range views across the estuary are not available from this location.

As shown in the simulated view from Viewpoint 9 (**Figure IV.K-10**), almost the entire expanse of the project site frontage would be visible. The view would include the towers on Parcels A, H, K, and M as well as the intervening mid-rise structures. Project buildings would obstruct some existing, intermittent views of the project site, such as views of the Ninth Avenue Terminal Bulkhead Building that remain visible behind existing trees, that would also remain or be replaced. High-speed motorists along the freeway would catch fleeting views of project buildings while traveling northbound. Immediate views of the lower levels of project buildings, which would be within the northbound motorists' primary vantage point, would be screened by trees and landscaping that would be planted along the Embarcadero as part of the project. Overall, from Viewpoint 9, the project would result in substantial changes to the existing view but would not substantially affect any scenic vista.

[2] Although 24-hour observation was not conducted from Viewpoint 8 (or any other viewpoint), possible views of the estuary or the San Francisco skyline from this viewpoint could not be confirmed during regularly conducted observations between January to August 2005.

Existing view from East 8th Street at 10th Avenue looking southwest (VP8)

Visual simulation of proposed project and cumulative Jack London Square (JLS) development to the right

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-9
Simulation

Existing view from Interstate 880 northbound looking southwest (VP9)

Visual simulation of proposed project

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-10
Simulation

Existing view from Shoreline trail near Homewood Suites looking west (VP10)

Visual simulation of proposed project

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-11
Simulation

Shoreline Trail at Homewood Suites, along Brooklyn Basin: Figure IV.K-11 (Viewpoint 10, p. IV.K-26) presents existing views looking southwest from the shoreline trail near the Homewood Suites, immediately east of the project site. Foreground views from the edge of the trail are of the estuary and the marina at Embarcadero Cove. The waterfront (rear) elevation and landscaped lawn of the three-story Homewood Suites hotel are visible to the north (at the right side of the view). In the mid-ground, the "front" facade of the Ninth Avenue Terminal is visible. Some long-range views of the Alameda shoreline and office buildings are available from this viewpoint.

Viewpoint 10 shows that the project would alter short- and mid-range views from this viewpoint. The building on Parcel A would be visible behind the Homewood Suites hotel. The proposed mid-rise buildings on Parcels B and C would be partially visible and would appear slightly taller than the retained Ninth Avenue Terminal Bulkhead Building. Also, the proposed tower on Parcel J would be visible above and between the buildings on Parcels B and C. Most of the Ninth Avenue Terminal would be demolished, but this alteration would not be apparent from this viewpoint. Nor would views of the Alameda shoreline be obscured. Overall, from Viewpoint 10, the project would result in minimal changes to the existing view and would not substantially affect any scenic vista.

Embarcadero at 16th Avenue: Figure IV.K-12 (Viewpoint 11, p. IV.K-28) presents existing views from 16th Avenue, near the Executive Suites hotel, looking southwest. Foreground views are dominated by the Embarcadero. The Oakland Estuary is visible to the west of the Embarcadero, its shoreline landscaped with street trees and light stands adjacent to the Bay Trail. Mid-range views are available of Embarcadero Cove Marina. Long-range views are characterized by the Ninth Avenue Terminal Bulkhead Building, with glimpses of Alameda and the San Francisco skyline in the distance.

Viewpoint 11 illustrates that under project conditions, short-range views would be defined by views of Embarcadero Cove and the estuary. As shown in the simulation, the project would remove most of the Ninth Avenue Terminal building, opening up mid- and long-range views to the distance. This would result in more expansive views of Alameda and the San Francisco skyline. Although new buildings in this view would be visible under project conditions, these buildings would not substantially obstruct any existing or newly created views of the estuary or long-range views of Alameda or the San Francisco skyline.

San Antonio Park Overlook: **Figure IV.K-13** (from Viewpoint 12, p. IV.K-29) presents existing views from the overlook at the highest elevation of San Antonio Park at East 19th Street and 17th Avenue, approximately 1.5 miles northeast of the project site. From this vantage point, the project site, framed by surrounding vegetation in the center of this long-range view, is barely discernable, though a small portion of the estuary is visible to the south (left) of the project site. Views terminate at Alameda and the northern extent of the Pacific Coastal Range on the distant horizon.

Existing view from Embarcadero near the Executive Inn looking southwest (VP11)

Visual simulation of proposed project

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-12
Simulation

Existing view from San Antonio Park looking southwest (VP12)

Visual simulation of proposed project

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-13
Simulation

From Viewpoint 12, five of the project's towers on Parcels A, H, J, and M would be visible above the horizon. The towers on Parcels A and J would be clustered, whereas the towers on Parcels H, K, and M would be viewed as separate elements on the skyline. The mid-rise portions of project buildings would also be discernable and appear larger than the pattern of surrounding homes in the foreground. While the project's proposed buildings would be taller and more noticeable on the horizon than other buildings currently visible from this vantage point, the project would not have a substantial adverse affect on a scenic vista.

Internal Private Viewpoints

Three viewpoints are included below to illustrate changes in views from internal points on the proposed project site. Although internal to the site, these views are from public vantage points (new public streets) and simulate the types of views that could be available to future site residents and visitors.

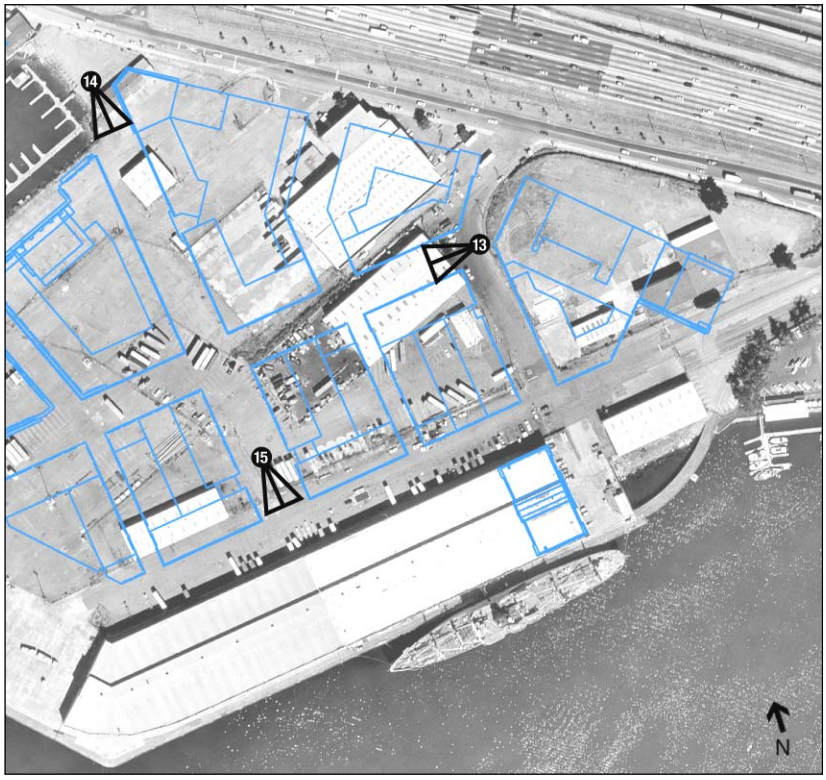


Figure IV.K-14 (Viewpoint 13, p. IV.K-31) presents an existing view from a new northeast-southwest public street (8th Avenue) looking southeast. This short-range view currently dead-ends into the side of single-story corrugated metal storage shed. The project would alter views from this location, by creating a new view corridor along the future 8th Avenue across the entire depth of the site. Several project buildings would be visible from this viewpoint.

Existing internal view looking southwest (VP13)

Visual simulation of proposed project along 8th Avenue

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-14
Simulation – Internal View

Existing internal view looking southeast (VP14)

Visual simulation of proposed project along Main Street (6th Avenue)

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-15
Simulation – Internal View

Existing internal view looking southeast (VP15)

Visual simulation of proposed Shoreline Park from Main Street (6th Avenue)

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-16
Simulation – Internal View

Views would include the project site's waterfront edge. The project would create a new long-range view corridor through the site to the Oakland Estuary and Alameda marina in the distance. These views do not currently exist.

Figure IV.K-15 (Viewpoint 14, p. IV.K-32) presents an existing view from Clinton Basin Marina looking southeast. This view is similar to Viewpoint 13, and currently dead-ends into the side of single-story corrugated metal storage shed. The project would alter views from this location by creating a new, elongated view corridor to the southeast across the entire depth of the site. The Main Street roadway alignment would define future views from this point –buildings G, H, C, and D would all have a regulated setback. The new Main Street view corridor would provide views through the project site to the proposed Shoreline Park. Brooklyn Basin would not be visible due to the rise in elevation compared to the viewpoint elevation.

Figure IV.K-16 (Viewpoint 15, p. IV.K-33) illustrates a short-range view looking southeast. Existing views are of loading bays along the north/west elevation of the Ninth Avenue Terminal building. As depicted in the photograph, parked trailer trucks are visible set in front of the double-height shed. Under project conditions, this viewpoint would frame views across Brooklyn Basin, and portions of the bases of buildings C and D would be visible from this location. Similar to the effects described above from the Viewpoint 14, the removal of the Ninth Avenue Terminal building under project conditions would establish a new view across the site, providing an unobstructed long-range water view from across the site to Brooklyn Basin and beyond.

View Impacts of Increased Building Height Variant

As described in the Project Description (Chapter III), the project variant would increase maximum building heights (excluding the high rise towers[3]) on Parcels B, C, D, E, and H from a maximum 86 feet tall (as proposed by the project) to a maximum 120 feet tall. The effect of the increased height on these parcels would be visible most clearly from Viewpoint 1, Viewpoint 10, and Viewpoint 11.

Figure IV.K-17 (from Viewpoint 1, p. IV.K-36) illustrates a view of the site from the Alameda shoreline looking north. For the project variant, the simulation of this view shows that the project would alter long-range, panoramic views from this viewpoint, similar to the changes expected under the proposed project (**Figure IV.K-2**). The difference between the variant's effects on views from this viewpoint, compared to those of the project, relate to the amount of distant hillside that would be visible. With the variant, taller building heights on Parcels B, C, D, and E obstruct some views of the East Bay hills from Alameda. However, distant hillside/horizon views would continue to be available between the proposed towers on Parcels M and J, as well as between Parcel B and to the east of the proposed tower on Parcel A. This partial obstruction of the East Bay hills from this long-range vantage point would not substantially affect any scenic vista.

3 The Increased Building Height Variant would increase only the building podium heights by 34 feet (from 86 feet to 120 feet maximum). The maximum height of the overall structure (including the highrise towers) would remain 240 feet).

Figure IV.K-18 (from Viewpoint 10, p. IV.K-37) presents existing views looking southwest from the shoreline trail near the Homewood Suites, immediately east of the project site. For the project variant, the simulation of this view shows that the project would alter short- and mid-range views from this viewpoint, similar to the changes expected under the proposed project (Figure IV.K-11).

The tops of buildings on Parcels B, C, and D would extend above the roofline of the retained Terminal Bulkhead Building. Similar to the proposed project, the Terminal's demolition would not be visible from this viewpoint, nor would views of the Alameda shoreline be obscured. Additionally, buildings on Parcels B, C, and D would appear taller than proposed for the project, these buildings would almost completely block views of the proposed tower on Parcel J behind them. While the project variant's taller buildings on Parcels B, C, and D would create a stronger visual edge along Brooklyn Basin at the eastern edge of the project site, it would not substantially affect any scenic vista.

Figure IV.K-19 (from Viewpoint 11, p. IV.K-38) shows existing views from 16th Avenue, near the Executive Suites hotel, looking southwest. Compared to the visual impacts of the proposed project from this viewpoint (Viewpoint 11), variant buildings on Parcels C, D, and E would appear taller than those proposed by the project. However, similar to the project, the buildings along the project waterfront boundary would be set back from the shoreline, and would create a taller visual edge than the project would from this location. The project's proposed towers would continue to be visible on Parcels J, H, and A, set back from the waterfront. However, while the project variant's taller buildings on Parcels B, C, D, E (and H, though not visible from this viewpoint) would create a taller visual edge along Shoreline Park, this would not substantially affect any scenic vista.

Existing view from Alameda shoreline at Wind River office building looking north (VP1)

Visual simulation of project variant and approved development at Jack London Square

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-17
Simulation–
Increased Height Variant

Existing view from Shoreline trail near Homewood Suites looking west (VP10)

Visual simulation of project variant

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-18
Simulation–
Increased Height Variant

Existing view from Embarcadero near the Executive Inn looking southwest (VP11)

Visual simulation of project variant

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-19
Simulation–
Increased Height Variant

Conclusion of View and Scenic Vista Impacts

Construction of new project buildings would result in changes to short- and medium-range views from the public access areas along the Oakland shoreline, estuary waters, I-880, and the Embarcadero, and would change long-range views from the city of Alameda shoreline and inland Oakland areas.

Most of the project buildings would be approximately 65 to 86 feet in height (six to eight stories). The five proposed highrise towers would be as tall as 180 to 240 feet and would have smaller floor plates compared to their broader, six- to eight-story podium bases. The tall buildings avoid significantly obstructing views of the hills or the few existing immediate view corridors to the estuary from the Embarcadero (i.e., Lake Merritt Channel bridge, through Clinton Basin, and around 18th Avenue near Executive Inn). Partial existing long-range views of the East Bay hills (viewed from south of the project site) and of the estuary (viewed from northeast of the project site from San Antonio Park) would also remain after construction of the project. The project would establish a new skyline that would be slightly lower than the natural horizon line established by the East Bay hills in the distance (viewed from the Alameda shoreline), and would thereby preserve most views of the hills from long-range viewpoints. The new skyline would be in line with the downtown Oakland skyline and future Jack London Square development skyline, as viewed from the Alameda shoreline (**Figure IV.K-2** and **Figure IV.K-17**). The project would thus extend the existing city skyline, as well as the future skyline that will emerge with approved development at Jack London Square.

At locations along the freeway and nearby arterial streets, the project would create a backdrop of taller new buildings closer into the observer's field of vision. The project could obstruct some views of the estuary and the distant San Francisco skyline**,** although very few substantial views of these attributes exist across the project site due to existing development and differences in elevation between the estuary and public viewpoints. Existing views of open spaces and the water's edge from locations close to or within the project site (i.e., Estuary Park, east shore of Lake Merritt Channel, Clinton Basin) would be preserved. In addition to substantial public improvements proposed by the project, new, sizeable public parks would "enhance opportunities for visual access to the waterfront and its activities," as called for by Oakland General Plan Land Use and Transportation Element (LUTE) Policy W3.4, by establishing new public viewing locations offering long-range views of Oakland's downtown skyline and the city of Alameda shoreline.

Based on the above evaluation of the project's impact on existing views and scenic vistas from public vantage points, the project would alter views of and across the site from nearby locations, but these changes would not be substantial or adverse. Therefore, the project's effect on scenic vistas would less than significant.

Mitigation: None Required.

Light and Glare Impacts

Impact K.3: The project would increase the amount of light and glare emitted from the project site but would not result in substantial adverse effects to day or nighttime views. (Less than Significant)

The project would result in substantially more development than the existing, relatively smaller-scale warehouse and commercial buildings in the area. As discussed in the Setting section above, existing sources of light are typical of urban commercial and industrial uses, with isolated high-wattage security lighting being the most intense sources of light and glare. The increased amount of occupied building area and building mass would result in more light and glare sources, particularly during nighttime hours. The amount of light and glare from the project would be comparable to light and glare from other urban development in the area would not substantially increase overall ambient light levels. The light and glare produced from the project would be comparable to light and glare levels from The Portobello and The Landing residential developments, residential mixed-use projects in adjacent areas such as the Waterfront Warehouse District, and the Jack London District. Lighting associated with new open spaces and recreational uses would be comparable to lighting provided in nearby public parks.

Existing work-live uses in the Fifth Avenue Point outparcel would front 5th Avenue and would be located close to new buildings on Parcel K, and to a lesser extent, Parcel L. Landscaping and the orientation of exterior building lighting and street lighting would minimize the potential for any substantial adverse effects on these adjacent uses due to increased light or glare. The project site adjoins local roadways and a major elevated freeway where street lighting and through-traffic create sources of glare at night.

The project would not include any large, surface parking areas, nor would its residential, commercial, or recreational areas necessitate extensive outdoor lighting for operational or security purposes that would create substantially increased and adverse light or glare. The project would likely include some fixed, indirect exterior lighting, particularly at building entrance points, along public streets and walkways, and in open space areas, to promote resident, visitor, and driver safety. The project's overall lighting system would generally be designed with downward-pointing lights, side shields, and visors. Occasional up-lighting may be used to highlight selected landscaping or building features, but would be limited to acceptable lighting levels consistent with the City's Outdoor Lighting Standards (City of Oakland, 2002) and the Port of Oakland's Dark Skies Program (Port of Oakland, 2003). Also, City would ultimately review project lighting and the reflective properties of building materials as part of the Final Design Review required for the project. The light and glare from new buildings is not expected to exceed that of the existing high-watt security lighting currently used by businesses and warehouses on the project site and adjacent to 5th Avenue, in particular.

Since the project would consist of development and lighting treatments typical of residential mixed-use buildings and open spaces in the general area, and would be consistent with City standards for outdoor lighting, it would not result in new sources of substantial adverse light or glare impacts.

Mitigation: None Required.

Shadow Impacts

Criteria Overview

This subsection describes the project's shadow effects compared to the shadow-related criteria prescribed by CEQA and the City of Oakland's significance criteria (listed on pages IV.K-6). The discussion addresses all shading that would result from the project and specifically highlights elements identified in the significance criteria (solar collectors, public open space, and historic resources). In relation to these criteria, it should be noted that no solar collectors or solar heat collectors are known to exist on adjacent parcels that might be affected by project shadows. Additionally, Estuary Park is the only existing public open space near the project site. The existing Ninth Avenue Terminal, which would be largely demolished as part of the project and the retained Bulkhead Building are the only historic resources on or near the project site.

The discussion also addresses areas that are potentially sensitive to shading effects but that are not identified in significance criteria under CEQA. These areas consist of the existing Fifth Avenue Point outparcel buildings that contain work-live uses; the wetlands restoration area at the mouth of Clinton Basin; proposed new open spaces (Shoreline Park, Gateway Park, South Park, and Channel Park); and existing waterways (Oakland Estuary and Lake Merritt Channel). Shadow effects on the biological resources of the wetlands restoration area are also addressed in EIR Section IV.I, Biological Resources.

Representative and Worst-Case Shadows

The project's shadow effects were analyzed for representative times of day (9:00 AM, 12:00 PM [noon], and 3:00 PM) during the four seasons of the year:

- June on the summer solstice, when the sun is at its highest and shadows are at their shortest;
- March at the spring equinox, when shadows are midway through a period of shortening;
- September at the fall equinox, when shadows are midway through a period of lengthening; and
- December on the winter solstice, when the sun is at its lowest and shadows are at their longest.

Shadows on any other day of the year would be within the range of shadows presented during the seasons and times of day described above. **Figures IV.K-20** through **IV.K-33** provide an overview of the shading patterns associated with the entire project for the aforementioned times of day and seasons. These pattern diagrams are generalized, though accurate, and convey the relative shadow effects overall. The analysis discussion is organized by season, with the applicable shadow diagrams for the three times of day immediately following the discussion of each season.

As with the previous assessment of views and scenic vistas, a maximum height and massing scenario for the project (86 foot maximum on most parcels and towers at a maximum 240 feet on Parcels A, H, J, K, and M) is used to consider worst-case shadow impacts. However, the project that is ultimately constructed would not likely be built to these maximum heights.

The maximum worst-case shadow effects that could occur from locating the residential towers anywhere within the designated residential "Tower Zones" are depicted. Because the detailed designs of individual buildings are not finalized,[4] the exact tower locations within Parcels A, H, J, K, and M (the parcels on which towers are proposed have not yet been determined. Therefore, a "Tower Zone Shadow" outlines the maximum extent of any shadow that could be cast from a particular tower that could be located anywhere within its identified parcel. No tower shadow would be as large as the area depicted by the tower zone shadow.

Project Shadow Impacts

Impact K.4: The project would create additional shadow on adjacent areas west and north of the project site, however, the project would not cast shadow on historic resources (retained Ninth Avenue Terminal Bulkhead Building), would not introduce landscaping conflicting with the California Public Resource Code; would not cast shadow on buildings using passive solar heat, solar collectors for hot water heating, or photovoltaic solar collectors; and would not cast shadow that impairs the use of any public or quasi-public park, lawn, garden, or open space. (Less than Significant)

Spring

As illustrated in **Figure IV.K-20** (p. IV.K-44), in spring during the morning hours (around 9:00 AM), substantial project shadow would fall to the west of project buildings. The wetlands restoration area would be in shadow until mid-morning, and would be in full sun by late morning (see **Figure IV.K-21**, discussed below). Additionally, as discussed in Impact I.6 (see Section IV.I, Biological Resources), morning shading of terrestrial and aquatic environments (e.g., vegetation and wetlands) in the project area would not result in a measurable effect. This conclusion is based on the San Clements study (San Clements, 2003) of shade effects on vegetation, finding that measurable effects would only be likely to occur immediately adjacent to shade sources (i.e., buildings, bridges) during midday hours (noon) because that is where and when the shadow lasts the longest (as well as autumn). As shown in **Figure IV.K-21**, the wetland restoration area would not be shaded at noon during spring when shadows are longest and would be outside the area of measurable impact.

Buildings in the easternmost portion of the project site would shade most of the internal streets and walkways. The project building on Parcel N would cast some shadow on the Portobello residential complex to its east. Project shadows from Parcel H and the tower on Parcel G would shade much of the proposed Gateway Park near the project's Embarcadero entrance, and shadow from proposed towers on Parcels H and J would extend across much of Clinton Basin. Shadow

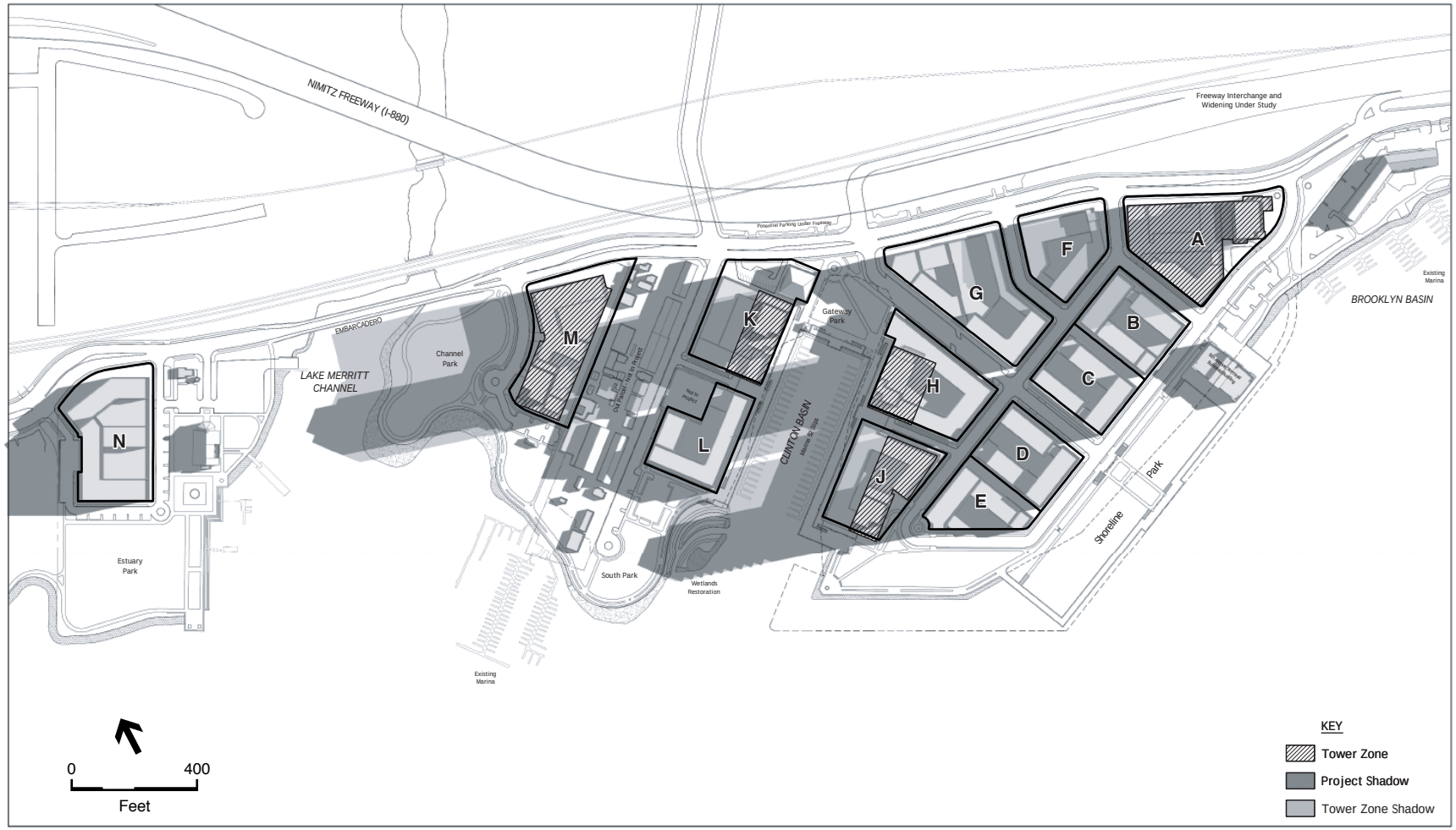
[4] Final project building designs will be considered during the City's Final Design Review process (see Section IV.A, Land Use, Plans, and Policies) and may also be influenced by this environmental review.

from the proposed tower on Parcel K would span the northern portion of the Fifth Avenue Point outparcel, however, this area would be in full sun by mid- to late morning (see **Figure IV.K-21**, discussed below). The Parcel M building would cast shadow over pathways along the southern portion of the proposed Channel Park, as well as a small portion of Lake Merritt Channel.

During springtime morning hours, the renovated Ninth Avenue Terminal Bulkhead Building would cast minimal shadow on the northern portion of the proposed Shoreline Park. The project would not shade the existing Estuary Park or its shoreline..

Figure IV.K-21 (p. IV.K-45) shows that at midday in spring (around 12:00 PM), project shadows would be relatively short and would fall to the north. Project buildings would cast minimal shadow on the Embarcadero and Clinton Basin, and half of the proposed Gateway Park and most of proposed Channel Park would be in sunlight. The proposed project would not cast shadow on the existing Estuary Park or its shoreline during spring midday hours.

Figure IV.K-22 (p. IV.K-46 shows that during the afternoon hours (around 3:00 PM), project shadows would lengthen and fall to the northeast on the Embarcadero and the project's internal streets and walkways. Project shadow would not affect the Fifth Avenue Point outparcel, Clinton Basin, the wetlands restoration area, the Fifth Avenue Point outparcel buildings, or any parks or shoreline during spring afternoon hours.

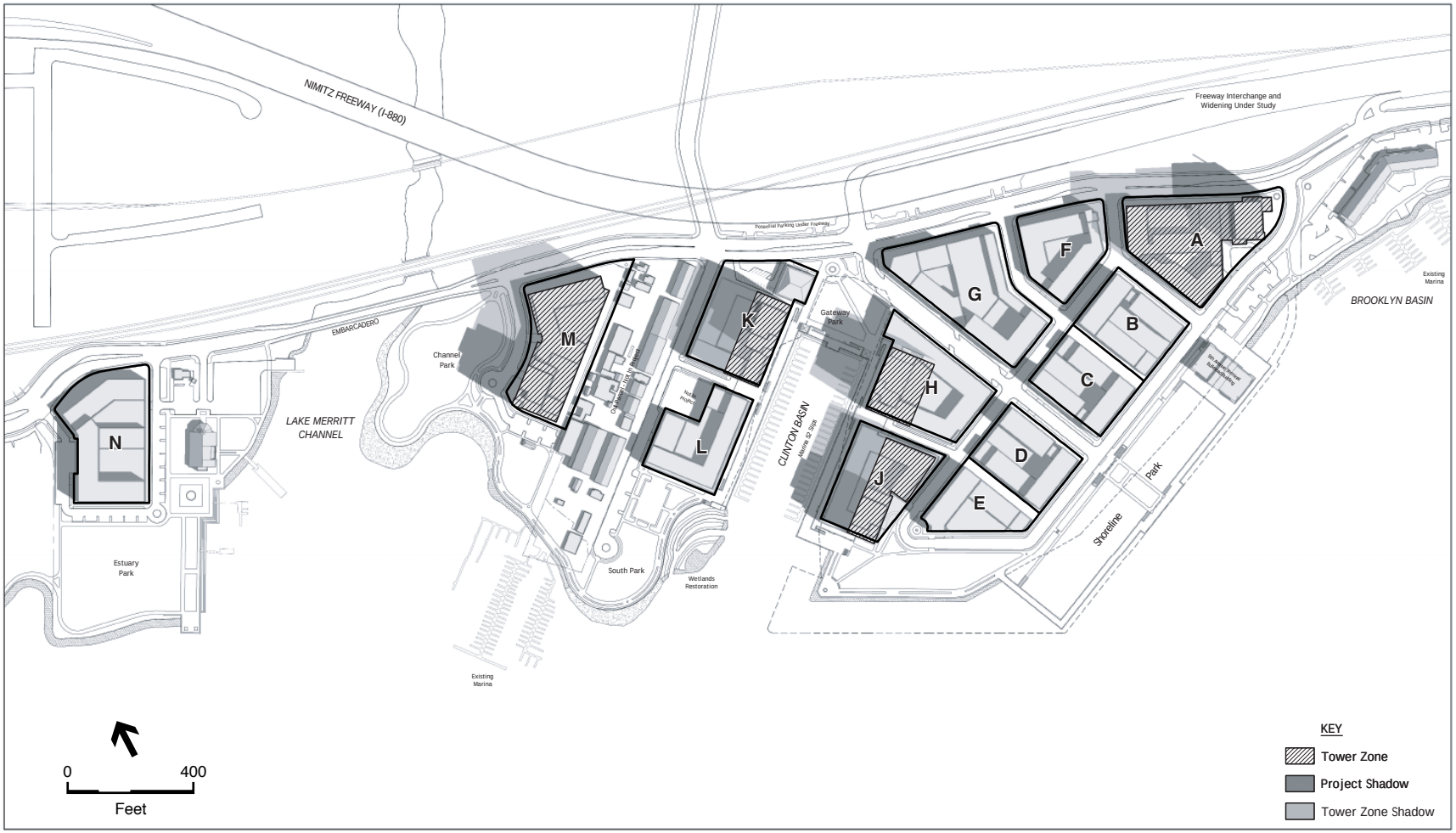


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-20

March Shadow Patterns: 9 am

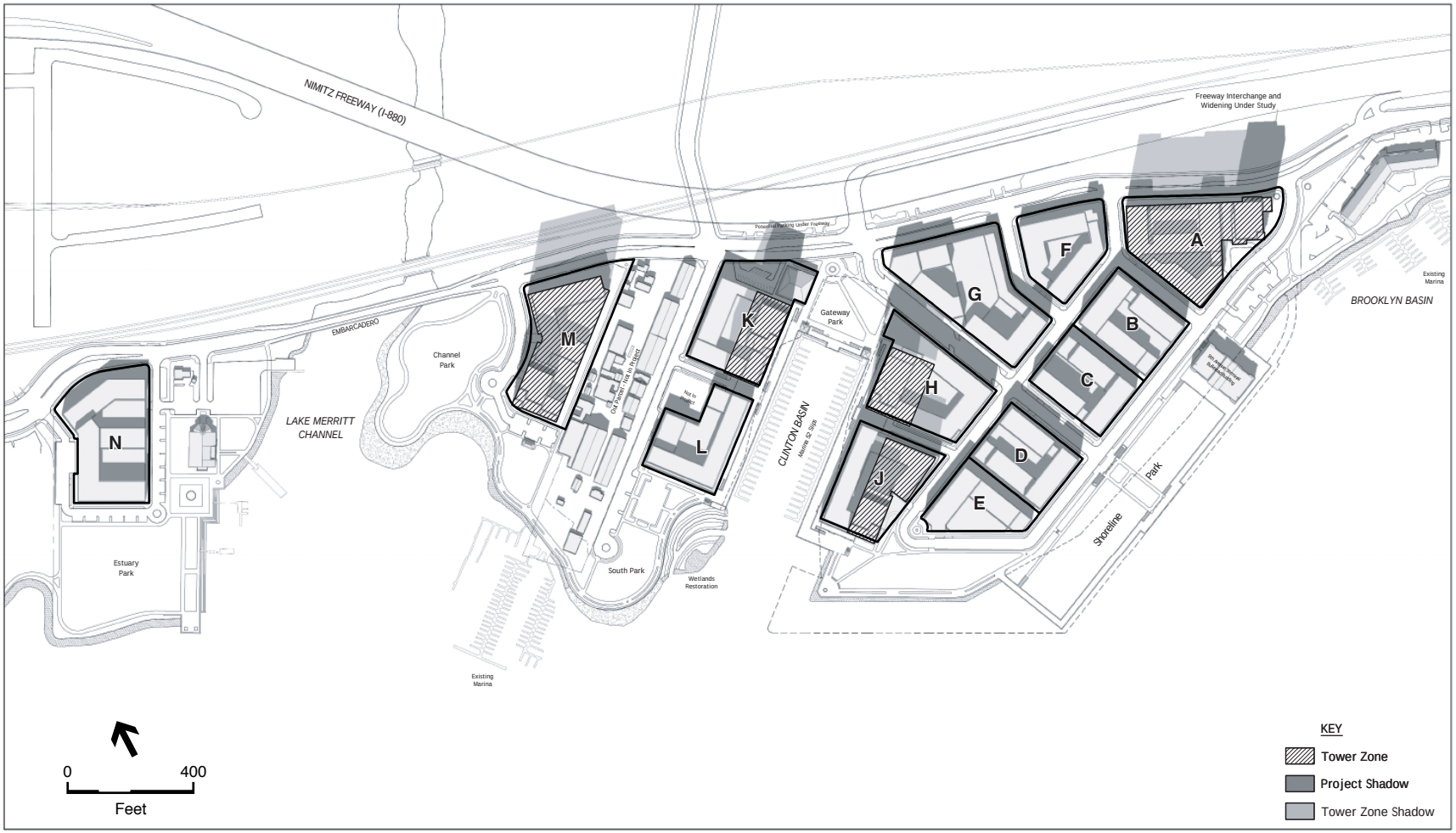


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-21

March Shadow Patterns: 12 noon



SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-22

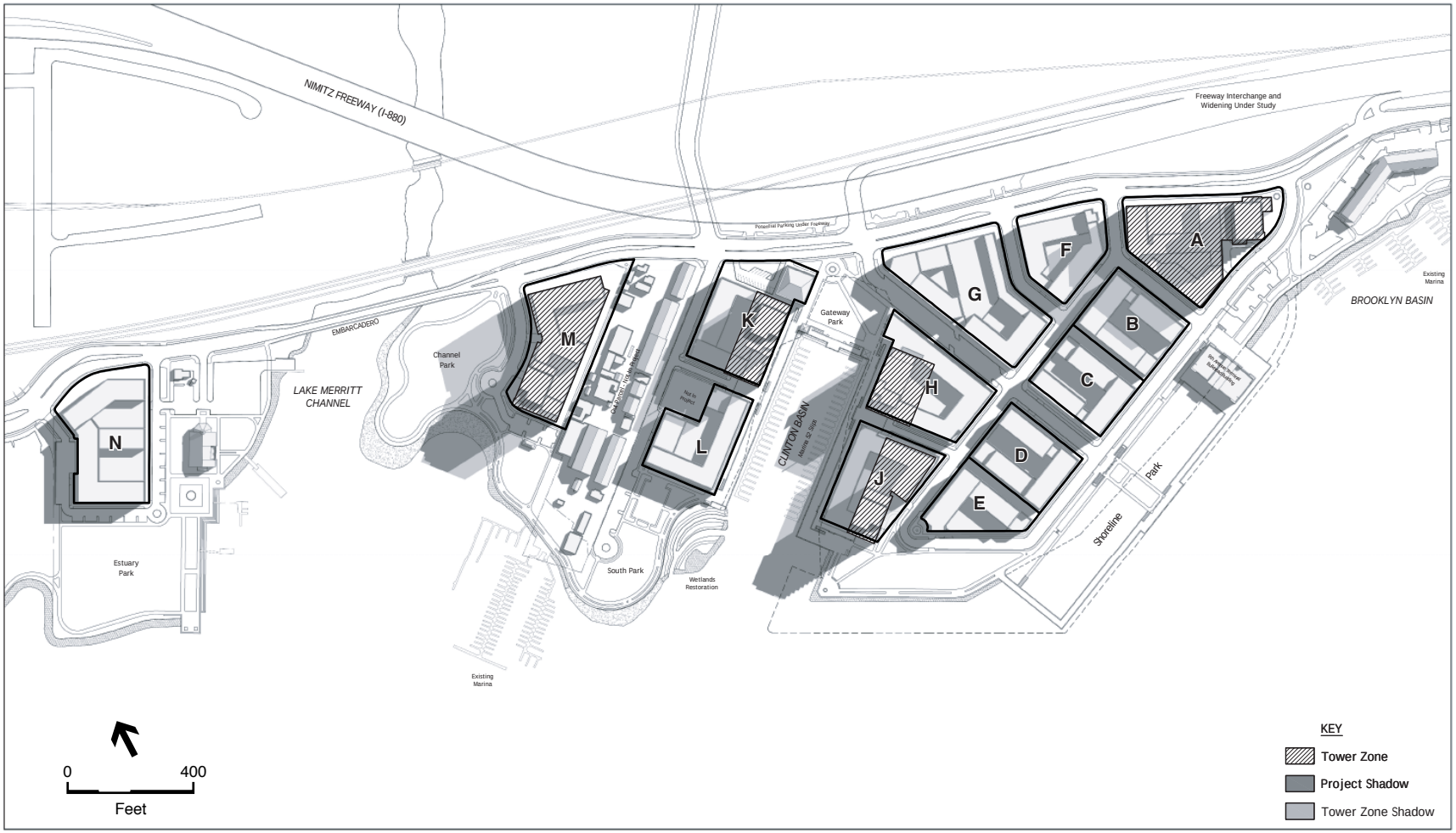
March Shadow Patterns: 3 pm

Summer

As shown in **Figure IV.K-23** (p. IV.K-48), during the summer solstice, project shadows are at their shortest, and morning shadows fall to the east in the morning hours. Shadow from the project would fall mainly on the project's internal streets and walkways. The proposed towers on Parcels H and J east of Clinton Basin would shade some portions of Clinton Basin Marina. A small portion of the proposed Gateway Park would be shaded, as would parts of the paths along the waterfront of the proposed Channel Park. Shadows from the proposed tower on Parcel K and the mid-rise building on Parcel L would fall on some of the Fifth Avenue Point outparcel buildings, but much of this area experiences existing shadow during this time of day in summer; shadow on these buildings would subside by mid-morning. The project would not cast shadow on the existing Estuary Park or its shoreline, or on the wetlands restoration area during morning hours in the summer.

Figure IV.K-24 (p. IV.K-49) shows that during midday in summer, relatively little shading would occur within the project area because the sun's position would be high overhead. Short shadows would fall to the north and would mainly shade pedestrian walkways adjacent to project buildings. Most project streets would remain in sunshine throughout the afternoon, and the project would shade a small portion of Clinton Basin in the summer midday hours. The project would not cast shadow on the existing Estuary Park or its shoreline during midday in the summer. Project buildings would not shade the Fifth Avenue Point outparcel buildings, nor would shade occur on the wetlands restoration area or other proposed open spaces.

Figure IV.K-25 (p. IV.K-50) shows that during the late afternoon in summer, shadows would fall to the northeast and would be relatively short. Most project shading would occur on internal sidewalks. The project would not shade the Fifth Avenue Point outparcel buildings, nor would it shade any existing or proposed open spaces in the summer afternoon hours.

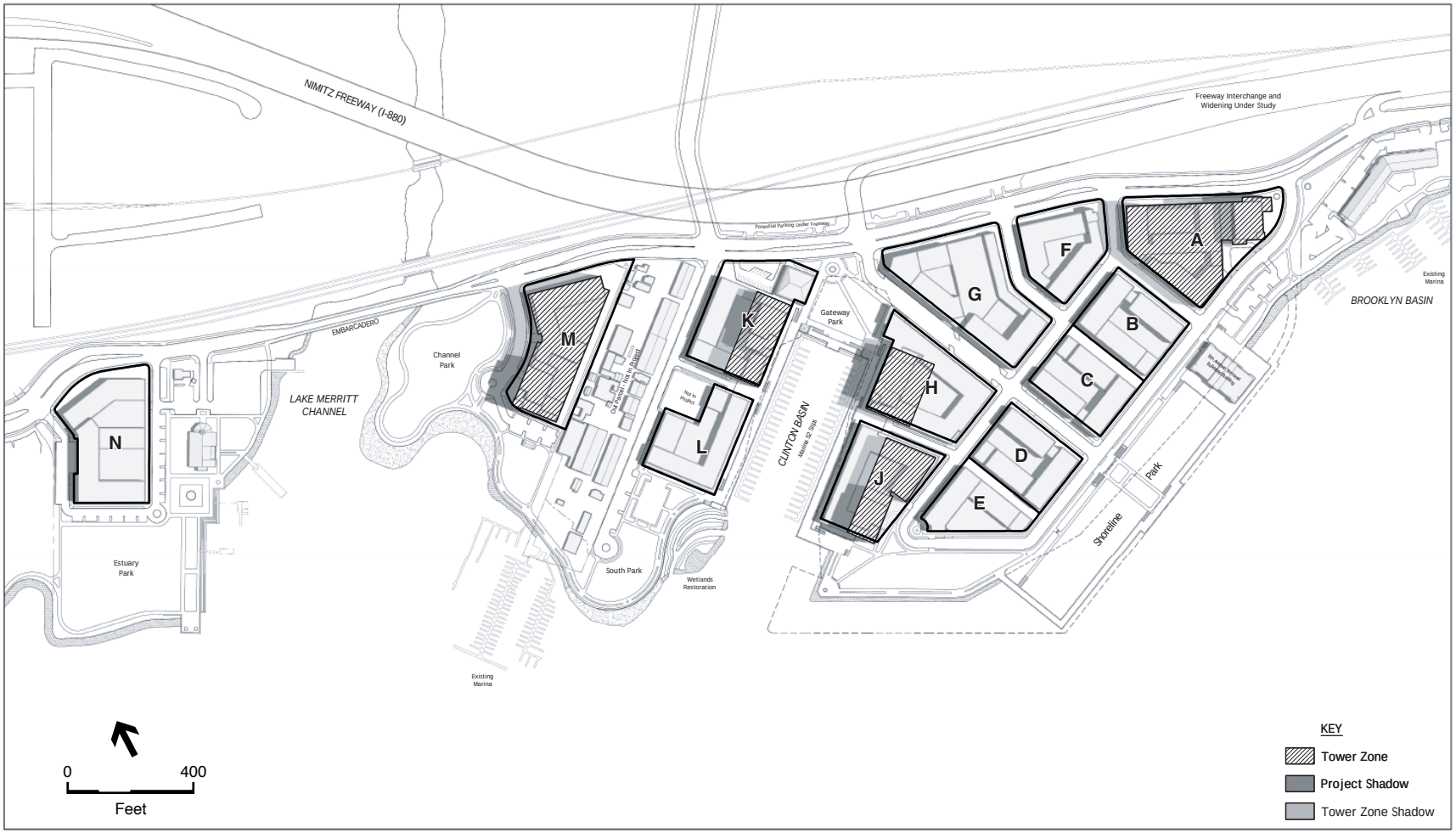


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-23

June Shadow Patterns: 9 am

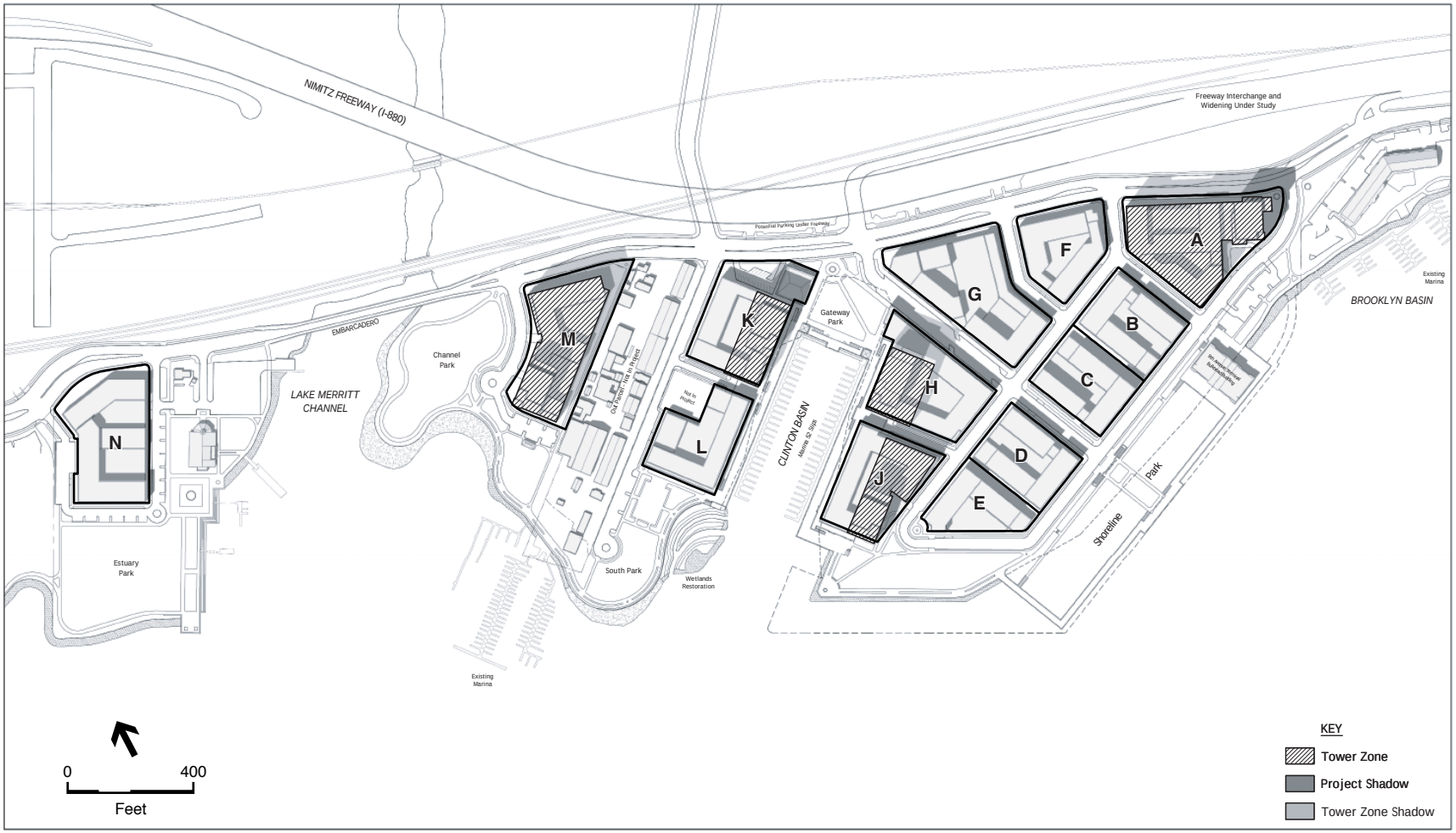


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-24

June Shadow Patterns: 12 noon



SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-25

June Shadow Patterns: 3 pm

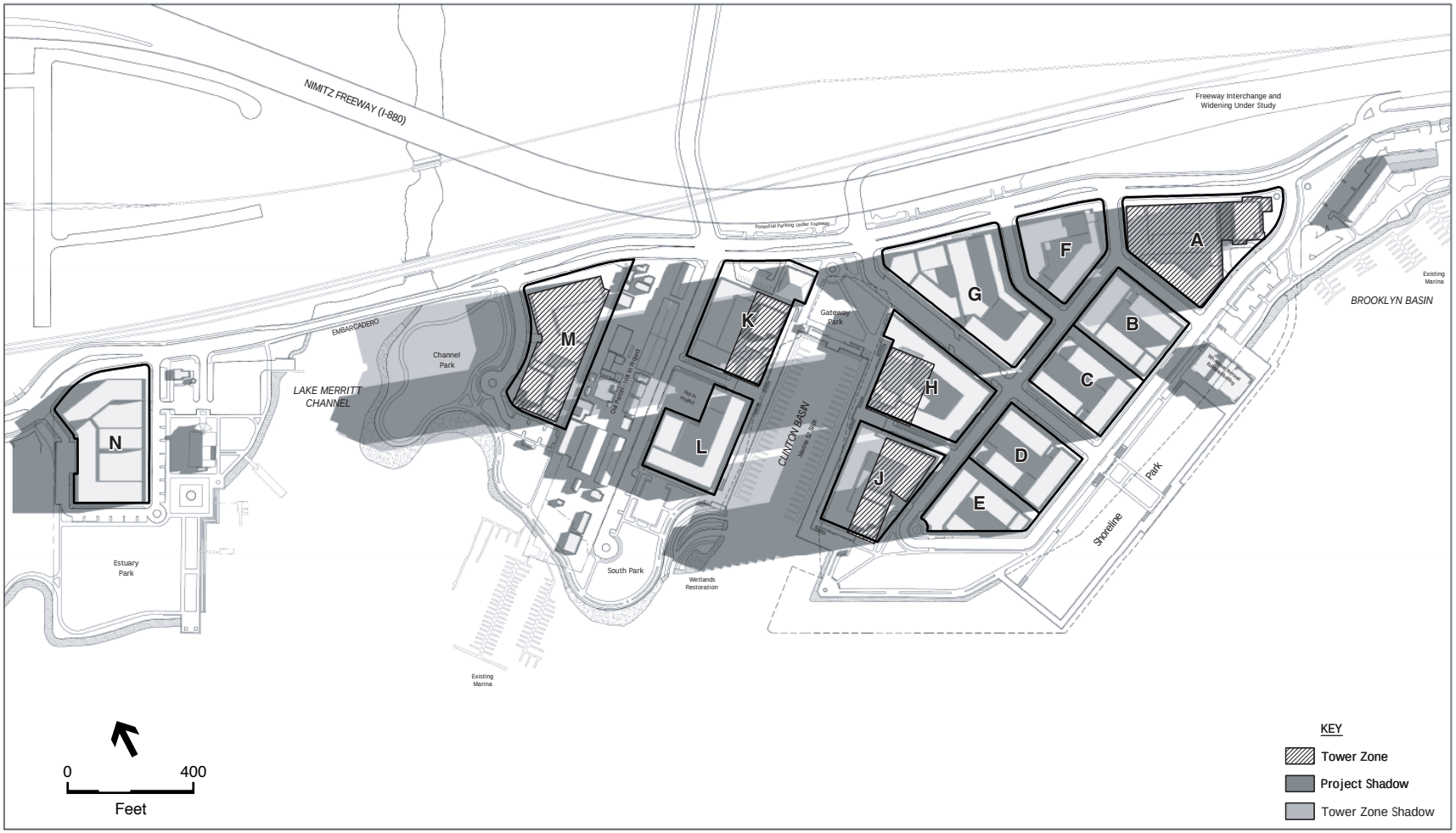
Autumn

Figures IV.K-26 through **IV.K-28** (pp. IV.K-52 to 54) show that by the fall equinox, shadows are longer. New autumn shadow caused by the project would extend generally to the west during the mid-morning, and to the northeast through mid-afternoon. The autumn morning shadow pattern is very similar to that of spring mornings (**Figures IV.K-20** through **IV.K-22**), allowing sensitive uses to be in full sun by mid-morning (see **Figure IV.K-27**, discussed below). As in spring mornings, the wetlands restoration area would be in shadow until mid-morning, and would be in full sun by late morning. As previously discussed under spring morning patterns, the morning shading of this area would not be considered a measurable affect (see Section IV.I, Biological Resources) based on the finding of the San Clements study (San Clements, 2003) that measurable effects would only be likely to occur immediately adjacent to shade sources (i.e., buildings, bridges) during midday hours (noon) because that is where and when the shadow lasts the longest. As shown in **Figure IV.K-27**, the wetland restoration area would not be shaded at noon during autumn when shadows are longest (as well as spring) and would be outside the area of measurable impact.

The project building on Parcel N would cast some shadow on The Portobello residential complex to its east. Morning shadows would also affect a portion of the southern edge of Lake Merritt Channel and would subside by mid-morning. Project shadow in the morning hours would fall on project streets and the northern portion of the Fifth Avenue Point outparcel, and would extend over most of Clinton Basin and portions of the proposed South Park, and these shadows would subside by mid-morning. The project would not cast shadow on the existing Estuary Park or its shoreline during the morning in autumn.

As shown in **Figure IV.K-27** (p. IV.K-53), midday autumn shadows would cover portions of some internal project streets and walkways and the Embarcadero. Project towers would shade a southeast portion of the proposed Gateway Park and Channel Park, and minimal shadow would fall on the north and east sides of Clinton Basin. The project would not shade the wetlands restoration area or the proposed South Park during autumn midday hours. The project would not shade the proposed Shoreline Park or the existing Estuary Park or its shoreline during these hours.

Figure IV.K-28 (p. IV.K-54) shows that during the late afternoon hours in autumn, shadow would affect sidewalks and streets, including the Embarcadero. The project would not cast shadow on Fifth Avenue Point outparcel buildings during this time, nor would it shade existing Estuary Park or its shoreline or other proposed open spaces.

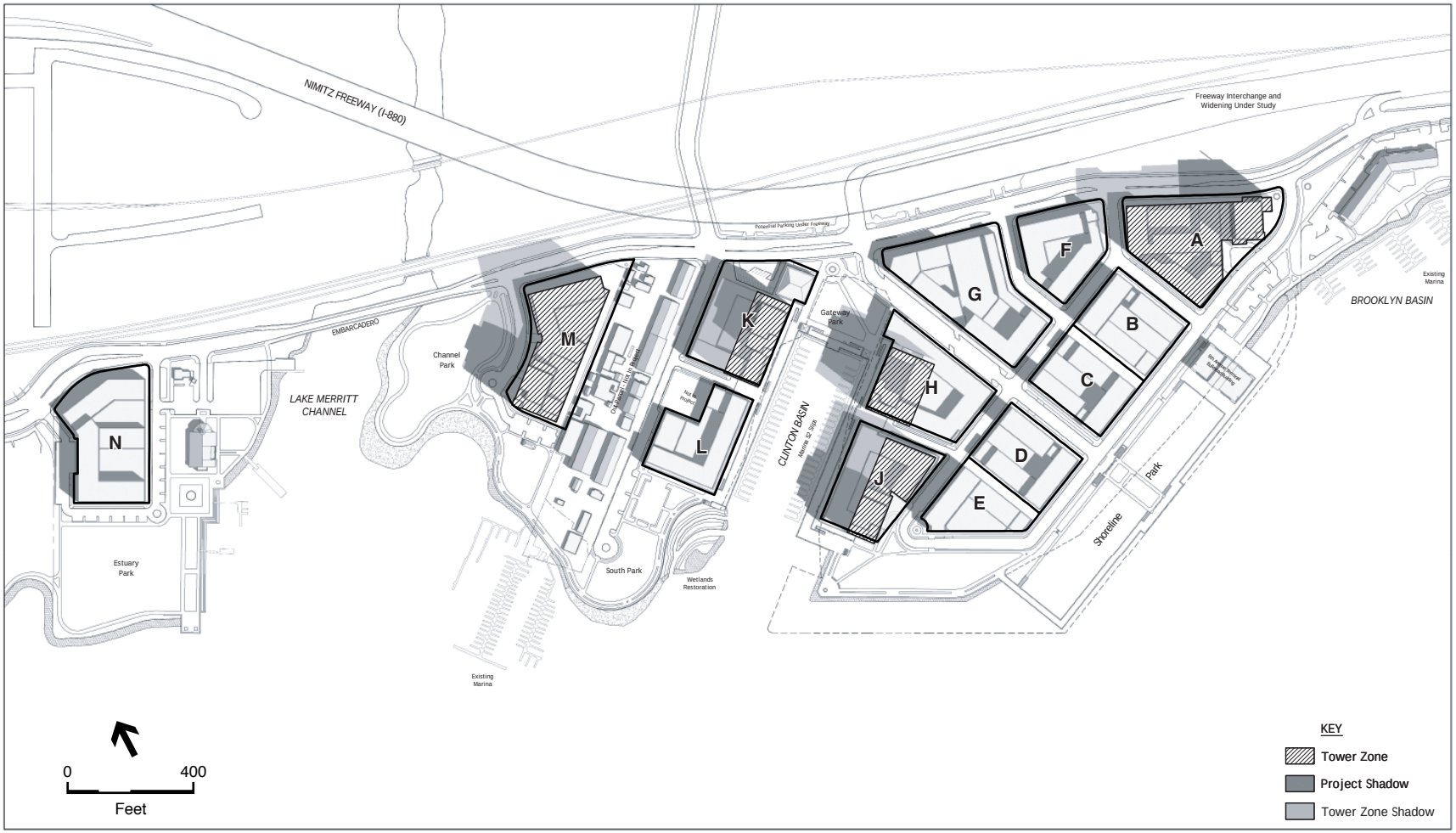


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-26

September Shadow Patterns: 9 am

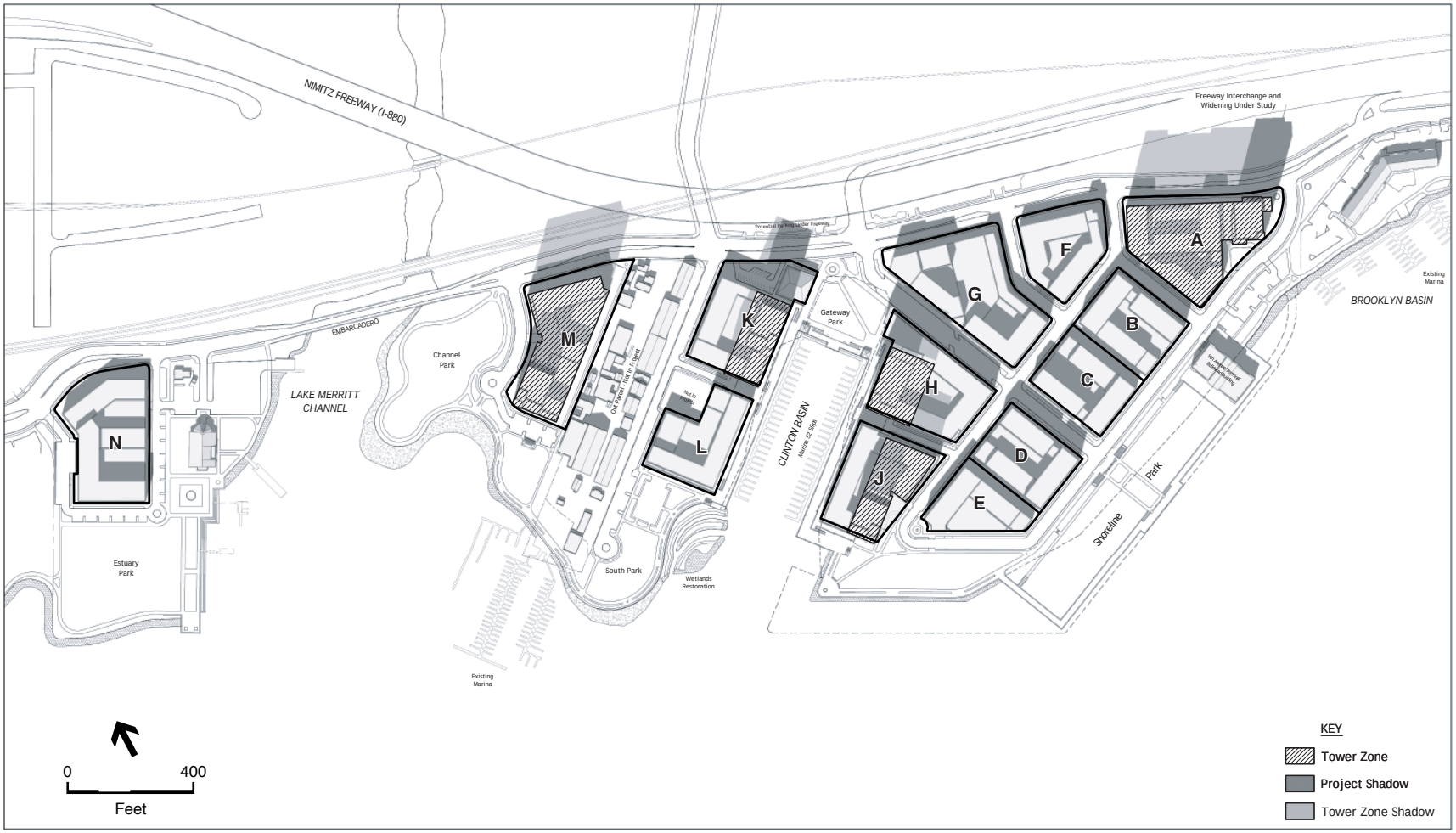


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-27

September Shadow Patterns: 12 noon



SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-28

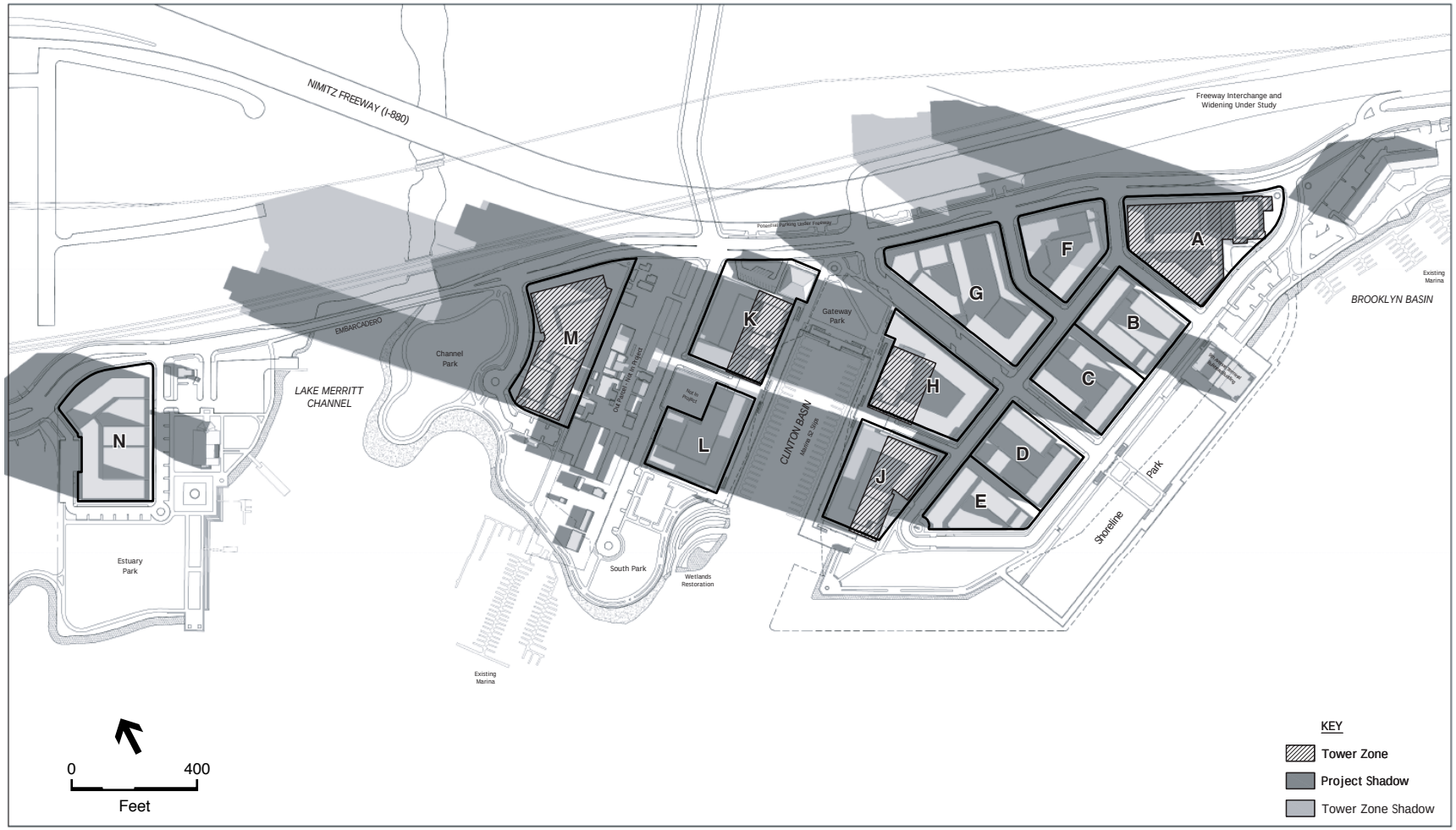
September Shadow Patterns: 3 pm

Winter

As shown on **Figure IV.K-29** (p. IV.K-56), shadows are at their longest during the winter solstice, and shadow cast by the project would reach its furthest extent to the north during winter mornings. Considerable shadowing would extend across the Embarcadero and would shade portions of I-880. Most of the internal project streets and walkways would be shaded throughout winter mornings. Additionally, the proposed project building on Parcel N would cast shadow on The Portobello residential complex to its east. The proposed towers on Parcels H and J would shade most of Clinton Basin. Project shadow would also extend into the Fifth Avenue Point outparcel, although substantial existing shadow currently occurs in this area during winter mornings). The project would shade most of the proposed Channel Park and Gateway Park in the morning since they are located immediately west of project buildings. The existing Estuary Park and wetlands restoration area and the proposed Shoreline Park and South Park, all located south or east of the project buildings, would not be shaded in the winter morning hours.

Figure IV.K-30 (p. IV.K-57) shows that at midday during winter, project shadows would become shorter and fall to the north on the internal streets and walkways. The project's towers would also shade the proposed Gateway Park and much of Clinton Basin, though project shadow would not extend to the Fifth Avenue Point outparcel buildings. Project shading would extend across about half of the proposed Channel Park, but no shading would occur on the other open spaces, including existing Estuary Park or its shoreline, the proposed Shoreline Park, South Park, or the wetlands restoration area.

Figure IV.K-31 (p. IV.K-58) shows that late afternoon in winter, shadows would lengthen and reach their northeastern-most extent. Much of the new shadow cast by project buildings would fall on the Embarcadero and beyond to industrial and rail uses that are not sensitive to shade. The proposed project would not shade any of the existing or proposed open spaces or the Fifth Avenue Point outparcel buildings during the late afternoon hours in winter.

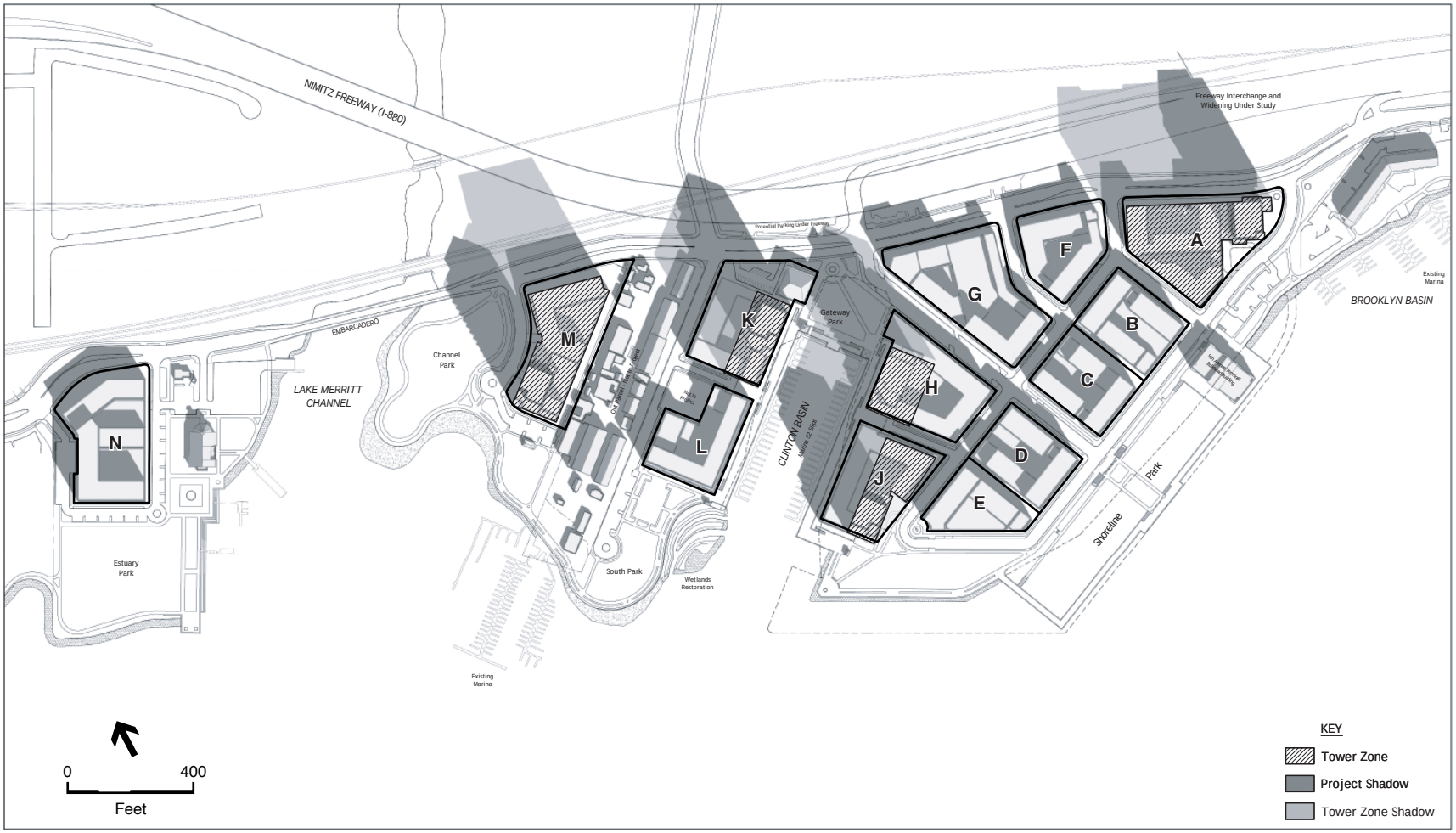


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-29

December Shadow Patterns: 9 am

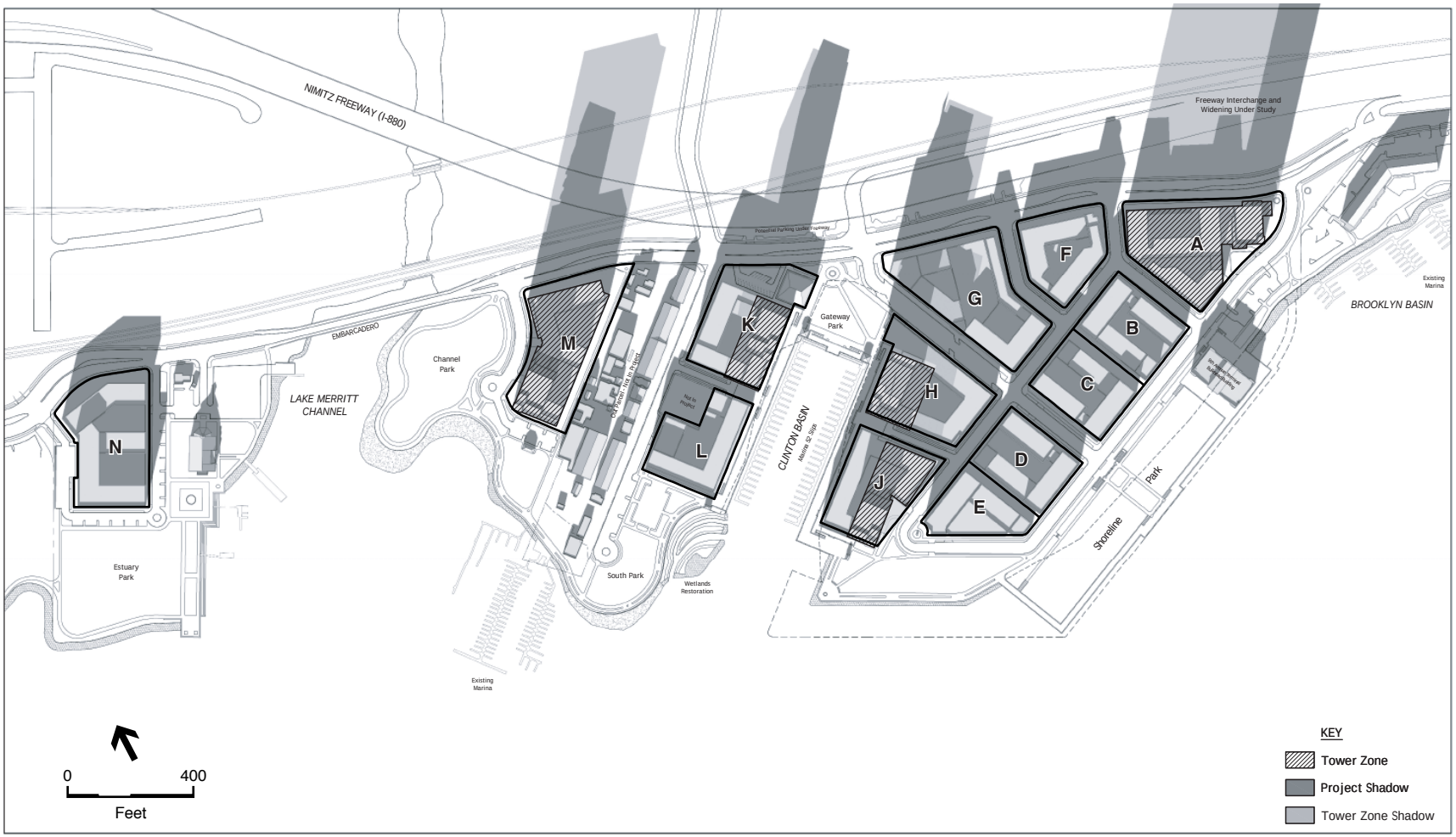


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-30

December Shadow Patterns: 12 noon



SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

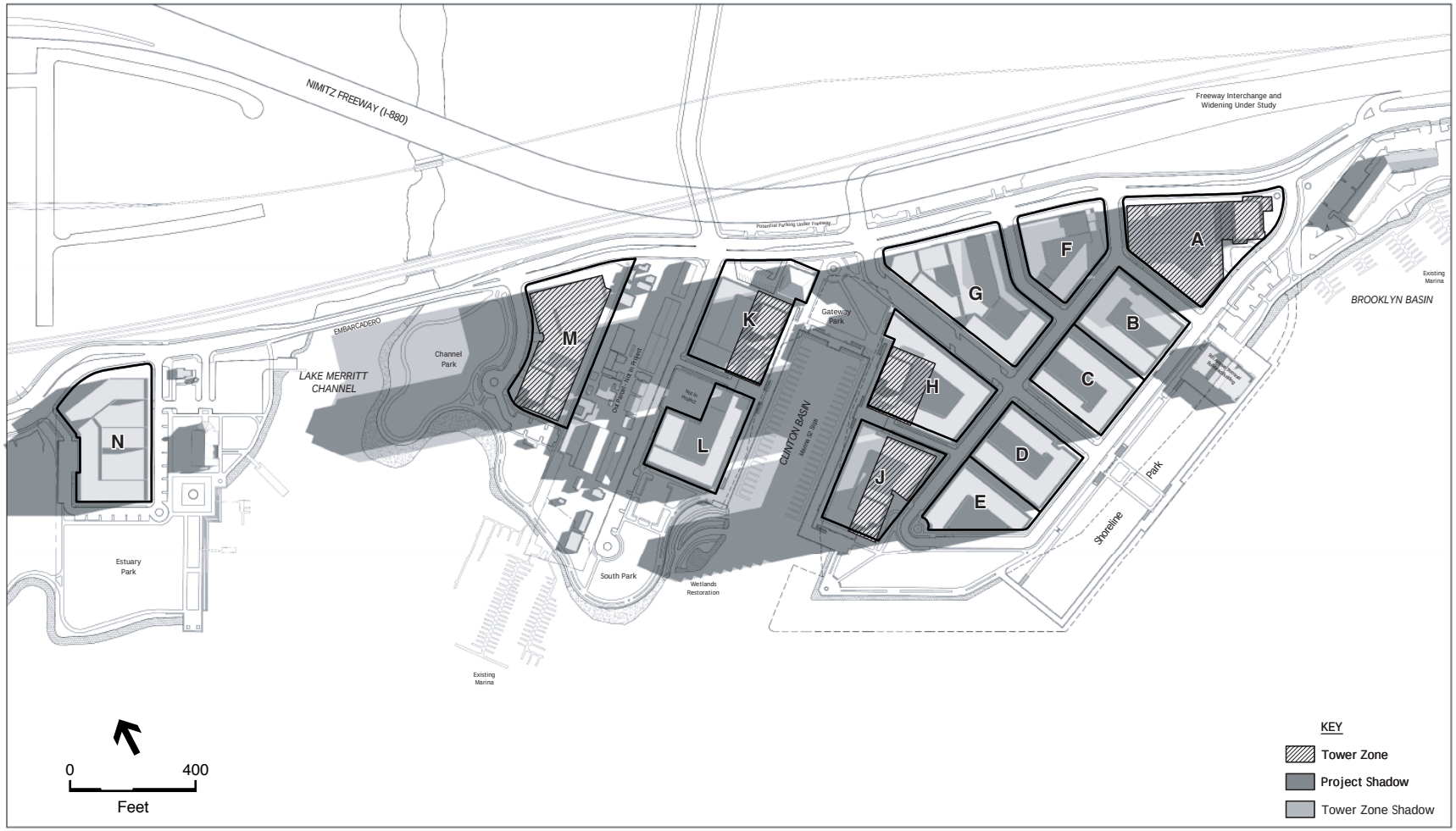
Figure IV.K-31

December Shadow Patterns: 3 pm

Shadow Impacts of the Increased Building Height Variant

The Increased Building Height variant of the project would increase maximum building heights (excluding the highrise towers) on Parcels B, C, D, E, and H from a maximum 86 feet tall (as proposed by the project) to a maximum 120 feet tall. Project buildings on these parcels are located along the eastern portion of the site would cast shadows east and northward around Clinton Basin, including around the wetland restoration area, as would the project. The above assessment of project shadow impacts indicates that the worst-case shading of shadow-sensitive areas would occur during morning hours (around 9:00 AM) in March and September (**Figure IV.K-20** and **Figure IV.K-26**, respectively), and that at midday (around noon), these sensitive areas are within or close to full sun under project conditions (**Figure IV.K-21** and **Figure IV.K-27**).

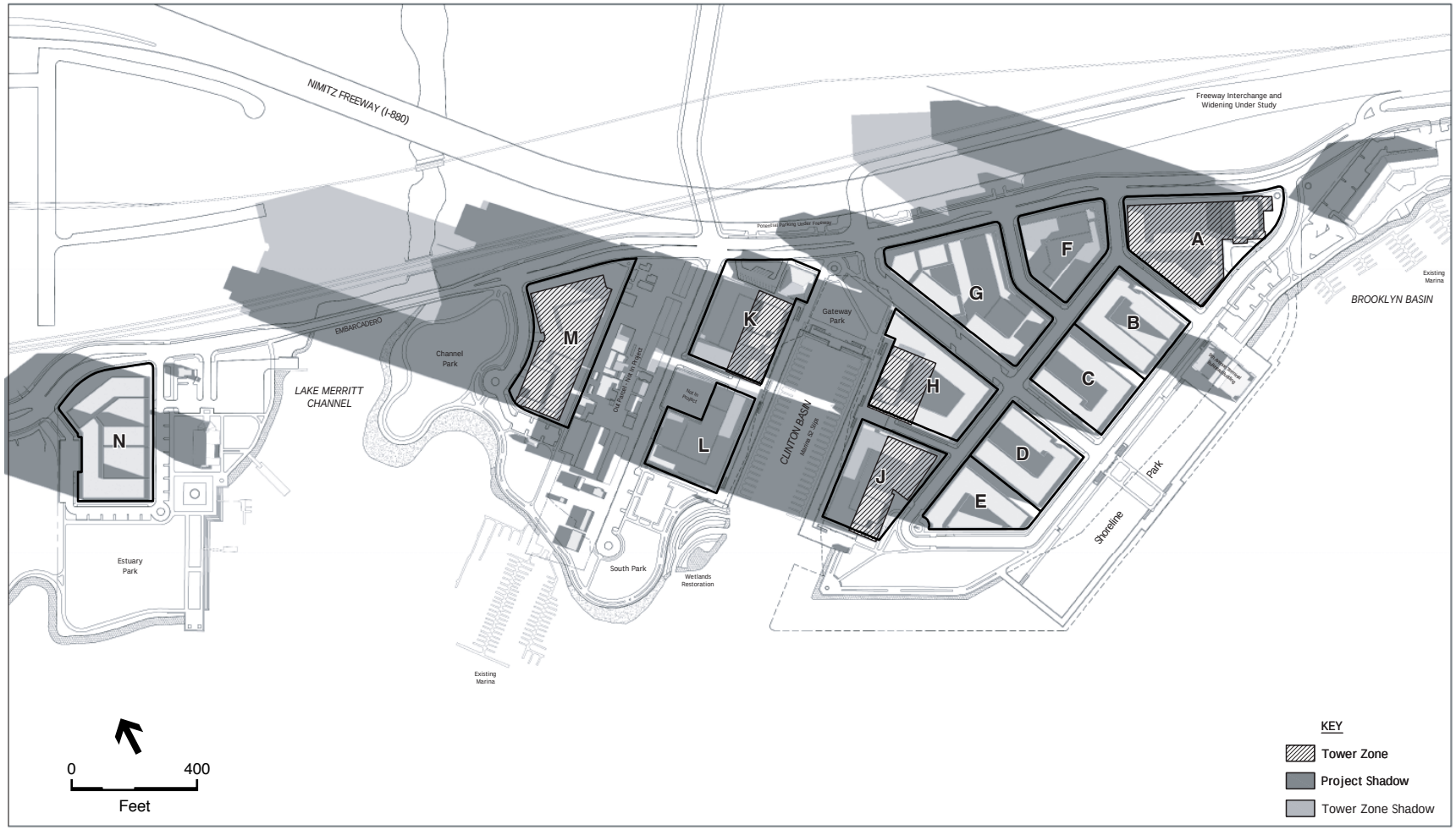
Figure IV.K-31 and **Figure IV.K-32** (pp. IV.K-60 and 61) illustrate the shadow cast by the Increased Building Height variant during these worst-case conditions (morning hours in March and September) in order to assess the worst possible variant shadow impacts. Overall, no noticeable change or increase in shadow is evident under the variant conditions because variant shadow (as a result of the additional 34 feet in height on building podiums on Parcels B, C, D, E, and H) falls on areas that would be already shaded by the project during morning hours in March and September: Clinton Basin Marina would continue to experience significant shade during these times (due to Parcel H podium and tower), and internal streets east of Clinton Basin would be in full shade (due to buildings on all parcels in this area) during these time. Under both the variant and the project, Clinton Basin Marina and internal streets would be in or close to full sun by late morning to noon. No change would occur to shadow cast on the wetland restoration area (due to Parcel J building) compared to the project shadow since the variant would not change the height of Parcel J. As with the project, the wetlands restoration area would be in full sun by mid-morning under the variant, and the affect of morning shading on this area would be considered a less than significant impact (see Section IV.I, Biological Resources, Impact I.6).



SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-32
Increased Height Variant–
March Shadow Patterns: 9 am



SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-33
Increased Height Variant–
December Shadow Patterns: 9 am

Conclusion of Shadow Impacts

The project would not result in significant shadow impacts as a result of new construction.

Regarding existing work-live and residential uses, the project would cast shadow on some of the easternmost buildings in the Fifth Avenue Point outparcel and The Portobello residential complex (immediately west of the project site) during the morning hours (9:00 AM) during most of the year. In all cases, however, shading would subside by mid-morning to noon. Project shadows therefore would not result in an unreasonable blockage of light to these buildings.

Some of the future parks that would be developed as part of the project would be shaded at various times of the day. In general, the greatest amount of project shadow would occur on the proposed 3.1-acre Gateway Park at the main entry to the project site during the mornings in spring, fall, and winter. Gateway Park would, however, be in mostly sun by late morning and noon, except in winter, when it would remain mostly shaded until early afternoon.

Under project and variant conditions, no shading would occur on the existing Estuary Park, the west shore of Lake Merritt Channel, the retained Ninth Avenue Terminal Bulkhead Building (an historic resource), or on the proposed South Park and Shoreline Park during any times of year. In each of these cases, these areas would experience no or minimal shading because they are located south of the new project buildings or west of the Lake Merritt Channel and therefore would avoid shading even when shadows are oriented southward to the fullest extent (in summer mornings). Shading would occur, however, on the wetland restoration area in the morning hours (around 9:00 AM) in spring and autumn, but would be in full sun by mid-morning and the remainder of the day throughout the year, would not have an adverse impact on biological resources (as discussed in Section IV.I, Biological Resources).

In conclusion, based on the above evaluation, the project would result in less-than-significant shadow effects.

Mitigation: None Required.

Impact K.5: The project would require approval of a general plan amendment and rezoning (among other discretionary approvals), but would be consistent with the policies and regulations addressing the provision of adequate light to appropriate uses. (Less than Significant)

The project would require approval of a general plan amendment and rezoning among other discretionary approval, pursuant to the Oakland Zoning Regulations (as proposed for amendment by the Planned Waterfront Development Zoning District). The proposed project does not appear inconsistent with the General Plan regarding the overall orientation of residential development (LUTE N3.9) and provision of useable open space (OSCAR OS4.1). The project would comply with building heights, setbacks and design standards proposed in the PWD-1 District. Through the Final Design Review process and final building plan approval and permitting process for each

building, the City will ensure project consistency with the light and ventilation section (Section 1203) of the Uniform Building Code, the City's Outdoor Lighting Standards (City of Oakland, 2002), and the Port of Oakland's Dark Skies Program (Port of Oakland, 2003). Although the project would cast shadow on nearby buildings, particularly during the spring, fall, and winter seasons at certain times of the day, indirect sunlight would still be available to windows of nearby buildings. Also, the project would be generally consistent with relevant policies that address the provision of adequate light and ventilation, as discussed in Section IV.A, Land Use, Plans, and Policies.

The project is consistent with relevant policies and regulations regarding the provision of light and therefore would not have a significant impact.

Mitigation: None Required.

Cumulative Impacts

Cumulative Context

The geographic context used for the cumulative assessment of visual quality and shadow impacts is the Oakland Estuary and surrounding area, generally located between the Embarcadero to the north, Jack London Square to the west, and Embarcadero Cove to the east. Implementation of the project with other reasonably foreseeable future projects in the Oakland Estuary, namely the mixed use development approved at Jack London Square, as well as other approved (though not yet constructed) projects visible in the vicinity of the Oak to Ninth Project site, would result in changes to the existing visual character and views of the project area. The Jack London Square Mixed Use Project would develop nine sites in the Jack London district (generally between Clay, Jackson, 2nd Streets and the Embarcadero) with a total of 960,700 square feet of new office, retail and/or restaurant space, hotel, conference/banquet space, theatre, and supermarket uses, plus associated parking. The Jack London Square Mixed Use Project is anticipated to be completed in two phases, with full occupancy of the second phase by the year 2020. Building heights would range from 24 feet to 175 feet, with the average height of just under 100 feet. The cumulative scenario including simulation of the approved Jack London Square mixed use development is depicted in **Figure IV.K-1** and **Figure IV.K-8** (and **Figure IV.K-17** for the Increased Building Height variant).

Figure IV.K-1 presents a simulated view across the Oakland Estuary from Alameda Island that includes the project site development and the future Jack London Square development. The simulation illustrates that the Oak to Ninth Avenue Project, in combination with the development proposed for Jack London Square, would intensify existing views looking north along the waterfront. These developments would create more distinctive elements in the panoramic views from mid- and long-range viewpoints, with clusters of Oak to Ninth and Jack London Square buildings serving as an extension of the downtown Oakland skyline. **Figure IV.K-8** illustrates foreseeable changes at the project site and vicinity in views from East 8th Street at 10th Avenue

looking southwest. The project's towers on Parcels A, H, and K would be the most dominant features in the foreground. The proposed highrise (up to 175 feet tall) hotel in Jack London Square is visible and in the distance to the west (approximately one-quarter mile west of the project site). While these buildings would be evident in mid- and long-range views, the cumulative changes would not substantially degrade existing scenic resources or adversely affect scenic views or vistas.

In terms of shadows, **Figures IV.K-19** through **IV.K-30** illustrate that the project's potential shading effects would fall to areas immediately adjacent to the project site. Therefore, because no foreseeable development has been identified on immediately adjacent, the project's shadow effects are not cumulatively considerable. Thus, there would be no significant cumulative aesthetic impacts, nor would the effect of the project in combination with other foreseeable projects be cumulatively considerable.

Mitigation: None Required.

References – Aesthetics

California Department of Transportation, California Scenic Highway Program, http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm, accessed October 22, 2004.

City of Oakland, Oakland City Council Resolution No. 77571 C.M.S., Resolution Establishing Outdoor Lighting Standards for New Lighting Facilities and Energy, adopted November 21, 2002.

Port of Oakland, Port of Oakland Sustainability Program Annual Report, 2003.

San Clements, M. Effects of Shading by Bridges on Estuarine Wetlands. M.S. Thesis, North Carolina State University. 56 p., 2003.

L. Public Services and Recreation Facilities

This section describes existing public services in the project vicinity. It also evaluates the potential impact of the project on the delivery of public services, and possible adverse physical impacts on the environment that could result from a need to provide new or physically altered facilities. As necessary, appropriate mitigation measures are identified. The analysis reviews police services, fire protection and emergency medical response, public schools, and parks and recreational facilities.

Setting

Police Services

Facilities and Staffing

The Oakland Police Department, headquartered at 455 - 7th Street in downtown Oakland, and approximately 1.7 miles from the project site, provides police protection services throughout the city. In addition to the police headquarters, there is one sub-station located at 2651 73rd Avenue, approximately 6.6 miles from the project site.

The Police Department is authorized to have 802 full-time, sworn police officers, as of August 2005, and about 439 civilian (non-sworn) employees. Currently, there are 741 sworn police officers and a civilian staff of about 380 (Poulson, 2005). The current ratio of police officers per 1,000 residents is approximately 2.0, based on the city's population of 399,484 from the 2000 U.S. Census.

The City of Oakland is divided into six geographical areas, called Police Service Areas (PSA), each commanded by a Lieutenant of Police. PSA one, which includes the project site, has three problem-solving officers, while the all other PSAs have two problem-solving officers assigned to each area. Problem-solving officers do not respond to calls for service, and are responsible for conducting projects in the community that patrol police officers frequently are unable to handle. Projects vary depending on the needs of the community. Each PSA also has one Crime Reduction Unit whose responsibilities include violence reduction and narcotics enforcement. The Crime Reduction Unit is comprised of about six to seven officers and one sergeant that work between the hours of 12:00 p.m. and 10:00 p.m. The City is divided into 35 patrol beats, each of which generally includes an area with 5,000 to 7,000 residents. Each patrol beat is assigned a neighborhood services coordinator, and a neighborhood services coordinator handles multiple patrol beats. Neighborhood service coordinators are civilian employees who serve as a liaison between the community and the Police Department, and work with residents, businesses, schools, and other institutions to set priorities and develop strategies to improve public safety and reduce crime. In November 2004, Oakland voters approved Measure Y, the Violence Prevention and Public Safety Act of 2004. Measure Y proposed a new parcel tax and parking surcharge (on parking in commercial parking lots) in order to fund violence, crime, and fire prevention programs. One of the permitted purposes of the tax revenues from Measure Y is the hiring and

maintaining 63 new sworn police officers, including at least one officer for each existing community policing beat, for community and neighborhood policing efforts and targeting truancy, crime reduction, domestic violence, and child abuse intervention.

The project site is located within patrol beats 19X and 1X. Beat 19X is bounded by Foothill Boulevard to the north, the estuary to the south, 23rd Avenue to the east, and Lake Merritt Channel to the west. Beat 1X encompasses an area bounded by 5th Street to the north, the estuary to the south, Lake Merritt Channel to the east, and, to the west, an imaginary line drawn by connecting Castro Street southbound to Embarcadero West eastbound to Union Street southbound to the estuary.[1] Patrol beats 1X and 19X each have one officer assigned 24 hours a day. Officers generally work ten-hour shifts four times each week. At any one time, citywide, there are 35 officers, a watch commander, and up to six supervising sergeants on duty, all of whom are sworn personnel. The Traffic Operations Unit staffs between six to eight officers throughout the day, with additional staff available for special events and periods of special staffing needs. The Port of Oakland currently has security officers that monitor the site, however this service would be eliminated from the site once the developer acquire the property.

Service Demand

All emergency (911) and non-emergency calls for police services are received through the Police Department's communications center located at 1701 Edgewater Drive. Calls for fire and medical services are routed to the Oakland Fire Department for dispatching. Priorities for responding to police calls are set by a computer-aided dispatch system that may be overridden by dispatchers. Police officers are dispatched from the police communications center by radio and/or laptop computers mounted in police vehicles.

Citywide, approximately 244,286 calls were handled in 2004, which equates to a ratio of about 612 calls per 1,000 residents, based on the city's population of 399,484 from the 2000 U.S. Census. The Police Department's response times to calls for police services are recorded for the City of Oakland as a whole; the department does not track response times for individual service areas. Response times generally reflect the perceived seriousness of the call. The department ranks incoming calls for police services as follows: Priority 1 means imminent danger of death or serious injury, felonies in progress, or serious public health hazards; Priority 2 refers to disputes with potential for violence, misdemeanor crimes in progress, stolen vehicle reports, and similar matters; and Priority 3 calls are reports of incidents that do not present danger to life or property. Dispatch times vary, although generally 63 percent of Priority 1 calls are dispatched within five minutes (Grieve, 2005).

In 2004, there were 1,199 reported crimes in beat 19X, which covers the majority of the project site. This total represents about four percent of the total number of crimes reported citywide during the same period. Within beats 19X and 1X, approximately 1,386 crimes were reported in

[1] Nearly 52 acres of project site area east of the Lake Merritt Channel (85 percent) is in beat 19X, and the remaining 10 acres west of the channel (15 percent) is in beat 1X.

2004. Over 75 percent of the total crimes reported were burglary,[2] larceny, and stolen vehicles. According to the Police Department, the project area has a low incidence of crime relative to the entire city (Poulson, 2004). **Table IV.L-1** summarizes reported crimes in beats 19X and 1X in 2004.

TABLE IV.L-1

REPORTED CRIMES IN THE PROJECT VICINITY JANUARY THROUGH DECEMBER 2004

Crime	Beat 1X [a]	Beat 19X [a]
Murder	1	1
Robbery[b]	4	81
Arson	1	3
Assault[c]	8	118
Larceny	69	187
Burglary[d]	31	203
Stolen Vehicles	30	204
Rape[e]	2	7
Prostitution	2	181
Narcotics	12	122
Disturbing the peace.	10	24
Vandalism	17	68

[a] Includes portions of the project site.
[b] Includes armed robbery, attempted robbery, and residential robbery.
[c] With a deadly weapon.
[d] Includes commercial, residential, and locked auto burglary.
[e] Includes attempted or forcible rape.

SOURCE: City of Oakland Police Department, 2004.

Fire Protection and Emergency Medical Services

Facilities and Staffing

The Oakland Fire Department provides fire protection services and emergency medical services throughout the city. The Fire Department operates 25 fire stations, and currently maintains 25 engine companies with approximately four personnel per engine, and 7 truck companies with four to five personnel per truck. The actual number of assigned personnel depends on the location of the emergency. Total Fire Department staffing consists of 562 personnel, of whom 492 are sworn personnel (fire suppression and emergency medical personnel). Approximately 100 of Oakland's firefighters are also trained as paramedics (Sierra, 2004), and many are trained as Emergency Medical Technicians (EMTs).

The Fire Department is organized into four divisions and three battalions. While the divisions focus on department functions, the battalions are organized by geographical districts, providing

[2] Includes commercial, residential, and locked auto burglary.

requested fire and emergency medical services. Battalion 2 serves West Oakland and North Oakland, Battalion 3 serves the area from Seminary Boulevard east to the city of San Leandro, and Battalion 4 serves central Oakland. (There is no Battalion 1.) Each battalion consists of seven to ten stations. The project site falls within the response boundaries of the following stations:

- Fire Station 1 at 1605 Martin Luther King Jr. Way, approximately two miles from the project site;
- Fire Station 3 at 1445 14th Street, approximately three miles from the project site;
- Fire Station 4 at 1235 International Boulevard, approximately one mile from the project site; and
- Fire Station 12 at 822 Alice Street, approximately one mile from the project site.

In addition to firefighting and emergency medical response capabilities, the Fire Department also has a hazardous materials unit that operates from Station 3 at 1445 14th Street and responds citywide to emergencies involving hazardous materials.

Water supply and fire flow for fire suppression purposes are discussed in Section IV.M, Utilities and Service Systems.

Service Demand

Fire and medical emergency calls are received by the public communications center at 1605 Martin Luther King Jr. Way and then routed through a computer-aided dispatch system. The Fire Department responded to approximately 58,485 citywide calls in fiscal year 2003. The four fire stations serving the project area responded to approximately 10,105 calls in 2003. The majority of these calls (about 70 percent of the total area calls) pertained to medical emergencies, and about 9 percent of total area calls pertained to structural fires.

The Fire Department's response time goal is seven minutes or less, 90 percent of the time. Response time is measured from the time a call is received in the Fire Dispatch Center until the time the first unit arrives on the scene of the emergency, 90 percent of the time (Sierra, 2004).

Public Schools

School Facilities and Attendance

The Oakland Unified School District (OUSD) operates the public school system within Oakland's city limits. The OUSD administers 70 elementary schools, 18 middle schools, and six high schools. It is also responsible for two alternative schools and two special education schools. Total school enrollment for elementary and secondary students for the 2003/2004 academic year was 50,437, showing a decline in enrollment from 52,501 students in 2002/2003 and 53,545 students in 2001/2002 (California Department of Education, 2004b).

Since the analysis of potential impacts on public schools is based on the estimated the number of students who reside in Oakland, for context, it is worth noting the approximate ratios of students that reside in Oakland but attend private schools. On a statewide basis, an estimated 11 percent of all Kindergarten through grade 12 students attend private school. During the 2002/2003 academic year, over 27,916 Kindergarten through grade 12 students in Alameda County attended private schools, an estimated 13 percent of the school population.[3] In the City of Oakland, there are 52 private elementary and secondary schools, attended by an estimated 8,787 students located throughout Oakland (California Department of Education, 2004a). These students do not necessarily live within the city where the private school is located. In addition, students living within Oakland can attend private schools in other cities. Private schools within Oakland provide a wide range of options that include Montessori schools, schools sponsored by religious institutions, and college preparatory schools.

Despite existing demand, the OUSD recognizes that it continues to experience a decreasing student enrollment and therefore is not planning construction of new schools in the foreseeable future. These plans are subject to change depending on future student enrollment (Chambers, 2004). Given the existing funding shortage for school facility needs districtwide, however, the OUSD has "predicted continued overcrowding and capacity constraints in much of the District" (Central City East Redevelopment Plan EIR,2003).

Student Generation

To estimate the number of students generated by new housing development, the OUSD uses student generation rates developed by the California State Department of Education.[4] The California State Department of Education estimates that one dwelling unit would generate an average of 0.7 student, consisting of 0.5 elementary or middle school student and 0.2 high school student (Chambers, 2004). The state's student generation rates are routinely used by school districts that have not developed rates for their local jurisdictions. The state rates are a result of statewide sampling that incorporates widely varying dwelling unit types, households, and other demographic characteristics across the state. The state rates therefore may not reflect the actual characteristics of the local area.

A second estimate for student generation was prepared as part of the demographic analysis for the proposed project to estimate on-site population.[5] The demographic analysis indicates an average of up to 0.1 school-age children per household for the project, based on the types and sizes of higher-density, multi-family housing units that are proposed for comparable areas of Oakland with similar types of multi-family housing.

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3 This estimate is based on 2002–2003 California Department of Education estimates of private school enrollment in Alameda County, and 2002-2003 estimates of the number of Kindergarten through grade 12 public school students in Alameda County.

4 The OUSD uses the statewide average student yield factors as defined in Section 1859.2 of the State Allocation Board (SAB) Regulations.

5 Demographic analysis and population and employment estimates for the project were prepared by Hausrath Economics Group. Background is provided in Appendix D.3 of this EIR.

Project Area Schools

The project area is located within the service areas of La Escuelita and Franklin Elementary Schools, Westlake Middle School, and Oakland High School. La Escuelita Elementary School is located at 1100 3rd Avenue, less than one mile north of the project site. Franklin Elementary School is located at 915 Foothill Boulevard, approximately 1.4 miles northeast of the project site. Westlake Middle School is located at 2629 Harrison Street, approximately 2.4 miles from the project site, and Oakland High School is located at 1023 MacArthur Boulevard, approximately two miles from the project site. The elementary schools and middle school that would serve the project site are close to downtown, and therefore experience a high demand because "numerous households bring their children to those schools that are near the offices where they work" (Central City East Redevelopment Plan EIR, 2003)**.**

Senate Bill 50

The Leroy F. Greene School Facilities Act of 1998, or Senate Bill 50 (SB 50), restricts the ability of local agencies such as the City of Oakland to deny land use approvals on the basis that public school facilities are inadequate. SB 50 establishes the base amount of allowable developer fees at $2.24 per square foot of residential construction and $0.36 per square foot of commercial construction.[6] These fees are intended to address local school facility needs resulting from new development. Public school districts can, however, impose higher fees provided they meet the conditions outlined in the act. Private schools are not eligible for fees collected pursuant to SB 50.

Parks and Recreational Facilities

The City of Oakland's Office of Parks, Recreation (OPR) manages the City's parks and recreation centers within the city boundaries. Oakland's Public Works Agency (PWA) maintains the parks and park facilities. As of May 2005, Oakland has approximately 2,257 acres of parkland, not including parkland within the East Bay Regional Parks District (EBRPD), discussed below (Combs, 2005).

Oakland's parks are categorized by size and intended service area. Generally, local-serving parks "meet the active recreational needs of the community" surrounding the park, rather than the city as a whole. Region-serving parks are 25 acres or larger, and include Lakeside, Joaquin Miller, and portions of Redwood-Roberts Parks. Community parks, such as Montclair Park and Dimond Park, range in size from five to 20 acres and serve a one-mile radius in hill areas and a 0.5-mile radius in flatlands. Neighborhood parks range in size from one to 10 acres and serve a 0.5-mile radius in the hills and a 0.25-mile radius in the flatlands. Oakland also has several classifications of miniparks, which are generally less than one acre in size and serve a 0.25-mile radius in the hills and 0.125-mile radius in the flatlands. Linear parks vary in size and service area and are intended to protect and provide linear access to a natural feature, such as a creek or shoreline, and

6 These are current base fees adopted by State Allocation Board (SAB), which is the policy-level body for the programs administered by the Office of Public School Construction within the State Department of General Services. The SAB is authorized by Government Code Section 65995(b)(3) to increase the base fee every two years. In order to levy the fees, school districts must prepare a "nexus" analysis demonstrating why the fees are required and how they will be used.

connection between two points. Special use parks also vary in size and service area (typically citywide), and generally are areas for specialized of single-purpose activities. Estuary Park and Jack London Aquatic Center that exists on the project site is classified as a "special use park."

The East Bay Regional Park District (EBRPD), although responsible primarily for acquiring and developing regional parks, open spaces, and regional trails throughout the East Bay, also provides open space and recreational facilities within Oakland's city limits. EBRPD parks in Oakland include the 271-acre Leona Canyon Regional Open Space Preserve, the 1,220-acre Martin Luther King, Jr. Regional Shoreline Park, the 660-acre Robert Sibley Volcanic Regional Preserve, and the 100-acre Roberts Regional Recreational Area.

The project site is located on the southeast edge of the Central Planning Area and abuts the east boundary of the San Antonio Planning Area, as defined in the OSCAR Element of the Oakland General Plan. Within one-half mile of the project site is the region-serving Lakeside Park (75 acres), as well as Peralta Park (3.8 acres), Clinton Park (2.26 acres), Franklin Park (2.05 acres), and Vantage Point Park (0.4 acres). The project site itself contains Estuary Park and Jack London Aquatic Center (approximately 7.7 acres). The Central Planning Area and San Antonio Planning Area as a whole contain one 12-acre community park (San Antonio), 14 neighborhood parks, four miniparks, five linear parks, and seven special use parks.

The City's Department of Parks and Recreation also operates several community-based centers located throughout city. The centers offer various public programs, including recreation, sports, arts and culture, computers, general learning, and after-school activities. In close proximity to the project site are the Franklin Recreation Center at 1010 East 15th Street, the San Antonio Recreation Center at 1701 East 19th Street in San Antonio Park, and Lincoln Square at 250 10th Street.

Service Standards

For residential land use, the OSCAR Element uses a level of service standard of 10 acres of parkland and 4 acres of local-serving parks per 1,000 residents to determine where there are unmet needs and to set priorities for future capital investments. The series of connected parks and open space proposed by the project would be region-serving, as well as local-serving, given its proximity to nearby residential and mixed use neighborhoods near downtown and Lake Merritt. The analysis in this EIR uses the General Plan (OSCAR) service standard for local-serving parks (4 acres per 1,000 residents); the General Plan does not prescribe a service standard for region-serving parks.

According to the OSCAR Element, which was prepared in 1995/1996, the estimated 3,073 total acres of parkland within Oakland's city limits, including region-serving parks managed by EBRPD, provided about 8.26 acres of parkland per 1,000 residents, based on the Oakland population at that time.[7] Local-serving parks provide an estimated 1.33 acres per 1,000 residents,

[7] Assuming that the 3,073 total acres of parkland within Oakland's city limits has not changes significantly since preparation of the OSCAR Element, the ratio would be 7.69 acres per 1,000 units based on the year 2000 Oakland population of 399,484, which is cited elsewhere in this section.

well below the City's service standard goal. Oakland's per capita standards for parks identified in the OSCAR Element are based on National Recreation and Park Association guidelines, "with modifications made to reflect the fact that Oakland is a mature, relatively dense city with a limited supply of vacant land" (City of Oakland, 1996).

Neither of the planning areas in which the project site is located meets the adopted citywide goal of 4 acres of local-serving parkland per 1,000 residents. According to the OSCAR Element**,** the Central Planning Area contains 1.65 acres of local-serving park acres per 1,000 residents (discounting Lakeside Park because it serves a much broader region than the Central Planning Area). This acreage exceeds the current citywide ratio of 1.33 acres per 1,000 residents but is below the citywide goal of 4 acres per 1,000 residents. The San Antonio Planning Area contains 0.78 acre of park/schoolyard area per 1,000 residents, which is well below the current citywide ratio (1.33 acres per 1,000 residents) and the citywide goal of 4 acres per 1,000 residents. Both planning areas have an existing shortage of park space and do not meet the adopted citywide goal (excluding regional open spaces and special purposes parks) of 4 acres per 1,000 residents. The OSCAR Element recognizes that achieving the 4-acre-per-1,000 standard in these areas would be impossible without massive development of relatively flat land, but that major gains could be made through expansion of existing parks and shoreline access improvements**.**

Measure DD

In November 2002, the Oakland voters approved Measure DD, a bond measure to finance the preservation and acquisition of open space, parks renovation, Estuary waterfront parks and trails, water quality improvements related to Lake Merritt, restoration of Oakland's creeks, renovation and creation of new youth and public recreation facilities, rehabilitation of open space and other safety and maintenance facilities, and provision of safe public access to Lake Merritt, Lake Merritt Channel, and the estuary. These projects involve facilities on or near the project site, such as Estuary Park.

Libraries

Library Facilities

The City of Oakland's Public Library system operates a Main Library plus 15 branch libraries, a Second Start Adult Literacy Program, the Bookmobile, and an African-American Museum and Library. The project site is equidistant from the Main Library (125 14th Street) and the Asian Branch Library (388 9th Street), both about 1.4 miles northwest of the project site. The Main Library serves residents from all of Oakland, with heavy use by residents around Lake Merritt and in the downtown area. The Main Library is one of the largest public library facilities in the Bay Area, including collections of non-fiction and fiction books, magazines and newspapers, sheet music, maps, government publications and compact discs, videocassettes, DVDs and audiobooks. The Main Library houses the Oakland History Room, the Children's Room, the Teen Zone, and a meeting room that can accommodate up to 121 persons. The Main Library also provides 22 computers with internet access, basic internet classes, and adaptive technology to assist persons who are blind or have low vision or learning disabilities (Oakland Public Library,

2005). The Asian Branch Library houses eight Asian languages (Chinese, Japanese, Korean, Vietnamese, Thai, Cambodian, Tagalog and Laotian) in major reference titles and general subject titles, an Asian Studies collection and an Asian American collection in English. The Asian Branch Library also includes computers and a computer lab with multilingual interface for instructional purposes (Oakland Public Library, 2005).

Impacts and Mitigation Measures

Significance Criteria

Based on Appendix G of the CEQA Guidelines and the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines, the project would have a significant public service impact if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives for any of the following public services:
  - Fire protection;
  - Police protection;
  - Schools; and
  - Other public facilities.
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Local Plans and Policies

Oakland General Plan policies and other applicable plans and policies that pertain to the various public services and related topics, and that apply to the project, are listed in **Appendix F**. Key policies are identified and discussed in Section IV.A, Land Use, Plans, and Policies. General Plan policies that are also significance criteria or contain a regulatory threshold which the project must meet are addressed in this section.

Police Services Impacts

Impact L.1: The increased population and density resulting from the project would not involve or require new or physically altered governmental facilities in order to maintain acceptable service ratios, response time, or other performance objectives for police protection services. (Less than Significant)

The majority of the project site is within patrol beat 19X, and the area west of Lake Merritt Channel is within beat 1X.[8] While patrol beats 1X and 19X each have one officer assigned 24 hours a day, the project site currently receives very little police service (Poulson, 2004).

The project would redevelop the site and substantially increase the daytime and nighttime population in the project area. The estimated 5,061 new residents and 623 new jobs (or employees) could result in an increase in reported crimes.

Increases in the number of reported crimes could lead to an increase in response times, which depend on the Police Department having adequate staff. Given the amount of new daytime and nighttime population anticipated from the project, however, the Police Department does not anticipate the need for any new physical facilities because of the proposed development. The project site would be served by police personnel who work in the main police station at 455 7th Street, approximately one mile from the project site (Poulson, 2004). Additionally, the increased economic base that the project would introduce could increase tax revenue and create greater financial resources for police services.

The topic of emergency vehicle access to the project site is discussed fully in Section IV.B, Transportation, Traffic, Circulation and Parking. In the case of an emergency during which access to the project area south of the Embarcadero via 5th Avenue and/or Oak Street would obstructed by a passing train, which, as discussed in Section IV.B, Traffic, Transportation, Circulation and Parking, are expected to continue to occur “intermittently at irregular intervals.” Oakland police would still have access to the estuary area south of the Embarcadero (including the Oak to Ninth project site) as it has historically via alternative routes on adjoining streets that do not directly cross the rail tracks. These alternative access routes are discussed in Section IV.B. The availability of alternative routes would not necessarily minimize delays in response time. As is current practice when responding to emergency calls south of Embarcadero during which access is obstructed by a passing train, responding officers would not necessarily know if a train was blocking the primary access route the project site prior to arriving at the respective train-crossing intersection. In the event that the route was blocked by rail activity, time would be required for the officer to re-route to an alternative approach to the site, call for another response unit, or wait until the primary route was cleared for access (Poulson, 2004). Pursuant to the significance criteria, and as determined by the Oakland Police Department, an anticipated delay in response time would not require the construction of new or physically altered facilities in order to maintain acceptable response times or other performance objective (Poulson, 2005). Therefore the potential delay in response time that may occur in these instances would be not be considered a significant impact.

Although the City has not indicated whether a new police facility would be warranted for the project, locating a new facility south of the Embarcadero is one way to address increased police-response times that could occur during rail activity in the project area. The project proposes to

8 Beat 1X is bounded by 5th Street to the north, the Estuary to the south, Lake Merritt Channel to the east, and Castro Street and Union Street to the south. Beat 19X is bounded by Foothill Boulevard to the north, the Estuary to the south, 23rd Avenue to the east, and Lake Merritt Channel to the west.

prepare an emergency response and security plan for the project in coordination with the Oakland Police Department to address key issues related to the potential delay in police response time to the project site. Aspects of the plan would include the preventive design measures discussed below and could incorporate measures aimed at advanced notification to dispatched units of train activity in the project area.

As discussed in the Estuary Policy Plan EIR, increased employment, economic activity, and public activity resulting from the project may have a beneficial effect on the safety of the area. Existing underused areas that have low daytime and nighttime population, and that are often difficult to police, would be replaced with high-density residential uses and other daytime and nighttime activities. This would introduce more street surveillance and activity and reduce the number of underused and vacant lots. Also, the project site plan and building designs could reduce the potential for crimes such as vandalism and vagrancy.

The Oakland Police Department recommends that preventive design measures, such as appropriate exterior building materials (e.g., anti-graffiti materials at the ground levels), landscaping, lighting, and security alarms and door locks, be incorporated into final project building designs for all new development. As part of standard development practices, the project plans would be reviewed by the Police Department, and the project applicant would be required to incorporate the Police Department's recommendations into the final project design.

To ensure that the project would not adversely affect the ability of the Oakland Police Department to deliver adequate services to the project area and vicinity, the project applicant would incorporate design standards, such as adequate public lighting, landscaping and buffering that provides visual access and "safe" places (in addition to compliance with the Uniform Building Code) into project plans. These features would be required as part of the City's conditions of approval to the project.

Any large event on the project site would require an Oakland Police Department Special Event Permit which would allow event-specific police needs (i.e., traffic management, public safety, etc.) to be identified and a case-by-case basis.[9] Specific issues addressed by the Police Department Special Event Permit include the availability of onsite and offsite parking availability at the event location, estimated number and target age of attendees, and the provision of private security.

Mitigation: None Required.

9 Large, public events held in public parks also require a Park Use Permit obtained from the Oakland Office of Parks and Recreation.

Fire Protection and Emergency Medical Services Impacts

Impact L.2: The increased population and density resulting from the project would not involve or require new or physically altered governmental facilities in order to maintain acceptable service ratios, response time, or other performance objectives for fire protection and emergency medical services and facilities. (Less than Significant)

The project site is within the response boundaries of Fire Stations 1, 3, 4, and 12, which are generally located nearby the project site in the vicinity of downtown, to the south and southeast of the downtown area, and in West Oakland: 1605 Martin Luther King Way, 1445 14th Street, 1235 International Boulevard, and 822 Alice Street.

The approximately 5,061 new residents and 623 new jobs (or employees) resulting from the project could increase the number of calls for fire and emergency service. However, the Fire Department indicates that it would be able to provide adequate fire suppression and emergency medical response services to the project site, with existing staff, and that the project would not require development of new or physically altered facilities. In accordance with the California State Fire Code, the Fire Department would require that fire prevention measures, such as automatic sprinklers, smoke detectors, fire alarm systems, and fire resistant construction, be incorporated into final project plans for each building. All appropriate building and fire code requirements would be incorporated into project construction. The Fire Department would review the project, including provisions for onsite access, exits, and any necessary special equipment to assist firefighters on-site. The project applicant would be required to incorporate the Fire Department's recommendations into the final project.

The Fire Department's first concern with new development is adequate access and the availability of water supply during emergency situations. (See Section IV.B, Traffic, Transportation, Circulation and Parking, for discussion of emergency vehicle access; see Section IV.M, Utilities and Service Systems, for a discussion of water and water supply.) Emergency vehicle access to the estuary area south of the Embarcadero, and specifically the project site, is discussed fully in Section IV.B, Transportation, Traffic, Circulation and Parking. To provide emergency fire service to the estuary area south of the Embarcadero when passing trains would obstruct the 5th Avenue and/or Oak Street crossings at the Embarcadero, the Fire Department would continue its current practice of dispatching two companies to the area. The department would dispatch one company from a station within the designated service area, and would dispatch a second company from a station that would reach the project area via routes not obstructed by the train (Williams, 2005). The four primarily fire stations identified above would respond to an emergency at the project site, and given their locations, available alternative routes that an emergency vehicle can use to access the site are the at-grade crossing on Oak Street (to the north) and the overcrossing on 16th Avenue (to the south).

As discussed in Section IV.B, Traffic, Transportation, Circulation and Parking, blockages at both 5th Avenue and Oak Street at the Embarcadero are expected to continue to occur "intermittently at irregular intervals." Although train obstruction at both or either crossing may negatively affect

response times (Williams, 2004), the construction of new or physically altered facilities would not be required, and thus the project would not have a significant impact.

As discussed under Police Service, the project sponsor would coordinate with the Oakland Fire Department to prepare an emergency response and security plan for the project that addresses issues related to the potential delay in fire and emergency response time to the project site in the event that rail activity obstructs emergency access to the project site. In addition to methods of advanced notification to dispatched units of train activity in the project area, the project would incorporate, as recommended by the Fire Department, onsite emergency equipment, such as Automatic Emergency Defibrillators (AED) and special equipment to assist firefighters in performing fire suppression and emergency response operations. Also, to further reduce the need for emergency response and new staff to serve the project site, the project sponsor would provide occupants (residents and non-residential tenants) with fire prevention and public education information to reduce hazards and risks. These features would be required as part of the City's conditions of approval to the project and would supplement the standard fire prevention measures required by the California State Fire Code.

Mitigation: None Required.

Public Schools Impacts

Impact L.3: The students generated by the project would not require new or physically altered school facilities in order to maintain acceptable service ratios or other performance objectives at local public schools. (Less than Significant)

At build-out, the project would have up to 3,100 new housing units. These units would house an estimated 2,170 new students, based on the student generation rate of 0.7 student per housing unit employed by the Oakland Unified School District (OUSD) (Chambers, 2004).[10] Of the 2,170 new students, about 1,550 students would be elementary or middle school age, and 620 new students would be high school age. School-age children living at the project site would live within attendance areas of the following OUSD public schools: La Escuelita and Franklin Elementary Schools, Westlake Middle School, and Oakland High School.

Grade-school children (Kindergarten through grade 5) living at the project site would attend La Escuelita and Franklin Elementary Schools. La Escuelita Elementary School, located at 1100 3rd Avenue less than one mile north of the project site, currently serves 258 students and is within its capacity of 285 students. Franklin Elementary School, located at 915 Foothill Boulevard approximately 1.4 miles northeast of the project site, currently serves 714 students and is within

[10] To provide the most conservative analysis of school impacts, this analysis assumes that all school-age children living at the project site would attend public schools. Because there are several private schools within the vicinity of proposed site, however, it is reasonable to assume that some children living at project site would attend private schools. The 2000 U.S. Census estimated that approximately 13.6 percent of all elementary and high school students in Oakland attended private schools.

its capacity of 920 students. La Escuelita and Franklin Elementary Schools have average class sizes of about 23 and 21 students, respectively (Chambers, 2004 and California Department of Education, 2004b). Middle school students (grades 6 through 8) living at the project site would attend Westlake Middle School at 2629 Harrison Street, approximately 2.4 miles from the project site. Westlake has an average class size of 31 students, currently serves 638 students, and is within its operating capacity of 1,053 students (Chambers, 2004). The 1,550 new elementary and middle school students would not exceed available capacity of 648 students at La Escuelita Elementary School, Franklin Elementary School, or Westlake Middle School. This is primarily because the project would be developed and occupied in multiple phases over a period of approximately 10 to 11 years, however, and therefore the increased number of elementary and middle school students generated from the project and the impact on Oakland High School would occur incrementally.

High school students residing at the project site would be within the attendance area of Oakland High School located at 1023 MacArthur Boulevard, approximately two miles from the project site. Oakland High School currently serves 2,129 students in grades 9 through 12 and is above its operating capacity of 1,955 students (Chambers, 2004). Therefore, it is unlikely that 620 new students could be accommodated at Oakland High School, if introduced within a short period of time. As explained for elementary and middle school capacities, the project would be developed and occupied in multiple phases over a period of approximately 10 to 11 years, however, and therefore the increased number of high school-age students generated from the project and the impact on Oakland High School would occur incrementally. If classroom capacity within the Oakland High School Attendance Area (HSAA), as delineated in the Central City East Redevelopment Plan EIR (City of Oakland, 2004), was not available at the time students from the project would enter the school system, the OUSD may accommodate these students at schools outside the Oakland High School service boundaries**.** Additionally, given existing low enrollments in the area where the project is proposed, the OUSD indicates that it would be able to provide teaching stations for the estimated number of students from the project (Chambers, 2004).

Alternate Estimate of Student Generation

As discussed above, under Student Generation, another estimate of the number of students generated by the new housing in the project was prepared as part of the demographic analysis for estimating population in the new housing. That estimate indicates an average of up to 0.1 school-age children per household for the project, based on the types and sizes of higher-density, multi-family housing units that are proposed. Development of this estimate was based on a number of considerations including: the density and types of multi-family housing proposed, average household sizes for project households, current shares of population represented by school-age children for comparable areas of Oakland with similar types of multi-family housing, and trends in the age distribution of the population. Because the project would consist of new higher-density housing in multi-family development along the waterfront, the number of persons per household is estimated to be smaller than average for Oakland overall. In addition, project households are

anticipated to include proportionally more adults and fewer children, and a relatively high percentage of project residents are anticipated to be employed.

At build-out, the project would include up to 3,100 housing units and 2,976 households assuming average vacancy of four percent consistent with citywide data. The number of school-age children would be 298 based on the rate of 0.1 school-age children per household (compared to 2,170 based on the SAB rate of 0.7). With no vacancy assumed, the number of school-age children would be 310. Of the 298 new students, about 209 students would be elementary or middle school age, and 89 new students would be high school age.

Also, pursuant to Senate Bill 50 (SB 50), the project sponsor would be required to pay school impact fees established to offset potential impacts on school facilities. Therefore, although the project could result in additional students and overcrowding within OUSD facilities, payment of the fees mandated under SB 50 is the mitigation measure prescribed by the statute, and payment of the fees is deemed full and complete mitigation. Therefore, no mitigation is required.

Mitigation: None Required.

Parks and Recreation Impacts

Impact L.4: The project would create new parks, and the increased population resulting from the project would not result in increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of these facilities would occur or be accelerated, nor would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. (Less than Significant)

The project would increase the permanent on-site daytime and nighttime populations at the site, thus increasing the demand for parks and recreation facilities. At build-out, it is anticipated that the project would result in an on-site resident population of 5,061 and provide 623 jobs (see Section IV.J, Population, Housing, and Employment)..

As discussed in Chapter III, Project Description, approximately 44[11] percent of the project site (nearly 28.4 acres) would be developed into a mix of active and passive open space uses. This permanent open space would be designed as a series of connected parks and trails to enhance the City's existing approximately 7.7-acre Estuary Park and Jack London Aquatic Center that lies within the project site and would be improved with re-vegetation as part of the project. New parks

[11] 44 percent includes the existing 7.7-acre Estuary Park and Aquatic Center. With these existing facilities and associated site area included, a total of 28.4-acres of open space would exist on the project site, which would result in approximately 37 percent of the project site as open space.

that would be developed as part of the project include Shoreline Park (9.7 acres), Channel Park (5.5 acres), Gateway Park (3.1 acres), and South Park (2.3 acres).[12]

The project open space would include a continuous public trail system along the project site's estuary edge that would extend the existing Bay Trail segment, which currently ends at Estuary Park.

No existing parks or open spaces would be removed by the project. As shown in **Table IV.L-2**, the project would provide approximately 60 percent of the almost 36 acres of total *new* open space (per Table III.D-1 in the Estuary Policy Plan EIR) analyzed for the slightly larger Oak-to-Ninth Avenue District[13] delineated in the Estuary Policy Plan EIR. However the Estuary Policy Plan does not include a park and open space program by acreage.

Approximately 20.7[14] of the 28.4 total acres of permanent open space that would exist on the project site at buildout would be new, usable park area that does not currently exist. Assuming new 5,061 project residents, the 20.7 acres of new park area would equate to 4.1 acres of new local-serving parks per 1,000 residents on the project site. This ratio would exceed the City's adopted standard of 4 acres of local-serving parks per 1,000 residents, or 20.2 acres.[15] As a more conservative estimate that also considers the approximately 623 new employees at the project, about 3.64 acres per 1,000 residents and employees would be provided.

[12] The area defined as Channel Park in the project is called Open Meadow Park in the Estuary Policy Plan. The area defined as Channel Park in the Estuary Policy Plan is a linear park on both sides of Lake Merritt Channel, primarily north of the Embarcadero, and is not part of the project site. South Park is the southernmost portion of Clinton Basin Park, as defined in the Estuary Policy Plan.

[13] The Estuary Policy Plan delineates the Oak to Ninth Avenue District as approximately 120 acres south of I-880, east of Oak Street, and west of Brooklyn Basin.

[14] 28.4 acres total proposed, less 7.7 acres of the existing Estuary Park and Aquatic Center.

[15] 5,061 residents divided by 1,000 equals 5.061; 4 acres per 1,000 residents (based on the Oakland General Plan standard) is therefore 4 x 5.061 residents, or 20.24 demanded park acres.

TABLE IV.L-2

PROPOSED PARK ACREAGE ESTUARY POLICY PLAN EIR AND PROPOSED PROJECT

	Existing (acres)	Estuary Policy Plan EIR (Oak-to-Ninth Avenue District) (acres)	Proposed Project (acres)
New Parks			
Open Meadow	0	11.0[a]	5.52 (Channel Park)[b]
Clinton Basin	0	8.4	2.30 (South Park)[c]
Crescent Park	0	11.0	9.74 (Shoreline Park)
			3.12 (Gateway Park)
Subtotal		***30.4***	***20.68***
Improved/Expanded Parks			
Estuary Park	7.7[d]	13.0	7.7[0d]
Total	**7.7**	**43.4**	**28.38**

a The area defined as Open Meadow Park in the Estuary Policy Plan includes the six-acre Fifth Avenue Point community, an area not included in the proposed project.
b The area defined as Channel Park in the proposed project is called Open Meadow Park in the Estuary Policy Plan. The area defined as Channel Park in the Estuary Policy Plan is a linear park on both sides of Lake Merritt Channel, primarily north of the Embarcadero, and is not part of the proposed project site.
c South Park is the southernmost portion of the Clinton Basin Park defined in the Estuary Policy Plan.
d Based on the 2005 project site survey prepared by BKF Engineers for the Oak to Ninth Project.

SOURCE: Estuary Policy Plan EIR, Table III.D-1
Oakland Harbor Partners, 2005.

The proposed new park areas would increase the service ratios in the Central Planning Area (which would remain above the current citywide average of 1.33 acres) and the San Antonio Planning Area (which would remain below current citywide average of 1.33 acres). Overall, however, both areas would remain below the adopted citywide standard, which the Open Space, Conservation, and Recreation (OSCAR) Element of the Oakland General Plan recognizes would be impossible to attain without massive development of relatively flat land. As discussed in Section IV.A., Land Use, Plans, and Policies, the 20.7 acres of new park and open space area proposed by the project would be consistent with the objectives of existing park expansion and shoreline improvements outlined in the OSCAR Element, as well as overall goals and policies in the LUTE and Estuary Policy Plan that call for additional public parkland along the waterfront.

In addition to new parks and open spaces and Bay Trail, the project would add approximately 170 boat slips by rebuilding the Clinton Basin Marina and expanding the Fifth Avenue Marina. New facilities would allow for greater water-oriented activities through the improvement of waterfront access to allow for recreational boating such as sailing, rowing, canoeing, and kayaking. The proposed park space and amenities associated with the project would benefit both on-site residents and the larger citywide population.

The project sponsor will be responsible for installing the improvements within the project open space and providing for the maintenance of the project open space in a manner that meets or exceeds minimum standards provided by the City. Maintenance by the project sponsor may be accomplished through the establishment of 1) a project homeowners' association, 2) a Community Facilities District or Community Services District (in conjunction with the City), or 3) other mechanism approved by the City.

The project would carry out a number of projects identified in the November 2002 Measure DD local bond measure, including improvements to Estuary Park and the development of Channel Park (referred to as "Meadows Park" in Measure DD and the Estuary Policy Plan), Shoreline Park, and connecting segments of the Bay Trail.

The Planned Unit Development (PUD) regulations (Section 17.122 of the Oakland Planning Code) require the project to incorporate private and group open space into the project design to serve its residents. Additionally, the PUD regulations allow the City to require that suitable areas for public open spaces be set aside, improved, and dedicated for public use.

As part of the project approval process, the City of Oakland would review the adequacy of the provision and public access to public parks, open spaces, and recreation facilities on the project site. Furthermore, because the project site falls under the jurisdiction of the Bay Conservation and Development Commission (BCDC), the project would be subject to additional review by the BCDC to ensure that adequate access to and along the shoreline has been incorporated into project. These review processes are not conducted as part of the environmental review of the project. Adequate overall site access to and within the project is discussed in Section IV.B, Traffic, Transportation, Circulation and Parking.

Physical effects on the environment that may result from the proposed demolition of most of the Ninth Avenue Terminal to create a new 9.7-acre park, shoreline alterations, dredging, and fill required to create new parks and recreational facilities (i.e., marinas) are all addressed within other sections of this EIR. See EIR Section IV.I, Biological Resources; Section IV.F, Geology, Soils and Seismicity; and Section IV.H, Hydrology and Water Quality.)

Mitigation: None Required.

Library Impacts

Impact L.5: The project would increase the on-site resident population and increase the demand for library services; however, the increase in demand for such services would not result in the need to construct or expand libraries, the construction of which could cause significant environmental effects. (Less than Significant)

The proposed project would increase the resident population on the project site, which in turn would increase the demand for library services. The Oakland Main Library and the Asian Branch Library would most likely provide services to project residents because of their proximity to the project site (each about 1.4 miles from the project site). The Oakland Public Library and the City of Oakland are currently working towards the development of a Master Facilities Plan for the Oakland Public Library system. The Master Facilities Plan is intended to assess community needs for library services, covering all aspects of library operations, and make recommendations for future library sites and services. Development of the plan is funded by a bond measure (Measure Q, reauthorization of the Library Services Retention and Enhancement Act of 1994 (Measure O) passed in March 2004.

The draft Master Facilities Plan includes a study of proposed population growth throughout the City, and reports 2020 population projections that show a decline within the Main Library service area and an increase in the Asian Branch Library service area. These service area population changes are due to proposed changes in library service area boundaries. The draft plan includes a proposal to increase building space and services, such as additional books, seating areas, computers, and expanded program rooms at both the Main Library and the Asian Branch to meet existing and future demand.

The proposed service ratio for library facilities is between 0.7 and 0.9 square feet per capita (Oakland Public Library, 2005). The current ratio of existing facilities is 0.43 per city of Oakland capita[16], below the recommended ratio. At 2025 buildout of the Oak to Ninth Project, the project population would constitute approximately 1.1 percent of the city's total population (as discussed in Section IV.J, Population, Housing, and Employment), and assuming an additional 168,260 square feet of additional total library facilities by 2020, as proposed in the draft Master Facilities Plan, the citywide service ratio would be 0.8 square feet per 2025 city of Oakland capita[17] in 2025 (as well as per 2020 total service area population[18], per the draft Master Facilities Plan).

The draft plan also discusses changes in population and facilities by service area or neighborhood for 2020. The estimated 2020 neighborhood service ratios would be approximately 1.2 square feet per person (approx. 12,000 s.f. / 10,442 persons) for the Asian Branch. A neighborhood-level service ratio for the Main Library is less relevant since it serves an expanded citywide geographic area, however, its floor area is planned to double to approximately 160,000 square feet by 2020,

16 Based on year 2000 Oakland population of 399,484, which is cited elsewhere in this section. (Approximately 10 percent of Oakland Public Library patrons reside outside of the city of Oakland.) Existing total square footage in the library system is 170,740 square feet (OPL, 2005).

17 Oakland Cumulative Growth Scenario for this project (see Appendix D) estimates a 2025 citywide population of 453,520, with the project. Total 2025 planned square footage in the library system is 353,600 square feet.

18 Including Emeryville and Piedmont: 463,108 persons.

while its total service area population is projected to increase 11 percent (2000 to 2020), and its neighborhood level service area population is expected to decrease 72 percent (2000 to 2020).

It is reasonable to assume that the new population from the Oak to Ninth Project (5,061 persons) primarily would patronize the Main Library and the Asian Branch since they are located closest to the project site. An additional 2,530 persons would result in a neighborhood service ratio of 0.9 square feet per person at the Asian Branch. The draft Master Facilities Plan proposes a new branch library in the San Antonio neighborhood. The project site is in proximity to the San Antonio Library service area. However, the location of the new library has not been identified, though the 22nd-23rd Avenue corridor at International Boulevard (approximately 2.0 miles from the project site) has been considered (OPL. 2005). It is also possible that some project residents would patronize the proposed San Antonio Branch, however, the San Antonio Branch is intended to meet existing service need in the San Antonio / Eastlake neighborhoods and would have a 2020 service ratio of approximately 0.4 square foot per person (approx. 19,000 s.f. / 43,516 persons), below the recommended citywide service ratio. The service ratio would remain 0.4 with an additional 1,687 persons (one-third of 5,061) from the project (the remaining two-thirds attributed to the expanded Main Library and Asian Branch).

Therefore, because there are significant planned improvements to the Main Library (doubling of square footage to 160,000 square feet), the Asian Branch (increased 30 percent to 12,000 square feet), as well as a new 19,000 square San Antonio Branch nearby, it is not expected that the increase in population resulting from the proposed project would result in a significant impact due to the need for new or expanded library facilities based on anticipated citywide population or neighborhood level population. The project would not necessitate any unforeseen expansion or construction of new library facilities beyond those already planned. Therefore, the project would have a less-than-significant impact on library services.

Mitigation: None Required.

Cumulative Impacts

Cumulative Context

As discussed above, the project would not result in significant project-level effects on the ability of service providers to provide adequate police services, fire protection and emergency medical services, public schools, and parks and recreation facilities to the project area and vicinity. Considered in combination with other foreseeable development, there would likely be an increased demand for public services. Overall, the city of Oakland and its surrounding areas (per the Oakland Cumulative Growth Scenario as refined for this EIR) was used as context for assessing cumulative impacts on police services, fire protection and emergency medical services, public schools, and parks and recreational facilities. The cumulative assessment context for public

schools was also assessed for the project vicinity based on localized study areas defined by the OUSD for the Central City East Redevelopment Plan EIR.

Impact L.6: The increased population and density resulting from the project, in conjunction with population and density of other foreseeable development in the city, would result in a cumulative increase in the demand for public services and parks. However, the project's contribution to such impacts would not be cumulatively considerable. (Less than Significant)

Police Services and Fire Protection/Emergency Medical Services

The increased population and density resulting from the project, in conjunction with population and density of other foreseeable development in the city, would result in a cumulative increase in demand for police services and fire protection/emergency medical services. This cumulative increase could result in the need for new or physically altered governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives. However, future development would occur pursuant to General Plan policies and mitigation measures adopted for the Land Use and Transportation Element (LUTE) EIR (as identified in the Central City East Redevelopment Plan) that reduce these potential impact on fire and police services to less-than-significant levels.

The additional population and density resulting from all other planned and foreseeable development under the cumulative scenario, including development in the project vicinity, would contribute to the increased demand for police services and fire protection/emergency medical services. New or altered physical facilities for police and/or fire services may be necessary to meet this increased demand. However, as determined in the Central City East Redevelopment Plan EIR, implementation of Oakland General Plan Land Use and Transportation Element (LUTE) policies and implementation of mitigation measures from the LUTE EIR would effectively mitigate potentially significant effects on police and fire services to less-than-significant levels.

For the project, the Oakland Police and Fire Departments do not anticipate the need for any new physical facilities to adequately service the resulting increase in daytime and nighttime population on the project site or from instances where response would be delayed due to trains obstructing access routes to the project area. Additionally, the project would incorporate design measures aimed to heighten safety (through lighting, access, and visibility) to public spaces and would provide administrative space for onsite police activities and would develop and emergency response and security plans in coordination with the relevant City departments. Therefore, the project's contribution to the citywide significant cumulative impact on police services and fire protection/emergency medical services would be less than significant.

Public Schools

Students generated by the project, in conjunction with students generated by other foreseeable development in the city, would result in a cumulative increased demand that could require new or physically altered school facilities in order to maintain acceptable service ratios or other performance objectives at local public schools.
When considering all other planned and foreseeable development under the cumulative scenario, including within the project vicinity, the addition of new students would contribute to a current deficit in the availability of classrooms to serve student populations citywide (City of Oakland, 2003). However, pursuant to Senate Bill 50 (SB 50), the project sponsor would be required to pay school impact fees established to offset potential impacts on school facilities. Therefore, although the project could result in additional students and overcrowding within OUSD facilities, payment of the fees mandated under SB 50 is the mitigation measure prescribed by the statute, and payment of the fees is deemed full and complete mitigation.

Parks and Recreational Facilities

Increased population resulting from the project, in conjunction with that generated by other foreseeable development in the city and the project vicinity, would increase the cumulative demand for existing neighborhood and regional parks or other recreational facilities such that new facilities could be needed in order to maintain acceptable citywide service ratios.
When considering all other planned and foreseeable development under the cumulative scenario, including development in the project vicinity, the additional population would contribute to the need for new or expanded park and recreational facilities citywide and further decrease the ratio of local-serving parkland to residents. Since cumulative development would potentially result in the need for new or expanded park and recreation facilities, and since the City does not currently meet the adopted citywide goal of 4 acres of local-serving parks per 1,000 residents, the effect on parks and recreational facilities would be considered a significant cumulative impact citywide, consistent with the determination of the Central City East Redevelopment Plan EIR.

Although the project would provide approximately 15 acres less new open space than was analyzed in the Estuary Policy Plan EIR, it would include 28.4 total acres of open space, 20.4 acres of which would be new park area that does not currently exist. The resulting ratio would be 4.1 acres of local-serving parkland per 1,000 residents, which would exceed the adopted citywide service standard of 4.0 acres per 1,000 residents, as well as the current citywide ratio of 1.33 acres per 1,000 residents. The total improved parkland and open spaces would contribute to the existing supply, and the new population generated by the project would not result in the need for additional new or expanded park facilities. Therefore, the project's contribution to the significant cumulative impact would be less than significant.

Library Services

The project, in conjunction with new residents generated by other foreseeable development in the city, would not result in a cumulative increase in demand that could require new or physically altered library facilities.

The additional population and density resulting from foreseeable development under the cumulative scenario, including development in the project vicinity, could contribute to the increase in demand for library services. New or altered physical facilities for library services may be necessary to meet this increased demand. However, as noted above, the Oakland Public Library is developing a Master Facilities Plan to assess and develop a strategy to meet the City's need for new or expanded library facilities and services. The Master Facilities Plan takes into account the long-term population growth anticipated for the City. The Main Library, which would be expected to serve the project site, is included in the Master Facilities Plan and under evaluation to identify improvements to facilities and services to adequately address future community needs. Overall, the project-generated population would constitute approximately 1.1 percent of the citywide population at buildout (according to the Citywide Cumulative Growth Scenario conducted for this analysis, see Appendix D), and would not result in an exceedance of proposed service ratios considering future planned library facilities. Therefore, the project would not result in the need for an expansion of library facilities beyond what is being proposed as part of the Master Facilities Plan, cumulative and the impact would be less than significant.

Mitigation: None Required.

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M. Utilities and Service Systems

This section describes existing public utilities in the project vicinity, and evaluates the potential impact of the project on the provision of public utilities and possible adverse physical impacts on the environment that could result from constructing new or expanded facilities. The section analyzes public water supply, sanitary sewer (wastewater) facilities, stormwater drainage facilities, solid waste, and gas and electricity services. It focuses on the effect the project would have on the ability of the City of Oakland and other service providers to deliver these services effectively. Appropriate mitigation measures are identified as necessary.

Setting

Water Service

The East Bay Municipal Utility District (EBMUD), a publicly owned utility, supplies water to parts of Alameda and Contra Costa counties, including the city of Oakland. EBMUD supplies water to nearly 1.3 million people within its estimated 325-square-mile service area. The city of Oakland comprises slightly less than one-third of EBMUD's customer base.

Water Supply System

The EBMUD water supply system includes a network of reservoirs, aqueducts, treatment plants, and distribution facilities. This network extends from its principal water source, the Mokelumne River Basin in the Sierra Nevada mountain range, to water treatment plants or to reservoirs[1] within its service area, and ultimately to residences and businesses in the East Bay. On average, 95 percent of the water delivered by EBMUD comes from the Mokelumne River watershed, with the remaining 5 percent originating as runoff within the service area. EBMUD has water rights and facilities to divert up to a maximum of 325 million gallons of water per day (mgd), subject to the availability of Mokelumne River runoff and prior water rights of other users. In addition to the Mokelumne River, in normal years, EBMUD's reservoirs in the East Bay receive about 30,000 acre feet (about 30 mgd) of water from local watershed runoff. Untreated water from local and Sierra reservoirs is transported to one of EBMUD's six water treatment plants, which are capable of filtering and processing up to 375 mgd. The Orinda Water Treatment Plant, which serves the city of Oakland and several surrounding communities, has the largest output, with a maximum capacity up 200 mgd. In early April 2005, this treatment plant had a seven-day average production of 111 mgd (EBMUD, 2005c).

Utility base maps from EBMUD show that the project site is currently served by 12-inch water lines that front the project along the Embarcadero. The portion of the site to the east of Lake Merritt Channel is serviced by a 12-inch looped system between 5th Avenue and 9th Avenue. West of 5th Avenue is serviced by a 12-inch line that terminates at the Lake Merritt Channel bridge. The Estuary Park portion of the site to the west of Lake Merritt Channel is serviced by 12-

[1] EBMUD's East Bay service area includes five reservoirs: Briones, Chabot, Lafayette, San Pablo, and Upper San Leandro.

inch branch from a separate looped system located in the Embarcadero and Fallon Street. This 12-inch branch runs from the intersection of the Embarcadero and Fallon Street to the limit of the Lake Merritt Channel bridge.

Water Demand

In early April 2005, EBMUD experienced an average demand of 161 mgd (EBMUD, 2005c). During non-drought years, EBMUD customers demand an annual average of about 220 mgd of water. By 2020, EBMUD estimates that water demand will increase to approximately 277 mgd in its service area, although, with successful implementation of water recycling and conservation programs, this demand could be reduced to about 229 mgd.

As discussed in EBMUD's Urban Water Management Plan 2000, EBMUD adopted a long-term Water Supply Management Program (WSMP) in 1993. The WSMP serves as a planning guide for the reliable provision of good-quality water to the EBMUD service area through 2020. The WSMP analysis indicates that in a severe drought,[2] the current water supply is not sufficient to meet existing or planned customer demand. An estimated supplemental supply of about 87 mgd would be needed to limit deficiency to 25 percent for current customer demand. To limit the water supply deficiency to 25 percent by 2020, a supplemental supply of 154 mgd would be needed. EBMUD anticipates that existing and planned customer demand will continue to exceed supply during severe drought conditions until a supplemental water supply project is implemented and a dependable supply is guaranteed for existing and future needs. In these drought conditions, EBMUD would impose the conservation and rationing measures set forth in its Drought Management Program.

To meet water needs during severe droughts, EBMUD is working to identify supplemental water supplies and recycled water programs and to continue implementation of water conservation measures, as described below.

Water Supply Projects

In September 1995 (two years after adopting its long-term Water Supply Management Program), EBMUD authorized a Water Supply Action Plan to identify supplemental water supplies during multiple-year droughts by pursuing several water supply components concurrently. As a result, on December 8, 2000, the U.S. Bureau of Reclamation, EBMUD, and Sacramento parties mutually agreed to develop a joint water supply from the Sacramento River. Components of this action include a diversion one mile north of the city of Freeport, pumping facilities, treatment facilities, and transmission pipes. A federal Record of Decision was issued in 2004, and the engineering design work is expected to be complete by the spring of 2006. Construction is expected to be complete by 2009. The Freeport Project would provide up to a 100-mgd, dry year water supply to EBMUD during drought periods (Freeport, 2005). Other resource options identified in the 1995 Water Supply Action Plan (and its 1996 revision) for meeting future water needs include the Bayside Groundwater Project, which involves storing excess water in a deep underground aquifer beneath the cities of San Lorenzo/San Leandro to increase the available supply of water in the

[2] Defined by EBMUD as the third consecutive year in a series of multiple dry years.

event of a drought. Consideration of approval of Phase I of the Bayside Groundwater Project is anticipated in 2005. A joint effort by the Bay Area's four largest water agencies – EBMUD, the San Francisco Public Utilities Commission, the Contra Costa Water District, and the Santa Clara Valley Water District – to explore regional desalination facilities to meet future water needs is also underway, and a detailed feasibility and environmental study is anticipated to be completed by December 2006. Implementation of Phase 1 would provide an annual capacity of 1 mgd, and Phase 2 would provide an additional annual capacity of 2 to 10 mgd (EBMUD, 2005a).

Recycled Water

The goals of using recycled water are to supplement the existing potable water supply and assist in meeting future water demands. Water for recycling is drawn from water reservoirs containing untreated water and from wastewater treatment plants. EBMUD's Nonpotable Water Policy No. 73 (1996) mandates that all customers use recycled water for non-domestic purposes when such water is of adequate quality and quantity, available at reasonable cost, not detrimental to public health, and not injurious to plant life, fish, and wildlife. EBMUD currently supplies more than 8 mgd of recycled water and other nonpotable water for irrigation, industrial processes and equipment wash-down. The Water Supply Management Program established goals of delivering an additional 8 mgd of recycled water by 2020, for a total of 5.8 billion gallons a year.

In January 2002, the City of Oakland adopted a recycled water ordinance for new developments within the City to use recycled water provided by EBMUD for common area irrigation if recycled water is available to the development area. This requires installation of a separate non-potable water distribution system on-site. The project site is located within the service area boundary of EBMUD's East Bayshore Recycled Water Project. EBMUD anticipates recycled water delivery to the project area by 2009 (Gehlhaar Oriol, 2005).

Water Conservation

EBMUD has adopted water conservation programs to address both water supply and demand. Demand-side water conservation programs are intended to reduce overall consumption of the water supply. The Water Conservation Master Plan (1994) identifies the use of free water audits, rebates, and other incentives, regulations, education, and support activities to reduce water consumption. These programs are designed to achieve annual water savings of 16 mgd by 2020. With an additional 17 mgd expected to result from "natural replacement,"[3] the total water conservation savings in 2020 is anticipated to be 33 mgd. EBMUD's supply-side conservation measures are directed toward increasing water use efficiency before or after customer use, and include improvements within EBMUD's distribution system (i.e., leak detection, pipe replacement, and corrosion control) and water recycling programs.

[3] Natural replacement is the installation of conservation hardware such as toilets, showerheads, and faucets without participation in an EBMUD program.

Sanitary Sewer Service

In addition to providing water supply, EBMUD provides sanitary sewer treatment services to approximately 640,000 people within an 83-square-mile area of Alameda and Contra Costa counties, including the city of Oakland. The city of Oakland and about eight other communities[4] comprise the EBMUD Special District No. 1 sanitary sewer treatment service area.

Wastewater Collection and Treatment Facilities

EBMUD's main wastewater treatment plant is located southwest of the I-580/I-80 interchange in Oakland, south of the San Francisco/Oakland Bay Bridge. Wastewater is collected by 29 miles of interceptor lines that move wastewater from about 1,400 miles of sewers owned and operated by the jurisdictions served. Currently, EBMUD's wastewater treatment plant has an average dry weather capacity of 168 mgd. With an average dry weather flow of approximately 77 mgd, the plant is operating at 45 percent of its capacity. During wet weather, the treatment plant accepts more flow[5]; the plant has a sustainable primary treatment capacity of 320 mgd, and a maximum secondary treatment capacity of 168 mgd.[6]

In addition, EBMUD facilities in the area include components of its San Antonio Creek Wet Weather Treatment Plant (SACWWTP), one of its three Wet Weather Treatment Program improvements in the East Bay. The SACWWTP screens, disinfects, dechlorinates, and disposes of up to 51 million gallons of diluted wastewater per day during intense wet weather events. Included on the project site is a small dechlorination facility at 330 Embarcadero (immediately north of the Jack London Aquatic Center) and a 54-inch pipeline that runs in an elevated trestle across Lake Merritt Channel, to the dechlorination facility where the sewage is treated, then through Estuary Park to discharge treated wastewater into the Estuary via the submerged outfall pipe. The 84-inch South Interceptor located at the project frontage along the Embarcadero is the main sewage pipeline that carries sewage to the main wastewater treatment plant (near the Bay Bridge.) This interceptor runs parallel to the 54-inch outfall pipeline and is visible at mean and low tide.

The City of Oakland owns, operates, and maintains a local sanitary sewer collection system covering approximately 39 square miles and including 850 miles of pipe. The city's sewer collection system is divided into basins and subbasins. Each numbered subbasin encompasses a specific physical area, and its sewer flows are assigned to a single discharge point from the city's collection system into the EBMUD's interceptor lines. The project site is located in subbasins numbered 54-07, 59-03, and 64-07.

City sewer pipes range from 6 to 72 inches in diameter, with most lines pre-dating 1938 and with some parts of the system over 100 years old. Most of the system is gravity-fed, and about five pump stations service the entire area. Some areas of Oakland, such as former military bases,

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4 EBMUD's main wastewater treatment plant treats municipal wastewater from the cities of Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont, El Cerrito, Kensington, and part of Richmond.

5 Storage basins provide plant capacity for a short-term hydraulic peak of 415 million gallons per day (mgd).

6 *Primary* treatment involves preliminary treatment (screening) and sedimentation (the removal of solid particles from suspension by gravity). *Secondary* treatment involves biological treatment of wastewater to remove remaining organic matter.

cemeteries, large parks, and some hillside areas, are not part of the sewer service system. Over 90 percent of the sewer customers are residential users. The existing sewer system at the project site flows into a City sewer main that connects to the EBMUD 84-inch interceptor in the Embarcadero right-of-way and flows to the EBMUD wastewater treatment plant near the I-580/I-80 interchange.

The site is currently served by 8- to 12-inch lines serviced by the City of Oakland and that connect to the existing 84-inch EBMUD interceptor as indicated from City of Oakland and Port of Oakland utility base maps. There are three separate connection points to the 84-inch interceptor to the east of the Lake Merritt Channel at 10th Avenue, 8th Avenue and between 5th Avenue and the Lake Merritt Channel bridge. The Estuary Park portion of the site to the west of the Lake Merritt Channel connects to the interceptor at Oak Street.

Inflow/Infiltration Correction Program

A continuing issue with respect to sanitary sewer collection has been inflow and infiltration of stormwater into EBMUD and Oakland sewer lines, resulting in high flow levels and overflow of untreated wastewater during wet weather. Most of the stormwater enters sewer systems by infiltration (i.e., stormwater passes through the soil and into deteriorated sewer pipes). Inflow originates from storm water inlets and manholes that connect to the sanitary sewer system rather than the storm water system.

In 1986, with EBMUD as the lead agency, the Wet Weather Program was initiated to improve treatment capacity for wet weather flows and reduce the amount of inflow and infiltration throughout the EBMUD collection system. The cities of Alameda, Albany, Berkeley, Emeryville, Kensington, Oakland, Piedmont, and portions of El Cerrito and Richmond participate in EBMUD's Wet Weather Program. The program has resulted in four new wet weather treatment facilities, two storage basins, 7.5 miles of new interceptors, and expansion of the main wastewater treatment plant. These new facilities accommodate an increase in peak wet weather treatment capacity from 290 mgd to 775 mgd. The City's long-range sewer improvements are anticipated to reduce peak regional flows from 1.1 billion gallons per day to 775 mgd.

Pursuant to the Wet Weather Program, EBMUD has allocated its capacity to treat wet weather flows among EBMUD's municipality/service area customers. The city of Oakland's allocation was divided among multiple subbasins within the city based on existing development at the time of allocation and then-current projections for growth within the various subbasins (and not on physical parameters/limitations within the conveyance and treatment infrastructure). The project is located within three subbasins (54-07, 59-03, and 64-07), which have a collective un-used allocation of 0.11 mgd.

In 1985, at the inception of the Wet Weather Program, the Inflow/Infiltration study projected a growth allocation of about 15 mgd over a 20-year period. To date, using actual housing construction data from the census, and approved housing projects through June 30, 2005, the city has used approximately 91 percent of its growth allocation.

Stormwater Drainage Facilities

In Oakland, stormwater generally flows southwest from the Oakland/Berkeley hills to the developed flatlands. It then flows primarily through underground storm drains and culverts to the San Francisco Bay via the Oakland Estuary (directly or by way of Lake Merritt) or through the city of Emeryville.

The Alameda County Flood Control and Water Conservation District constructs, operates, and maintains major trunk lines and flood control facilities in Oakland, and the Oakland Public Works Agency (PWA) is responsible for construction and maintenance of the local storm drainage system within Oakland's public areas and roads. PWA makes structural improvements to ensure that the system can reasonably handle stormwater flow. The City is currently preparing a comprehensive storm drainage master plan to identify existing deficiencies in the system and develop recommended priorities for rehabilitating the system in order to reduce localized flooding (Oakland, 2004).

Onsite runoff is currently discharged overland and via existing pipes to the Oakland Estuary, however these site drains are part of the City's system (Amirzehni, 2005). The portion of the site to the east of Clinton Basin is serviced by a piped system that discharges at several separate locations along the shoreline. The area of the site between Clinton Basin and the Lake Merritt Channel does not have any record of piped drainage and appears to drain overland to the Oakland Estuary. The Estuary Park area is serviced by a combination of piped storm water and overland runoff that discharges directly to the Oakland Estuary. Offsite storm drainage is located along the project frontage in the Embarcadero. Existing City of Oakland base maps indicate that offsite storm water is bounded to the limit of the I-880 freeway and Amtrak/Union Pacific railroad north of the site, and three small drainage systems serve this area along the I-880 freeway (Amirzehni, 2005). Runoff from the Embarcadero is discharged to the Oakland Estuary via the existing onsite system and discharge points along the shoreline.

The City currently does not have a systematic method for assessing the capacity of the storm drainage system, and therefore relies on instances of needed repair and maintenance as a primary source of evaluation (Oakland, 1995).

Solid Waste Service

Waste Management and Disposal

Non-hazardous waste in the city of Oakland, including the project site, is collected by Waste Management of Alameda County (WMAC), which provides curbside pickup for residential, commercial, and industrial non-hazardous waste and transports it to WMAC's Davis Street Transfer Station in the city of San Leandro. The Alameda County Waste Management Authority estimates that, in 2000, Oakland disposed of approximately 423,200 tons of solid waste, or about 1,160 tons per day (CIWMB, 2004a).

Transfer trucks haul waste to the Altamont Landfill and Resource Facility, located approximately 35 miles east of Oakland near Livermore. The Altamont Landfill has a permitted maximum daily

disposal of 11,150 tons per day, ten percent of which is attributable to the city of Oakland (CIWMB, 2004b). The Altamont Landfill has recently updated its conditional use permit, which allows for an additional capacity of approximately 40 million tons of disposal over the next 19 to 38 years (St. John, 2004).

Demolition and construction debris generated in Oakland is generally hauled by contractors and local construction companies to recycling facilities in the East Bay or to the Vasco Road Landfill near the city of Livermore. The Vasco Road Landfill, owned by Republic Services of California I, LLC, is estimated to have sufficient capacity through approximately 2015 (CIWMB, 2004c).

Waste Diversion

As required by enactment of the California Integrated Waste Management Act (AB 939) in 1989 (discussed under "Federal, State, and Local Regulations" below), the City of Oakland has prepared a Source Reduction and Recycling Element (SRRE) that describes 1) the chief characteristics of the city's waste, 2) existing waste diversion programs and rates of waste diversion, and 3) the new or expanded programs the city intends to implement to achieve the mandated rates of diversion.[7] In 2000, about 423,200 tons of waste was generated by the city of Oakland, approximately one-third of which was generated by residential uses (CIWMB, 2005a). According to the California Integrated Waste Management Board, the city's waste diversion rate has increased from approximately 11 percent in 1990 to an estimated 50 percent in 2002 (CIWMB, 2005a). The City's waste diversion programs and requirements are discussed under "Federal, State, and Local Regulations" below.

Energy Services

Electricity and gas service in the city of Oakland is provided primarily by Pacific Gas and Electric (PG&E), which owns the gas and electrical utility supply lines. Throughout most of Oakland, electrical power is delivered via overhead distribution and transmission lines, and natural gas is distributed through underground piping. PG&E expands its services on an as-needed basis and requires the user to fund the extension of service.

Following restructuring of the electricity industry in 1996, California experienced a number of problems related to energy supply and demand. These problems were largely driven by increases in demand from population and economic growth paired with insufficient local supply. Inadequate supply was due to the lack of new power plants constructed in the state and the sale of a number of power plants to privately owned, out-of-state energy companies. As a result, Bay Area consumers have been experiencing rising costs and uncertainty regarding the supply of electricity. The State of California Energy Action Plan, adopted in May 2003, indicates that the California Energy Commission (CEC) is currently considering applications for the development of new power-generating facilities in the Bay Area and elsewhere in the state to establish adequate, reliable, and reasonably priced energy for Californians (California, 2003).

[7] Waste diversion is defined as the total waste that a jurisdiction generates less the amount that is disposed at a landfill or transformation facility. Waste diversion occurs through reduction, reuse, recycling, and composting programs.

Federal, State, and Local Regulations

Water Quality, Supply and Distribution

Safe Drinking Water Act

The U.S. Environmental Protection Agency (U.S. EPA) administers the Safe Drinking Water Act (SDWA), the primary federal law that regulates the quality of drinking water and establishes standards to protect public health and safety. The Department of Health Services (DHS) implements the SDWA and oversees public water system quality statewide. DHS establishes legal drinking water standards for contaminants that could threaten public health.

Senate Bill 610 / Senate Bill 221

Senate Bill (SB) 610, codified as Sections 10910-10915 of the California Public Resources Code, requires local water providers to conduct a water supply assessment for projects proposing over 500 housing units, 250,000 square feet of commercial office space (or more than 1,000 employees), a shopping center or business establishment with over 500,000 square feet (or more than 1,000 employees), or equivalent usage. Local water suppliers must also prepare or have already prepared an Urban Water Management Plan to guide planning and development in the water supplier's service area, and specifically pursue efficient use of water resources. Senate Bill (SB) 221 similarly amended the Subdivision Map Act to ensure confirmation that public water supply is sufficient to serve proposed development projects of 500 dwelling units or more.

Stormwater Drainage

Regulations related to the quality and quantity of stormwater runoff (i.e., Federal Clean Water Act / National Pollutant Discharge Elimination System (NPDES are discussed in Section IV.D, Hydrology and Water Quality. As previously stated, this section focuses on whether the proposed project would result in the need for new or expanded stormwater drainage facilities.

Solid Waste

Assembly Bill (AB) 939

The California Integrated Waste Management Act of 1989, or Assembly Bill (AB) 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of all solid waste generated (from 1990 levels), beginning January 1, 2000, and at least 75 percent by 2010. As required by AB 939, the City of Oakland has prepared a Source Reduction and Recycling Element (SRRE) that requires proposed development projects to undergo, as part of the required environmental review, an assessment of project impacts on the City's ability to maintain the mandated 50-percent waste diversion rates. Projects that would have an adverse effect on the City's waste diversion goals are required to include waste diversion mitigation measures to assist in reducing these impacts to less-than-significant levels.

Alameda County Waste Reduction and Recycling Initiative (Measure D)

In addition to AB 939, the 1990 voter initiative Measure D (Alameda County Waste Reduction and Recycling Initiative) mandates all cities in Alameda County to divert 75 percent of their solid waste from landfills by the year 2010.

Construction and Demolition Debris Waste Reduction and Recycling Requirements (Ordinance No. 12253 C.M.S.)

The City of Oakland's construction and demolition (C&D) debris waste reduction and recycling requirements are intended to further the goals of AB 939 and Alameda County's Measure D. As part of the application for a building permit, a project applicant is required to prepare and submit a Construction and Demolition Debris Waste Reduction and Recycling Plan (WRRP) to divert from landfill disposal at least 50 percent of all C&D debris generated by project development.

Guidelines for the Development and Evaluation of Recycling Collection and Storage Areas (Policy 100-28)

The City of Oakland Planning Commission's *Guidelines for the Development and Evaluation of Recycling Collection and Storage Areas* (Policy No. 100-28) requirements regulate the design, location, and maintenance of recycling collection and storage areas. The policy requires that a minimum of two cubic feet of storage and collection area shall be provided for each dwelling unit and for each 1,000 square feet of commercial space. A proposed project must comply with this policy prior to the issuance of a building permit.

Energy

Buildings constructed after June 30, 1977 must comply with standards identified in Title 24 of the California Code of Regulations. Title 24, established by the California Energy Commission (CEC) in 1978, requires the inclusion of state-of-the-art energy conservation features in building design and construction, including specific energy-conserving design features, use of non-depletable energy resources, or a demonstration that buildings would comply with a designated energy budget.

Utilities and Service Systems Impacts Discussion

Significance Criteria

Based on Appendix G of the CEQA Guidelines and the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines, the project would have a significant utilities and service systems impact if it would:

- Exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board;
- Require or result in construction of new stormwater drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects;

- Exceed water supplies available to serve the project from existing entitlements and resources, and require or result in construction of water facilities or expansion of existing facilities, construction of which could cause significant environmental effects;

- Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new wastewater treatment facilities or expansion of existing facilities, construction of which could cause significant environmental effects;

- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs and require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects;

- Violate applicable federal, state, and local statutes and regulations related to solid waste;

- Violate applicable federal, state and local statutes and regulations relating to energy standards; or

- Result in a determination by the energy provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects.

Local Plans and Policies

Oakland General Plan policies and other applicable plans and policies that pertain to utility services and related effects, and that apply to the project, are listed in **Appendix F**. Key policies are identified and discussed in Section IV.A, Land Use, Plans, and Policies. General Plan policies that are also significance criteria or contain a regulatory threshold which the project must meet are addressed in this section.

Project Impacts

Water Service

Impact M.1: The project would not exceed water supplies available to serve the project from existing entitlements and resources and require or result in the construction of water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Less than Significant)

The project would result in average day water demand of approximately 640,000 gallons per day (gpd) (BFK Engineers, 2005). In 2004, the city of Oakland consumed approximately 14.5 million gallons per day (mgd) of water, therefore the project would therefore result in a gross increase of approximately four percent of the city's average daily water use (Szczepankowska, 2005). This gross estimate is conservative as it does not consider the amount of current water demand associated with existing uses to be removed from the site (approximately 60,000 gpd).

Pursuant to Sections 10910-10915 (SB 610) of the California Water Code, the City of Oakland submitted a request to EBMUD to prepare a water supply assessment (WSA) for the project.[8] In response to the City's request, EBMUD determined that the project's estimated water demand is accounted for in EBMUD's water demand projections, as published in EBMUD's 2000 Urban Water Management Plan (Kirkpatrick, 2004).[9] The project would not change EBMUD's 2020 water demand projection and would not result in a new significant increase in projected water use. Therefore, the project would not result in the need for new or expanded water entitlements.

The Project will participate (along with all other EBMUD customers) in the implementation of the rationing and conservation measures set forth in EBMUD's Drought Management Program. . Additionally, consistent with the City's 2002 recycled water ordinance, EBMUD also recommends use of a non-potable water distribution system at the project site to enable the use of recycled (reclaimed) water generated by EBMUD's East Bayshore Recycled Water Project. Recycled water delivery to the project area is expected by 2005 . Reclaimed water infrastructure will be installed throughout the proposed site and along the project frontage for future connection to the EBMUD reclaimed water network that will be extended to the project site. Similar to water lines, reclaimed water lines will be installed above the water table.

Existing water lines in the project vicinity are expected to be adequate to serve the project's anticipated water demand. As discussed in the Setting, the project site is served by a 12-inch EBMUD water line within the Embarcadero right-of-way, which forms a "looped" system between 5th and 9th Avenues, with a 12-inch line serving the area west of 5th Avenue and that terminates at the Lake Merritt Channel bridge. The Estuary Park portion of the site to the west of Lake Merritt Channel is serviced by 12-inch branch from a separate looped system located in the Embarcadero and Fallon Street. This 12-inch branch runs from the intersection of the Embarcadero and Fallon Street to the limit of the Lake Merritt Channel bridge.

As part of the project, water mains designed and supplied by EBMUD would be installed onsite to serve the project demands. Street grades on the proposed site will be raised approximately 3-feet above existing grades to allow for installation of water lines above the groundwater table. Each project building would have service connections for residential water service, commercial water service, fire service, and irrigation.

Water flow data from EBMUD for the existing 12-inch water system in the Embarcadero has a hydrant test flow of 1,300 gallons per minute (gpm), indicating that the offsite water facilities will be adequate for serving this project. The City has determined that adequate fire flow to serve the project site exists within the EBMUD water line that lies within the Embarcadero right-of-way (Williams, 2005). While extension and possible relocation of existing water mains to serve the

8 A "project," as defined by SB 610, includes proposals for new residential use over 500 units; retail use over 500,000 square feet; office use over 250,000 square feet; hotel/motel use over 500 rooms; industrial use over 40 acres or 650,000 square feet; a mixed-use project including any use as large as the above; or any project that would demand more water than the equivalent of 500 dwelling units.

9 California Water Code Section 10610 et seq requires urban water suppliers to prepare, adopt, and implement urban water management plans (UWMPs). The Water Code specifies the required contents for UWMPs, which includes identifying and quantifying existing and planned sources of water available to meet demand within the provider's service area for a 20-year planning period.

project could cause environmental impacts during construction, those impacts would be reduced to less-than-significant levels through construction-related mitigation measures identified throughout this EIR.

Consistent with the Landscape Water Conservation section of the City of Oakland Municipal Code (Chapter 7, Article 10), the project would incorporate, as feasible and applicable, the following water-efficient equipment and devices into building design and project plans:

- low-, ultra-low, and dual flush flow toilets and showerheads
- high efficiency horizontal axis clothes washing machines (if installed by developer)
- Sub-metering of multifamily housing
- Water efficient irrigation systems (or residential units and common areas) that include drip irrigation and efficient sprinkler heads
- Evapotranspiration (ET) irrigation controllers
- Drought-resistant and native plants for landscaping
- Minimization of turf areas.

Given EBMUD's existing water capacity and delivery infrastructure and its Water Supply Management Program and Drought Management Program, the project will not have a significant impact on water service.

Mitigation: None Required.

Sanitary Sewer Service

Impact M.2: The project's projected wastewater demand would not result in the city of Oakland exceeding its citywide allocation under the Wet Weather Program or East Bay Municipal Utility District's (EBMUD) capacity to serve the project's projected demand in addition to its existing commitments within its service area. (Less than Significant)

The project would increase sewage generation on the site, resulting in greater demands on EBMUD's wastewater treatment facility serving the project site. The project would be expected to increase the estimated average dry weather wastewater flow to approximately 576,000 gpd.[10]

[10] The estimated wastewater flow is approximately 90 percent of the project's anticipated total average day water demand: 640,000 x 0.90 = 576,000. No factor for water loss due to irrigation is applied.

Based on the 3.2 peaking factor recommended in the draft City of Oakland Sanitary Sewer Design Standards, peak-hour wet weather flow from the project is estimated to be 1.84 mgd.[11]

Sewage from the project site flows into a City of Oakland sewer main that connects to EBMUD's 84-inch interceptor in the Embarcadero. The sewage then flows west to the EBMUD wastewater treatment plant near the I-580/I-80 interchange. The project's estimated sewage flows (when combined with existing conditions and other expected growth) 1) would not exceed the City's or EBMUD's existing capacity/ability to transport sewage to the treatment plant, 2) would not cause the City to exceed the total treatment capacity allocated to the City by EBMUD, and 3) would not exceed EBMUD's existing capacity/ability to treat sewage within its service area. Therefore, the project's impact on sanitary sewer service would be less than significant.

Onsite sanitary sewer lines would be located under new streets constructed as part of the project and would typically connect via gravity flow to the EBMUD 84-inch interceptor in the Embarcadero. The project may also require the installation of sewer force mains at the outer reaches of the sewer system due to anticipated differential settlement throughout the site. Gravity and force main sewer systems will be installed within the proposed public right of way.

While the sewer line along the project frontage would be replaced as part of the project, the project would not result in the need for new or expanded wastewater treatment facilities. While the expansion of onsite sewer mains to serve the project could cause environmental impacts during construction, those impacts would be reduced to less-than-significant levels through construction-related mitigation measures identified throughout this EIR in, for example, Section IV.B, Traffic, Transportation, Circulation and Parking; Section IV.C, Air Quality; Section IV.G, Noise; and Section IV.D, Hydrology and Water Quality.

The project's projected demand would exceed the current unused sub-allocation for the relevant subbasins (54-07, 59-03, and 64-07). The subbasin allocation system is the method by which EBMUD and the City of Oakland ensure that the city does not exceed its city-wide allocation as part of the Wet Weather Program. In 1985, at the inception of the Wet Weather Program, the Inflow/Infiltration study projected a growth allocation of about 15 mgd over a 20-year period. As previously indicated, the city has used approximately 91percent of its growth allocation.[12] With the project, the city would use approximately 92.6 percent of its allocation. Therefore, a portion of this unused allocation could be re-allocated, through coordination and agreements with EBMUD, to the relevant subbasins to accommodate the project's projected demand. As of the date of publication of this DEIR, this re-allocation has not occurred. As there is sufficient system-wide conveyance and treatment capacity dedicated to the city of Oakland, the fact that the project would cause the relevant subbasins to exceed their wet weather allocations is not a physical impact.

Mitigation: None Required.

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11 A 3.2 peaking factor is applied to the average day dry weather flow to estimate peak-hour wet weather flows: 576,000 x 3.2 = 1,843,200 (1.84 mgd).

12 Based on actual housing construction data from the U.S. Census and approved residential projects as of June 30, 2005.

Stormwater Drainage Facilities

Impact M.3: The project would not require or result in construction of new offsite stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Less than Significant)

As discussed in Section IV.D, Hydrology and Water Quality, the project would result in a net decrease (approximately 10 percent) in impervious surfaces compared to existing conditions. This is primarily due to the installation of new unpaved open space proposed primarily in and around Shoreline Park, Gateway Park, and portions of Channel Park. As a result, the amount of peak runoff from the site would decrease compared to existing conditions (and would likely be reduced), suggesting that the potential for increased flooding would be reduced and therefore would not significantly affect the existing storm drainage system. Additionally, the project site is located in an area that has previously been developed and that is served by existing stormwater drainage facilities. Although there have been no reported problems with the capacity or condition of the existing system, the project would upgrade the existing onsite facilities to serve the development parcels. The project will install new storm drain throughout the proposed project size in conformance with City of Oakland design criteria. Storm drain will be discharged to the Oakland Estuary through existing and new outfalls permitted through RWQCB, the USACE and BCDC. New storm drain will be designed to accommodate drainage from the Embarcadero.

While replacement and possible relocation of storm drainage to serve the project could cause environmental impacts during construction, those impacts would be reduced to less-than-significant levels through construction-related mitigation measures identified throughout this EIR in, for example, Section IV.B, Traffic, Transportation, Circulation and Parking; Section IV.C, Air Quality; Section IV.G, Noise; and Section IV.D, Hydrology and Water Quality.

Solid Waste Service

Impact M.4: The project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs, and therefore the project would not require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects. The project would not impede the City of Oakland's ability to meet the waste diversion requirements of the California Integrated Waste Management Act or the Alameda County Waste Reduction and Recycling Initiative, nor cause the City to violate other applicable federal, state, or local statutes and regulations related to solid waste. (Less than Significant)

Solid Waste from Project Construction

Project construction would generate construction waste and debris. Waste generated by construction activity is estimated at approximately 4 pounds per square foot of non-residential construction and approximately 4.4 pounds per square foot of residential construction (US EPA,

1998). Using these estimates, project construction would generate approximately 9,000 tons[13] of debris over the 11-year construction period. The construction-generated waste would be removed from the project site and disposed of at the Vasco Road Landfill, which is estimated to have sufficient capacity to serve existing users through approximately 2015 (CIWMB, 2004c). Pursuant to AB 939 and City of Oakland Ordinance No. 12253, the project would prepare and implement a Construction and Demolition Debris Waste Reduction and Recycling Plan (WRRP) to ensure diversion of at least 50 percent of the construction and demolition debris from each stage of project implementation. The project therefore would not prevent the City of Oakland from being able to meet mandated state or local diversion rates.

Solid Waste from Project Operations

The California Integrated Waste Management Board (CIWMB) provides estimates for solid waste generation by land use category. The project would include residential land use, which would generate approximately two pounds of solid waste per resident per day, or 0.33 ton per resident per year. The retail component of the project would generate approximately 0.3 ton of solid waste per employee per year. As detailed in **Table IV.M-1**, projected solid waste generation resulting from the project is 1,857 tons of solid waste annually. Overall, the annual tonnage of solid waste generated from commercial uses (64 percent) is approximately twice the amount generated by residential uses (36 percent), therefore the annual tonnage of solid waste generated by the project is expected to be less than that currently generated by the nearly 300,000 square feet of commercial activities (industrial, marine-related service, storage/warehousing, bulk retail) currently operating on the project site.

[13] The project would include 230,000 gross square feet of non-residential construction (200,000 net square feet plus 30 percent) and 4.0 million gross square feet of residential construction (3.1 million square feet plus 30 percent).

TABLE IV.M-1

OAK TO NINTH AVENUE PROJECT ESTIMATED SOLID WASTE GENERATION (tons per year)

Proposed Project Land Use	**Disposal Rate**	**Estimated Number of Residents or Employees**	**Estimated Tons of Solid Waste/Year** (rounded)
Residential (3,100 units)	0.33 ton per resident[a]	5,061 residents	1,670 tons/year
Retail (200,000 square feet)	0.30 ton per employee[b]	623 employees	187 tons/year
Total			**1,857 tons/year**

[a] Based on 2000 estimated disposal rates for Oakland residents,
[b] Based on disposal rate estimates for Retail Trade – General Merchandise Stores.

SOURCE: California Integrated Waste Management Board (2005b)

In 2000, the city of Oakland disposed of approximately 423,200 tons of waste at the Altamont Landfill. The project's estimated 1,857 annual tons of solid waste would represent an increase of approximately 0.4 percent in this disposal amount. The project-generated waste would be disposed of at the Altamont Landfill and would result in an increase of less than 0.1 percent of the total amount of refuse processed annually at that facility. The Altamont Landfill currently has adequate permitted capacity to accommodate this increase in solid waste disposal.

The project would participate in City of Oakland and Alameda County recycling and waste diversion programs, and specifically the City's recently expanded residential curbside recycling program. The project would ensure suitable storage locations and containers for recyclable materials in or around the project buildings and public outdoor spaces. The design, location, and maintenance of recycling collection and storage areas would comply with the City of Oakland Planning Commission's *Guidelines for the Development and Evaluation of Recycling Collection and Storage Areas* (Policy No. 100-28). Therefore, the project's contribution to Oakland's overall waste stream in and of itself is not considered significant. With continued participation and adherence to these programs, the project would not require or result in new or expanded landfill facilities or impede the City's ability to meet mandated waste diversion requirements.

Mitigation: None Required.

Energy Services

Impact M.5: The project would not violate applicable federal, state, or local statutes and regulations relating to energy standards. The project would not result in a determination by the energy provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments, nor require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects. (Less than Significant)

The project would increase the amount of development on the site and would therefore result in an incremental increase in demand for gas and electrical power. The level of increase resulting from the development of 3,100 multifamily units and 200,000 square feet of commercial use (in addition to the removal of existing uses on the site) is not anticipated to require new significant expansion of gas or electricity facilities, and would be minimal relative to the demands of PG&E's service area. PG&E infrastructure exists on the project site, and all improvements and extensions required to accommodate the project would be determined in consultation with PG&E prior to installation**.** Although the project will involve undergrounding, relocation, and perhaps upgrade of gas and electricity infrastructure, that could create environmental impacts during construction, those impacts would be reduced to less-than-significant levels through construction-related mitigation measures identified throughout this EIR in, for example, Section IV.B, Traffic, Transportation, Circulation and Parking; Section IV.C, Air Quality; Section IV.G, Noise; and Section IV.H, Hydrology and Water Quality. Additionally, the project would be required by the City to comply with all standards of Title 24 of the California Code of Regulations, aimed at the incorporation of energy-conserving design and construction, and therefore the project would not violate any energy-related standards or regulations, nor would it require the construction of new or expanded energy facilities. As a result, the project would have a less-than-significant impact on the provision of energy services.

Mitigation: None Required.

Cumulative Impacts

Cumulative Context

As discussed above, the project would not result in significant project-level impacts that affect the ability of the City of Oakland and other service providers to effectively deliver public water supply, sanitary sewer (wastewater), stormwater drainage, solid waste, and gas and electricity services to the project site. Service demand from the project would combine with demands from other foreseeable development, however, causing a cumulative increase in demand for utility services. The geographic context used for the cumulative assessment of water supply impacts is EBMUD's entire service area, which includes Oakland and several other jurisdictions throughout Alameda County and Contra Costa County. The assessment of cumulative impacts on sanitary sewer (wastewater) and stormwater drainage services considers Oakland and its surrounding areas, in accordance with the Oakland Cumulative Growth Scenario as refined for this EIR. The service regions of the Altamont Landfill and Resource Facility and the Vasco Road Landfill make up the geographic context used to assess cumulative solid waste impacts. PG&E's 70,000-square-mile service area of northern and central California (PG&E, 2005) is the cumulative context for gas and electricity service.

Cumulative Impacts on Utilities and Service Systems

Impact M.6: The increased development resulting from the project, in conjunction with population and density of other foreseeable development in the city, would not result in significant cumulative impacts on utilities and service systems. (Less than Significant)

Water Service

The project, in conjunction with reasonably foreseeable future projects, could result in a cumulative increase in demand for water service. However, EBMUD has indicated that the project site and its associated water demand are accounted for in its cumulative demand projections (through planning horizon year 2020) in the Urban Water Management Plan 2000. EBMUD has confirmed that the gross increased water demand resulting from the project (average day water demand 840,040 gallons per day) would not change its 2020 water demand projection, and would not result in a new significant increase in water use. The increases in demand attributable to other future development would be addressed on a site-by-site basis by EBMUD prior to approval of new development.

As described previously in this section, during multiple dry years the Urban Water Management Plan indicates that deficiencies in water supply of up to 67 percent (year 2020) could occur unless water conservation and recycling goals are met and a supplemental water supply is developed. The project and other foreseeable development in the project vicinity would be required to employ EBMUD's recommended water conservation measures, and wherever feasible, participate in water recycling programs, to minimize the effects of water supply during severe drought. The proposed project would also be required to comply with the City's Landscape Water Conservation Ordinance and all City policies aimed at water use reduction, as would other reasonably foreseeable future projects in Oakland.

The project and other foreseeable future development in Oakland (approximately one-third of EBMUD's service area) would be located in a largely built-out urban area where water supply is already provided. While extension and possible relocation of existing water mains to serve the project may cause environmental impacts during construction, those impacts would be reduced to less-than-significant levels through construction-related mitigation measures identified throughout this EIR. Therefore, the effect of the project on water supply, in combination with other foreseeable projects, would be less than significant.

Sanitary Sewer Service

The project, in conjunction with reasonably foreseeable future projects, could produce a cumulative increase in sewage generation, resulting in increased demand on EBMUD's wastewater treatment facility serving the project site. However, the City would continue to implement the EBMUD Wet Weather Program to improve treatment capacity for wet weather flows and reduce the amount of inflow and infiltration throughout the EBMUD collection system. The City would also continue to implement its 25-year inflow and infiltration collection maintenance and rehabilitation program, thereby reducing the potential of exceeding system capacity. Project flow would be accommodated by EBMUD, separate from the city's collection system. The sewer system at the project site flows into a city sewer main that connects to the

EBMUD 84-inch interceptor in the Embarcadero. Capacity of the interceptor is based on the city's allocation of flow at the nearby EBMUD treatment plant. The City has determined that there is adequate capacity in the Interceptor to accommodate flows anticipated from the project, both in dry-weather and peak wet-weather conditions. The capacity of the sewer system could be increased if growth was to exceed projections, but facilities are limited by flows projected by the City (as part of EBMUD's planning process), and the overall Wet Weather Master Plan. Given the existing capacity and continued implementation of this program aimed at the sewer system capacity, the project, in combination with other reasonably foreseeable future projects, would not result in the need for new or expanded wastewater treatment facilities. While expansion and/or replacement/relocation of onsite sewer mains to serve the project could cause environmental impacts during construction, those impacts would be reduced to less-than-significant levels through construction-related mitigation measures identified throughout this EIR.

Stormwater Drainage Facilities

The project, in conjunction with reasonably foreseeable future projects, would not result in a cumulative increase in stormwater runoff requiring new or expanded stormwater drainage facilities since the project site independently collects and discharges runoff directly to the Oakland Estuary. The project would result in a net decrease (approximately 10 percent) in impervious surfaces compared to existing conditions, primarily due to the increased unpaved open space that would be developed. Therefore, the amount of runoff from the site would be the same or less than existing conditions. Also, existing stormwater drainage facilities serve the project site and there are no reported problems with the capacity or condition of the existing system (Amirzehni, 2005). Nevertheless, the project would upgrade the existing onsite facilities to serve the project. Potential impacts related to the construction of upgraded facilities would be reduced to less-than-significant levels with implementation of construction-related mitigation measures identified throughout this EIR. The project therefore would not contribute to any cumulative increases in the demands on the storm drainage system.

Solid Waste Service

The project, in conjunction with reasonably foreseeable future projects, could result in a cumulative increase in solid waste and debris generated by construction and operations. Area landfills have adequate future capacity, however, and implementation of City and County waste reduction and diversion requirements and programs would continue, thereby reducing the potential for exceeding existing capacities. The Vasco Road Landfill is estimated to have sufficient capacity to serve existing users through approximately 2015, and the Altamont Landfill has expanded its capacity by approximately 40 million tons to accommodate disposal through approximately 2042. In total, the project would generate 9,000 tons of solid waste and debris over the 11-year construction period, and 1,857 tons of solid waste annually during project operation. The project-generated waste would be disposed of at the Altamont Landfill and would result in an increase of less than 0.1 percent of the total amount of refuse processed annually at that facility. The facility currently has adequate permitted capacity to accommodate this increase in solid waste disposal. Additionally, the project and other reasonably foreseeable future projects would be required to adhere to and participate in all other waste reduction and diversion requirements and programs administered by the City of Oakland and Alameda County. It is therefore

reasonable to conclude that cumulative development would not result in new or expanded landfill facilities or impede the City's ability to meet mandated waste diversion requirements. The effect of the project on solid waste service, in combination with other foreseeable projects, would be less than significant.

Energy Services

The project, in conjunction with reasonably foreseeable future projects, could result in a cumulative increase in the demand for gas and electrical power in PG&E's service area of northern and central California. The State of California Energy Action Plan reports that energy consumption statewide is increasing annually while the in-state power generation facilities are aging and most of the natural gas supply is produced out of state. Regardless, the project and other reasonably foreseeable future development would be located in areas already served by gas and electricity infrastructure, and the increased power demand relative to the regional service area would be minimal. New or expanded power facilities would not be required as a direct result of project development. Construction-related environmental impacts associated with undergrounding and possibly the expansion of existing gas and electricity infrastructure to serve the project would be reduced to less-than-significant levels by mitigation measures identified throughout this EIR. Furthermore, the project and other reasonably foreseeable future development would be required to comply with all standards of Title 24 of the California Code of Regulations, and therefore would not violate any energy-related standards or regulations. Overall, the effect of the project on energy services, in combination with other foreseeable development, would be less than significant.

Mitigation: None Required.

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CHAPTER V
Alternatives

A. Criteria for Selecting Alternatives

The California Environmental Quality Act (CEQA) requires that the EIR compare the effects of a "reasonable range of alternatives" to the effects of the project. The alternatives selected for comparison would attain most of the basic objectives of the project and avoid or substantially lessen one or more significant effects of the project (CEQA Guidelines Section 15126.6). The "range of alternatives" is governed by the "rule of reason" which requires the EIR to set forth only those alternatives necessary to permit an informed and reasoned choice by the decision-making body and informed public participation (CEQA Guidelines Section 15126.6[f]). CEQA generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors.

The alternatives addressed in this EIR were selected based on the following factors:

- The extent to which the alternative would accomplish most of the basic objectives of the project (identified in Chapter III)
- The extent to which the alternative would avoid or lessen any of the identified significant environmental effects of the project (discussed throughout Chapter IV)
- The feasibility of the alternative, taking into account site suitability, availability of infrastructure, general plan consistency, and consistency with other applicable plans and regulatory limitations
- The extent to which an alternative contributes to a "reasonable range" of alternatives necessary to permit a reasoned choice, and
- The requirement of the CEQA Guidelines to consider a no project alternative and to identify an environmentally superior alternative in addition to the no-project alternative (CEQA Guidelines, Section 15126.6(e)).

The project would result in significant impacts related to the topics listed below. Impacts that are not mitigated to less-than-significant levels are considered "significant and unavoidable" and are indicated in parentheses and by "SU". This list is intended to provide context for the extent to which an alternative would avoid or lessen any of the identified significant environmental effects of the project.

- Land Use (land use change, General Plan and zoning consistency, community division)

- Traffic (project and cumulative) (SU)
- Air Quality (cumulative regional emissions) (SU)
- Water Quality
- Cultural Resources (historic resources) (SU)
- Geology, Soils, and Seismicity
- Noise (construction-related and land use/noise compatibility) (SU)
- Hazardous Materials
- Biological Resources

The significant environmental effects of the project and each alternative are summarized in **Table V-5** at the end of this chapter.

B. Alternatives Selected for Consideration

With consideration given to the above factors, the following reasonable range of project alternatives and a Sub-Alternative (that could be combined with any of the alternatives) were selected to be addressed in this EIR:

- **Alternative 1A**: No Project
- **Alternative 1B**: No Project / Estuary Policy Plan
- **Alternative 2**: Enhanced Open Space / Partial Ninth Avenue Terminal Preservation and Reuse
- **Alternative 3**: Reduced Development / Ninth Avenue Terminal Preservation and Reuse
- **Sub-Alternative**: Full Ninth Avenue Terminal Preservation and Reuse

Suggestions Incorporated into the Selected Alternatives

Although many other alternatives to the project could be formulated, for purposes of this EIR, the City of Oakland has considered the selected alternatives to constitute "a range of reasonable alternatives to the project…which would feasibly attain most of the basic objectives of the project" (CEQA Guidelines Section 15126(a)). The selected alternatives are considered to generally aligned with the overall goals and policies of the Estuary Policy Plan and present possible alternatives for development on the Oak to Ninth Project site. A number of suggested alternatives (and components of possible alternatives) emerged during the EIR scoping process, during other non-EIR-related public input opportunities that have paralleled the EIR process, and from educational study outside either of these aforementioned City's processes. These suggestions are listed in **Appendix B** of this EIR. Most of the suggestions have been incorporated into the alternatives analyzed in this EIR and are noted below:

- The *Ninth Avenue Terminal: A Feasibility Study for Adaptive Reuse* (Perry et al., 2005) describes several examples of uses that could occur in the fully- or partially-retained Ninth Avenue Terminal. A potential mix of cultural, educational, and recreational uses that are assumed to be Tidelands Trust compliant would occur in the Ninth Avenue Terminal in Alternative 2, Alternative 3, and the Full Preservation Sub-Alternative.

- Reduced-scale development and building heights around the Fifth Avenue Point outparcel are considered in Alternative 1B, Alternative 2, and Alternative 3.
- Reduced retail uses are considered in Alternative 2 and Alternative 3.
- Retaining the 1920s portion of the Ninth Avenue Terminal building is considered in Alternative 2. Retaining the 1920s and the 1950s portion of the Terminal building is considered in Alternative 3 and the Full Preservation Sub-Alternative (as well as the No Project Alternative).
- The Embarcadero is realigned as a curvilinear parkway, separating development areas from new open space areas, in Alternative 2.
- Expansion of Estuary Park and an overall increase in open space (to the extent envisioned in the Estuary Policy Plan) are considered in Alternative 1B, Alternative 2, and Alternative 3.
- Development and land uses that are consistent with the *existing* Tidelands Trust configuration on the project site, and that would not require the exchange of Trust lands at an offsite location, are considered in Alternative 1B.

An offsite alternative was "considered but not analyzed in detail in this EIR" and is discussed in Section E of this chapter.

Project Characteristics Consistent throughout the Selected Alternatives

A detailed description is provided of each alternative analyzed in this EIR. However there are aspects of the proposed project that are assumed to occur with each of the alternatives (except the No Project Alternative). The improvements that would be consistent throughout the alternatives are listed below.[1]

- Creating a continuous public trail along the entire shoreline of the project site;
- Creating a series of new parks and open spaces between Lake Merritt Channel and Brooklyn Basin;
- Improving the existing shoreline along the project site (removal of existing debris, re-grading of the banks, shoreline protection, and construction of bulkhead walls) and creating a new seawall and promenade around Clinton Basin ;
- Improving Clinton Basin Marina and Fifth Avenue Marina;
- Improving Estuary Park (new lawn/landscaping), maintaining the Jack London Aquatic Center, and retaining the existing waterfront access facilities along the west shore of Lake Merritt Channel (existing boating and fishing docks and boat launch);

[1] The improvements that would occur in all alternatives could occur in total (as proposed by the project) or to a lesser extent appropriate to the reduced scope and/or development area of an alternative.

- Avoiding and preserving the existing Clinton Basin wetland restoration project area; and
- Implementing a phased remediation process for cleanup of the project site to appropriate levels.

C. Description and Analysis of Alternatives

Throughout this section, a description of each alternative is followed by a discussion of its impacts and how it differs from those of the project. As permitted by CEQA, the significant effects of the alternatives are discussed in less detail than are the effects of the project (CEQA Guidelines Section 15126.6[d]). However, the analysis is conducted at a sufficient level of detail to provide City decision-makers adequate information to fully evaluate the alternatives and to approve any of the alternatives without further environmental review.

Unless indicated, the impacts associated with the project and each alternative are for year 2025 buildout (2025) conditions and are stated as levels of significance *after* implementation of mitigation measures identified in Chapter IV.

Alternative 1A: No Project

With the No Project Alternative, redevelopment of the 64.2-acre Oak to Ninth project site as proposed by the project would not occur. Consistent with recent-year trends on the site, there would be no substantial change to existing Port of Oakland (property owner) tenant occupancies or existing facilities, infrastructure, or site conditions. **Table V-1** summarizes the No Project Alternative program.

Description

Uses on the project site would continue to be primarily industrial and marine-related uses. Specific uses would include boat building and repair, industrial uses associated with metal recycling, glass fabrication, sand and gravel processing / ready-mix concrete operations; warehousing, construction and container storage; retail furniture sales, as well as offices and storage areas. Overall, the dominant existing onsite activities that would remain represent approximately 294,082 square feet of storage and repair/service uses (including nearly 83,533 sq. ft. of storage in the Ninth Avenue Terminal building); approximately 284,272 square feet of manufacturing use (mainly the sand and gravel / ready-mix concrete operation and the metal recycling operation); and approximately 123,192 square feet of wholesale and retail sales uses.

The existing short-term Port leases for most existing businesses, as well as the long-term Port leases for the wholesale grocery and the sand and gravel / ready-mix concrete operation, are assumed to continue into the future in accordance with Oakland Planning Code Section 17.114.040 (Right to Continue Non-Conforming Uses, Subject to Limitations).

The existing low-rise warehouse buildings (two to three stories) would remain, as would the 40-foot-tall Ninth Avenue Terminal building. The Terminal building and its associated wharf would

remain in its current state and continue to be used for bulk and container storage and barge docking activities.

Contaminated soils and groundwater exist on portions of the project site. Concentrations of petroleum hydrocarbons, metals (including lead), PCBs, PAHs, VOCs, methane gas, and arsenic, among others, have been identified at levels that may cause adverse health effects. There are also both documented underground storage tanks (UST) and physical evidence indicating the potential presence of undocumented USTs on the site.

In 2001, the Port and the City selected the current project sponsor, Oakland Harbor Partners, LLC, as master developer to redevelop the project site. It is reasonable to assume that if the project sponsor were not to proceed with the project, the Port and City would seek another potential developer for the site, meaning some change on the site would inevitably occur. However, this No Project Alternative assumes that no new development would occur on the project site, beyond that of any future tenant changes that would maintain existing types of uses.

The existing General Plan and zoning classifications would remain as currently designated and configured.

With the No Project Alternative, the large open land areas that make the site conducive for the existing industrial and storage businesses would remain in their current conditions. Waterfront areas, particularly around Clinton Basin and the east shore of Lake Merritt Channel (proposed Channel Park) would remain inaccessible to the public and unimproved. Estuary Park would not be improved or expanded, and no new parks, open spaces, or trails would be developed, except for implementation of Bay Trail segments along the shoreline that could occur separate from private development of the project site. Improvement of the existing shoreline or marinas would not occur, leaving Clinton Basin Marina functionally obsolete. Some level of site remediation would occur given the documented existing conditions and ongoing remediation and monitoring efforts underway. Currently, the Port of Oakland conducts quarterly groundwater monitoring at the site under the supervision of the ACEHD, and these activities would continue under the No Project Alternative for as long as required by the ACEHD.

An estimated 231 employees are currently employed on the project site and would remain in the future. No households or resident population currently exist on the project site, and none would be added with this alternative.[2]

[2] Although not part of the project site, some level of growth is assumed to occur in Fifth Avenue Point in the future under each alternative: 25 new work-live households (42 total), 50 new residents (83 total), and 32 new employed residents (52 total), as well as 66 additional jobs (174 jobs total).

TABLE V-1

ALTERNATIVE 1A: NO PROJECT

Subareas[a] /Parcels	Parcel Acreage (Gross)	Dwelling Units (#)	Du/Net Acre	Development / Uses (Sq. Ft.)[b]		Max. Approx. Bldg. Ht.
Subarea 5 (Parcels A thru H, and J) Terminal	39.4	0	0	44,792 33,750 186,1508 3,533	retail manu/recycling other[c] storage	15 to 40 ft.
Subarea 4 (Parcels K, L)	5.1	0	0	21,617 15,600	manu storage/svs	20 to 25 ft.
Subarea 2 (Parcel M)	7.6	0	0	228,905 8,799	manu storage/svs/ sales	15 to 25 ft.
Subarea 1 (Includes Parcel N)	11.1	0	0	78,400	wholesale	22 to 25 ft.
TOTAL	**63.2** [a]	**0**	-	**701,546**		-
Subarea 3 (Fifth Ave. outparcels)	5.4	42	n/a	102,891 35,000	manu/svs infill studios	10 to 30 ft.
Parks and Open Space	Estuary Park and Aquatic Center			7.1 acres (11 percent of project site, excluding Fifth Ave. outparcels)		
Ninth Avenue Terminal	No change					

a No development parcels would be created with the No Project Alternative, therefore the geographic subareas defined in Section IV.J, Population, Housing, and Employment (shown in Figure IV.J-1) are used for comparative purposes. The noted project parcels correspond generally to the geographic subarea (except for Parcel N, which is approximately one-third of Subarea 1, west of Lake Merritt Channel) and the acreage shown is slightly less than the actual existing (before-project) land area of 68.1 acres.

b Total floor area is shown, with total land area included for outdoor uses.

c "Other" includes 127,370 square feet of storage, warehousing, and boat repair uses; a 37,000 sq.ft. construction yard/docking use; and a 21,780 square feet longshoreperson training area.

SOURCE: Hausrath Economics Group, 2004; Oakland Harbor Partners, 2005.

Impacts

A. Land Use, Plans, and Policies

The No Project Alternative assumes no change would occur to the existing structures or land uses on the project site. Therefore, this alternative would not fulfill the goals and objectives in the Estuary Policy Plan for the Oak-to-Ninth Avenue District. Specifically, new housing, waterfront parks and open spaces and trails, and the overall transformation of the project site's maritime and marine industrial use into a mixed-use waterfront district and major open space resource on the estuary. Existing industrial and manufacturing uses that are incompatible with existing nearby residential uses and sensitive water and biological resources would remain.

This alternative would not conflict with Historic Preservation Element Policy 3.1 (as would occur with the project) because no portion of the Ninth Avenue Terminal would be demolished and the wharf would remain paved area (discussed below in E. Cultural Resources). No new land uses would be introduced to the existing noise environment of the project site, therefore this alternative would not conflict with Noise Element Policy 3 (as the project would) (discussed below in G. Noise). The project impacts related to substantial changes that the project would create to the existing environment and land uses and the project impact of dividing an existing community (Fifth Avenue Point) from the existing broader industrial district (reduced to less than significant, after mitigation), would not occur under the No Project Alternative. Also, no changes would occur to the existing land uses or development, so no changes to the General Plan or Zoning Regulations would be required.

B. Transportation, Circulation, and Parking

No construction or changes to the project site would occur with the No Project Alternative. Therefore, transportation conditions would exist as they do today (and as they are forecast to be in the future without development of the site), and significant unavoidable traffic impacts associated with the project would be avoided. The site conditions would remain essentially as discussed in the setting sections of Chapter IV.

C. Air Quality and Meteorological Conditions

No construction or changes to the project site would occur with the No Project Alternative. Therefore, air quality conditions would exist as they do today (and as they are forecast to be in the future without development of the site) Significant unavoidable air quality impacts associated with the project would be avoided. Moreover, because no new development is assumed on the project site, the site's existing wind conditions would continue to be about 15 miles per hour (mph) near enclosed areas and about 16-18 mph in the site's open areas. This alternative would not reduce wind speeds on the site as under project conditions.

D. Hydrology and Water Quality

No construction activities (excavation, soil stockpiling, boring, grading, and dredging) associated with the project would occur with the No Project Alternative. Existing, less than optimal conditions on the project site would continue. These include expansive areas of impervious surfaces as well as unpaved areas where uncontrolled stormwater flows into the storm drains and/or directly into the estuary (and ultimately the Bay) and that likely result in increased sedimentation in waterways. Some of the uncontrolled runoff flows are from existing industrial and manufacturing uses and potentially contaminated soils on the site. Although existing operations on the project site have not been evaluated for compliance with any applicable regulatory standards or requirements, the existing operations and conditions on the site could have adverse effects to water quality, stormwater runoff, and flooding.

The project would install an improved storm drain system on the site and would reduce the amount of impervious surfaces, which would thereby reduce the volume of untreated runoff that currently occurs. Additionally, the project would adhere to all agency standards, requirements,

and specific project management measures to reduce or avoid soil erosion and the release of hazardous materials into watercourses. With the project, the industrial and manufacturing uses on the site would be removed and replaced with residential, commercial, and open space uses, and the shoreline would be improved to also reduce stormwater discharge flowing overland into the estuary. These improvements would not occur with the No Project Alternative.

Overall, the contamination of the existing site conditions could potentially have adverse water quality and hydrology impacts. Implementation of improved best management practices and plans and site changes (reduced impervious surfaces, site remediation, and new storm drain system) would not occur. Therefore, the No Project Alternative is considered to have greater adverse hydrology and water quality impacts than would the project.

E. Cultural Resources

No construction or changes to the project site would occur with the No Project Alternative. Therefore, the potentially significant impacts (reduced to less than significant, after mitigation) related to archaeological and paleontological resources that would occur with the project would not occur with this alternative. No changes or demolition would occur. Therefore, the significant and unavoidable impacts that would occur with the project would be avoided.

F. Geology, Soils, and Seismicity

No building development or changes to the project site or its uses would occur with the No Project Alternatives. Therefore, the project's potentially significant (reduced to less than significant, after mitigation) related to geology, soils, and seismic hazards would not occur with this alternative.

G. Noise

No construction or changes to the project site would occur with the No Project Alternative. Therefore, the noise environment would exist as it does today (and as forecast for future conditions), and significant unavoidable noise impacts related to construction noise and the introduction of residential and/or park uses (as proposed under the project) would be avoided.

H. Hazardous Materials

Although no building development or demolition would occur with the No Project Alternative, contaminated soils, groundwater, and USTs currently exist on portions of the project site. Since no construction activity would occur that would alter contaminated soils, this alternative would likely avoid the project's potentially significant (reduced to less than significant, after mitigation) hazardous materials impacts that would occur due to exposure to construction workers or the public during construction. It is assumed that the onsite remediation and monitoring efforts that are currently underway by the Port would continue even though no new development, residential uses, or new useable public open spaces would occur on the site. However, the continuation of existing conditions would not have the benefit of measures that the project would implement to

reduce workers' and the public's exposure to hazardous conditions. This alternative would result in what could be considered a less beneficial condition than would occur with the project.

I. Biological Resources

No construction activities would occur with the No Project Alternative. However, the contaminated conditions that exist on portions of the project site, and that may cause adverse health effects to the public and biological resources (resulting from uncontrolled stormwater runoff into the estuary). Existing onsite remediation and monitoring efforts that are currently underway would continue even though no new development would occur with this alternative, however, the beneficial effects of measures aimed at uncontrolled stormwater drainage conditions and at further reducing potential hazardous onsite conditions would not occur, and biological resources would continue to be adversely affected. The potentially significant (reduced to less than significant, after mitigation) impacts to potentially jurisdictional wetlands, fisheries, and nesting/breeding habitats and specific status species that would occur due to construction activities and other project operations (increased activity and marinas) would not occur with this alternative.

J. Population, Housing, and Employment

The existing types of industrial and marine-oriented business activities and employment would remain on the project site under the No Project Alternative. As a result, this alternative would retain locations for industrial uses in the central parts of the region within proximity of the growing markets that they serve. Similar to the project, there would be no residential displacement impacts under this alternative as none exist.

No Project would mean no impacts from induced population growth, no increases in housing supply, and no expansion of housing choices as would be provided by the new neighborhood created by the project. Further, the generation of tax increment funding for additional affordable housing as a result of new development on the project site also would not occur under this alternative. However, the No Project Alternative would avoid the more focused indirect effects of the project on housing demand that could encourage additional new development sooner in adjacent areas and other locations along the waterfront, nor would it result in the additional retail spending by project residents to support business activity in Oakland and surrounding areas.

K. Visual Quality and Shadow

With the No New Development Alternative, it is assumed that the existing appearance of the project site would not change: "predominately industrial in character…very little or no vegetation…low-rise industrial buildings." Since no new mixed-use development would occur, views across the project site, and the appearance of the project site, which is highly visible from adjacent major thoroughfares and waterways, would not change or improve. Existing shadows cast from existing buildings on the site also would not change. The City's goals to increase waterfront open space, trails, and recreation facilities, as well as views of the waterfront along this segment of the Oakland Estuary would not be realized with the No New Development Alternative.

L. Public Services and Facilities

Since no new development or land uses would occur under the No Project Alternative, no new residents would be introduced to the project site. As a result, this alternative would not result in the increased demand for police, fire, schools, parks, and libraries that would occur with project.

M. Utilities and Service Systems

There would not be an increased demand for water, wastewater, and storm drain service and facilities, solid waste, and gas and electricity services with the No Project Alternative since no new development or changes in land use would occur.

Alternative 1B: No Project / Estuary Policy Plan

The No Project / Estuary Policy Plan Alternative (Estuary Plan Alternative) is included in the EIR to provide a comparison of the project to an alternative that further considers the objectives and policies of the Estuary Policy Plan (Estuary Plan) and what could be reasonably developed on the site. **Table V-2** summarizes the Estuary Plan Alternative development program.

Description

With this alternative, future development of the southern section of the Oak-to-Ninth Avenue District, which generally corresponds to the project site (and includes Fifth Avenue Point) would be consistent with the Oak-to-Ninth Avenue District illustration in **Figure V-1**.[3] As envisioned in the Estuary Plan, the area south of the Embarcadero would be converted into a network of large-scale open spaces, including an assemblage of parkland that would create "the major open space resource in Oakland" and a "recreational asset of regional significance." The location, type, and scale of new development around Fifth Avenue Point would be such that the Fifth Avenue Point community would be preserved and could expand as part of the new, surrounding development on the project site.

Generally, activities on site would include commercial-recreation uses, educational/cultural uses and facilities, as well as the preservation and expansion of Fifth Avenue Point. Building development would be concentrated in two areas of the project site, on either side of Clinton Basin. Most of the new building development would occur east of 5th Avenue. As depicted in **Table V-2**, the approximately 102,900 square feet of existing space in Fifth Avenue Point would remain with some intensification and infill expansion anticipated, including approximately 35,000 square feet of additional artisan studio space for work-live and work-only uses. About 5,500 square feet of new restaurant and marina-related uses would also be developed on the west side Clinton Basin. New development is anticipated east of Clinton Basin and would include commercial-recreation and educational, cultural, and recreation facilities and uses. The new development is envisioned to include 30,000 square feet of restaurant and retail uses, a smaller,

[3] The perspective portion of Figure V-1 is referenced from page 89 of the Estuary Policy Plan, Figure III-11, Oak to 9th Bird's-eye Perspective.

250-room hotel, a larger, 400-room hotel with a 50,000 square feet conference facility, and 70,000 square feet for educational, cultural, and recreational facilities/uses, such as a museum, community recreation center, gallery space, and/or other uses.

Generally, all existing uses and building development, except for those in Fifth Avenue Point, would be replaced in this alternative. As suggested in **Figure V-1**, low-rise buildings (approximately two to three stories) would be clustered in the area west of Clinton Basin and would be associated with the expanded Fifth Avenue Point and the new marina-related commercial retail/restaurant uses focused on Clinton Basin Marina. The hotel and community uses would occur in new larger buildings up to approximately four to five stories tall and would be located close to the Embarcadero, set back from the shoreline. The new street pattern would be a grid layout between Clinton Basin and 5th Avenue, and a north-south curvilinear parkway would be developed along Crescent Park in the east portion of the site.

The proposed location and types of uses in this alternative are assumed to be consistent with the existing configuration of the Tideland's Trust designation.

As described in the Estuary Policy Plan EIR[4] and depicted in the Estuary Plan[5], a total of approximately 41.5 acres of open spaces (compared to 28.4 acres with the project) would occur in a series of parks, open spaces, and continuous pedestrian and bicycle trail around the entire shoreline of the site (as also proposed by the project). Estuary Park would be expanded north to the Embarcadero, and Jack London Aquatic Center would remain unchanged. For purposes of this analysis, and as described in Estuary Plan Policy OAK 2.5 (see EIR Section A and/or **Appendix F** of this EIR), the Estuary Plan Alternative assumes that the Ninth Avenue Terminal building would be completely demolished (and wharf partially demolished) to allow a new major park (Crescent Park) would be developed in the Terminal's current location. (Full and partial preservation and adaptive reuse of the Terminal building are analyzed below under Alternative 2, Alternative 3, and the Full Preservation Sub-Alternative includes preservation of the associated wharf structure as well.)

Like the project, this alternative would create an improved seawall and promenade around Clinton Basin and improve the existing shoreline along the entire site. Site remediation to appropriate levels for the proposed uses would be implemented on the project site.

Total employment on the site would increase to approximately 651 employees, compared to the 231 that currently exist, and no new households or resident population would occur on the project site.[6]

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4 Estuary Policy Plan Draft EIR, Table III.D-1, and also provided in Table IV.L-2, Proposed Park Acreage, in this EIR.

5 Estuary Policy Plan, Figure III-10, Oak to 9th District Illustrative Open Space Key Map.

6 See Footnote 1.

TABLE V-2

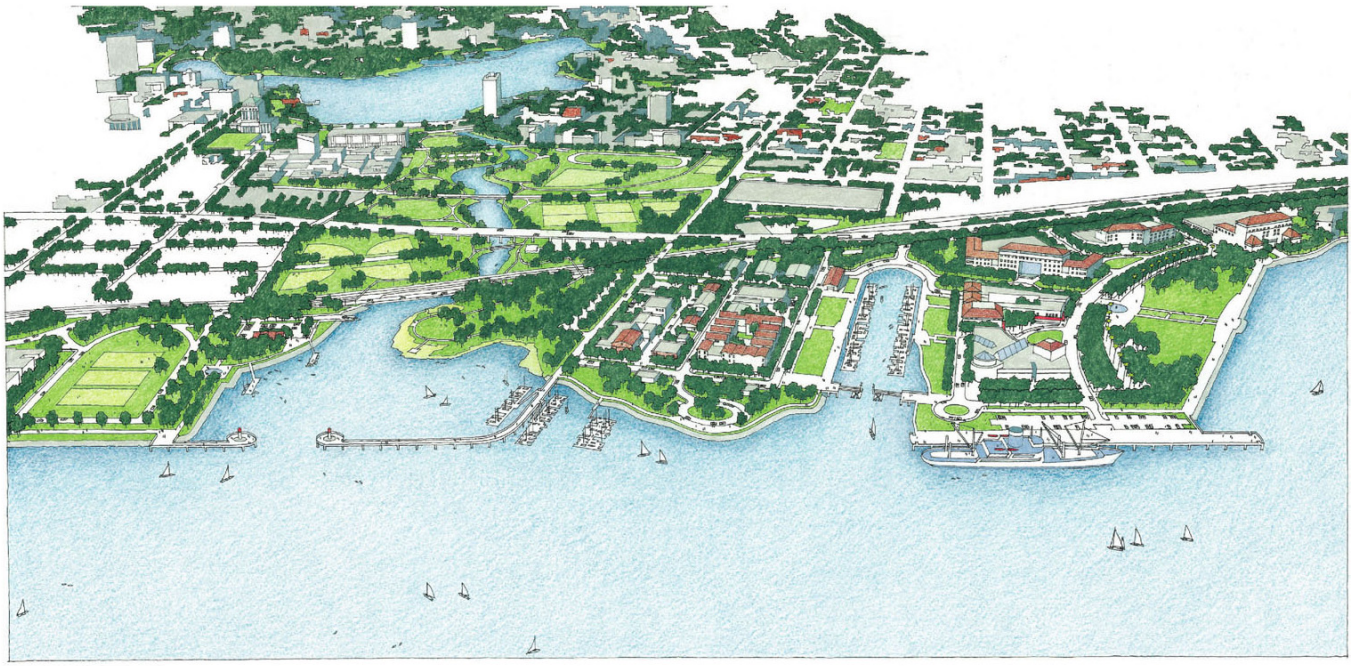
ALTERNATIVE 1B: NO PROJECT / ESTUARY POLICY PLAN

Subareas[a] /Parcels	Parcel Acreage (Gross)	Dwelling Units (#)	Du/Net Acre	Development / Uses (Sq. Ft.)[b]		Max. Approx. Bldg. Ht.
Subarea 5 (Parcels A thru H, and J) Terminal	39.4	0	0	650 50,000 30,000 70,000	hotel rooms conference retail/ restaurant edu/cultural/ recreation	20 to 60 ft.
Subarea 4 (Parcels K, L)	5.1	0	0	5,500	restaurant	15 to 30 ft.
Subarea 2 (Parcel M)	7.6	0	0	0		-
Subarea 1 (Includes Parcel N)	11.1	0	0	0		30 ft.
Subarea 3 (Fifth Ave. outparcels)	5.4	42 (work-live)	n/a	102,900 35,000	manu/svs infill studios	10 to 30 ft.
TOTAL	68.6	0	0	650 50,000 30,000 70,000	hotel rooms conference retail/ restaurant edu/cultural/ recreation	
Parks and Open Space	Expanded Estuary Park and Aquatic Ctr. New Open Meadow Park *(Channel)* New Crescent Park *(Shoreline)* New Clinton Basin Park *(Gateway/South)* **TOTAL**			11.1 acres 11.0 acres 11.0 acres 8.4 acres **41.5 acres** (66 percent of project site, excluding Fifth Ave. Point)		
Ninth Avenue Terminal	Demolished					

a Since no development parcels are defined for the No Project / Estuary Policy Plan Alternative, the geographic subareas defined in Section IV.J, Population, Housing, and Employment (Figure IV.J-1) are used for comparative purposes. The noted project parcels correspond to the geographic subarea, except for Parcel N, which is approximately one-third of subarea 1, west of Lake Merritt Channel.

b Total floor area is shown, with total land area included for outdoor uses.

SOURCE: Hausrath Economics Group, 2004; Oakland Harbor Partners, 2005.



SOURCE: ROMA Design Group; Estuary Policy Plan, 1999

Oak to Ninth Avenue . 202622

Figure V-1
Alternative 1B: No Project/
Estuary Policy Plan

Impacts

A. Land Use, Plans, and Policies

Development of the site in the Estuary Plan Alternative would fulfill the goals and objectives in the Estuary Policy Plan for the Oak-to-Ninth Avenue District. Specifically, the existing maritime and marine industrial area would become a major regional open space and recreational resource (including marinas), with a mix of community uses intermixed with hotel, conference, and retail/restaurant uses. Existing uses that conflict with nearby existing residential uses and sensitive water and biological resources would be removed. Development would be consistent with the uses and development standards of the existing Planned Waterfront Development-1 (PWD-1) Estuary Plan land use classification. No General Plan Amendment would be necessary (as with the project). The existing M-40 Heavy Industrial Zone would need to be changed to be consistent with the Estuary Plan.

Although policy conflicts are not considered a physical impact pursuant to CEQA, this alternative would conflict with Historic Preservation Element Policy 3.1 *(Avoid or Minimize Adverse Historic Preservation Impacts Related to Discretionary City Actions)* (as would occur with the project) because the Ninth Avenue Terminal building and would be demolished (and wharf partially demolished) (discussed below in E. Cultural Resources). This alternative would have the same conflict with Noise Element Policy 3 *(Reduce the Community's Exposure to Noise)* by introducing park uses to the existing noise environment of the project site (discussed below in G. Noise). This alternative is expected to have the same potentially significant impact as the project with respect to creating substantial change in the existing environment and existing land uses. Less intensive development would occur in building heights up to 60 feet (versus 86-120 feet with the project), however a district of community uses (education, cultural, recreation, etc.), hotel and visitor-serving retail/commercial uses, and open space would occur and substantially change the land use character and development intensity on the project site. The alternative would not, however, result in the same impact of dividing Fifth Avenue Point, an established community, from the existing industrial district of which it is currently a part. Development under this alternative would include work-live artists studios and would be integrated into Fifth Avenue Point. This alternative would also more fully support policies that call for the creation of new waterfront open spaces and views along the estuary.

B. Transportation, Circulation, and Parking

Development in the Estuary Plan Alternative would result in fewer peak-hour vehicle trips than the project (i.e., about 65 to 71 percent fewer under Buildout conditions), which would reduce project effects on area roadways and intersections proportionately. The significant project impact on regional roadways under Buildout (2025) conditions would not occur with this alternative. Significant (but mitigable, except at the 5th Street / Broadway, 6th/Jackson Streets, and Lakeshore Avenue/MacArthur Boulevard intersections) project impacts at the area intersections under Buildout (2025) conditions would occur with this alternative, but at fewer locations. The project would have a significant impact at 17 intersections, whereas this alternative would have a significant impact at 8 intersections. (See **Appendix I** for alternatives' traffic data.)

C. Air Quality and Meteorological Conditions

As indicated above, development in the Estuary Plan Alternative would generate fewer daily vehicle trips than the proposed project, which would reduce criteria air pollutant emissions associated with project operations. Implementation of this alternative would reduce the significant and unavoidable impact level project emissions of PM10 (2025 cumulative conditions) to less than significant. (See **Appendix I** for alternatives' operational emissions.)

In the Estuary Plan Alternative, hazardous wind conditions are expected to be similar to existing conditions and the project. Conditions are expected to be windy in areas of wide-open spaces along the waterfront not shielded by building masses and would decrease closer to the Embarcadero. The proposed Crescent Park (Shoreline Park) would experience unshielded hazardous west winds that currently occur under existing conditions.

D. Hydrology and Water Quality

As with the project, the Estuary Plan Alternative would improve existing conditions on the site that currently allow uncontrolled stormwater flow into the storm drains and/or directly into the estuary (and ultimately the Bay). These improvements include reducing the amount of impervious surfaces, removing industrial and manufacturing uses, improving the onsite storm drain system, and implementing measures to treat runoff from impervious surface areas, and reduced hazardous material use and storage. The percentage of impervious surface (open spaces and parks) on the project site (approximately 66 percent) would be more in this alternative than with the project (approximately 44 percent). Also, development activity with this alternative would adhere to all agency standards, requirements, and specific project management measures to reduce soil erosion and the release of hazardous materials into watercourses, as would the project. As a result, this alternative would result in the same less-than-significant (after mitigation) water quality and hydrology impacts during construction, and the same less-than-significant /beneficial impacts (after mitigation) that would occur with the project during operations.

E. Cultural Resources

Building development would occur with the Estuary Plan Alternative, therefore the same potentially significant impacts (reduced to less than significant, after mitigation) related to archaeological and paleontological resources that would occur with the project would occur with this alternative.

As previously described, this alternative would remove the existing Ninth Avenue Terminal building and portions of its associated wharf structure to allow a new, large-scale open space. Therefore, the significant and unavoidable impacts (project and cumulative) that would occur with the project, and that were identified for this alternative in the Estuary Policy Plan EIR, would also occur with this alternative.

F. Geology, Soils, and Seismicity

Building development would occur with the Estuary Plan Alternative. Therefore, consistent with the determinations with the Estuary Policy Plan EIR, the same potentially significant (reduced to

less than significant, after mitigation) related to geology, soils, and seismic hazards that would occur with the project would occur with this alternative.

G. Noise

Development in the Estuary Plan Alternative would generate fewer daily vehicle trips than the proposed project, which would result in reduced vehicular noise levels associated with the alternative operation compared to the project operation. However, this alternative would introduce park uses to the existing noise environment considered “normally unacceptable” for such uses, resulting in the same significant and unavoidable impact as the project. Like the project, development of the Estuary Plan Alternative on the project site would require construction involving a significant number of piles for an extended duration. Therefore, this alternative would result in the same significant and unavoidable impact resulting from construction noise.

H. Hazardous Materials

Since building development would occur with the Estuary Plan Alternative, this alternative would have the same potentially significant impact (reduced to less than significant, after mitigation) associated with exposing construction workers and the public to hazardous materials during construction as identified for the project (and in the Estuary Policy Plan EIR). This alternative would also involve remediation of the site (cleanup as described for the project), and any potentially significant operational hazardous materials impacts would be reduced to less than significant, after mitigation, as with the project.

I. Biological Resources

Construction activities would occur with the Estuary Plan Alternative, including the same shoreline improvements as proposed for the project. Therefore, the same potentially significant impacts to potential jurisdictional wetlands, fisheries (as identified in the Estuary Policy Plan EIR), and nesting/breeding habitats and specific status species that would occur with the project (and be reduced to less than significant, after mitigation) would occur with this alternative.

J. Population, Housing, and Employment

Like the project, the Estuary Plan Alternative would involve the redevelopment of the project site from industrial and marine-oriented uses to a mix of new uses in the future. There would be similar, less-than-significant impacts from displacing businesses and jobs and requiring that existing business operations seek new locations as their sites are needed for development. Also similar to the project, there would be no residential displacement impacts under this alternative.

The Estuary Plan Alternative does not include new housing development and, therefore would not directly induce population growth, compared to the less-than-significant impacts under the project. There would be onsite infrastructure improvements for development in this alternatives, although such improvements are not anticipated to induce substantial additional population growth in other areas and have been previously considered and analyzed as part of the city’s

General Plan, unlike the higher density of development that would occur with the project. Employment growth would be similar for this alternative and the project. The employment growth would induce additional household and population growth to provide the additional workers and result in less-than-significant impacts because of the small amount of job growth relative to the larger citywide and regional context. Under the project, new housing that would accommodate many more additional workers/employed residents than needed for the additional jobs would offset such impacts.

Development under the Estuary Plan Alternative, the amount of retail development being less than proposed for the project, and because of the focus of retail/commercial development on the waterfront and on visitor-oriented retailing, this alternative would not create competition with existing retailers nor would it lead to indirect physical impacts from long-term vacancies and physical deterioration.

The Estuary Plan Alternative would not provide the additional housing opportunities and improved jobs/housing balance, but would create extensive park, recreation, and open space amenities that would enhance the desirability of the waterfront and increase demand for housing at nearby locations. Like the project, there could be indirect effects that encourage additional new development sooner than would otherwise occur in adjacent areas and other waterfront locations.

K. Visual Quality and Shadow

Like the project and each of the development alternatives, the Estuary Plan Alternative would substantially change the character of the project site. The existing mix of commercial and manufacturing uses that give the project site its overall industrial character would be replaced with open space and low- to mid-rise development focused on community and visitor-serving retail/commercial uses. The Ninth Avenue Terminal building currently dominates the project site, particularly as viewed from higher elevations (i.e., I-880, long-range viewpoints), and although it is a Estuary-related feature, it blocks views of the estuary from certain public vantagepoints. The Terminal building would be demolished in this alternative, expanding existing views of open space and the water, as would the project.

As mentioned above, a Rezoning from the M-40 Heavy Industrial Zone would be required to be consistent with the General Plan. Possible “Best Fit” zones for the project site (given the existing Estuary Plan land use classification and existing zoning) would allow maximum buildings heights ranging from 35 feet (in the C-28 zone) to an unlimited height (C-45 zone).[7] Given the depiction of this alternative presented in **Figure V-1** (and in the Estuary Plan), buildings would be approximately 10 to 30 feet tall around Clinton Basin and adjacent to Fifth Avenue Point, and would range from approximately 20 to 60 feet tall for the various commercial and community uses (cultural, educational, recreational, restaurant/retail, hotel, conference) located in the northeast portion of the site. As a result of 1) locating lower buildings in the central portion of the

[7] The current zoning of M-40 conflicts with the existing general plan land use classification of Planned Waterfront Development-1 (PWD-1), thus a “Best Fit” zone” must be selected for development standards. Best Fit zones for the PWD-1 Estuary Policy Plan land use classification include the C-28 zone, C-45 zone, and S-13 Combining Zone, pursuant to the City’s Guidelines for Determining General Plan Conformity, Table 5A, 2003.

site, 2) clustering taller buildings (up to approximately 60 feet) toward the northeastern most area, 3) eliminating development west of 5th Avenue, and 4) removing the Ninth Avenue Terminal building, this alternative would have less-than-significant impacts on visual quality (views of the estuary and open spaces from public vantage points would be created and expanded; substantial shadowing would not occur on sensitive uses or public spaces), as with the project. Effects would be further reduced with this alternative by allowing additional views from points along the Embarcadero (Fallon Street and 5th Avenue), maintaining views of the Oakland Hills from the Amtrak pedestrian bridge at Jack London Square (see **Figure IV.K-4**). Additionally, shadows cast by the lower buildings in this alternative (compared to the project) would have similar less-than-significant shadow impacts and would further reduce effects on areas around Fifth Avenue Point and Clinton Basin (including the wetland restoration area).

The increased level of light and glare with this alternative would be comparable to that of other urban development in the area. It may be less than that of the project since no residential development would occur (to generate nighttime light and glare) and no development would occur west of Lake Merritt Channel, near existing residential developments. Therefore, as with the project, this alternative would result in similar less-than-significant light and glare impacts, as the project.

Overall, this alternative would have the same less-than-significant visual quality, shadow, and light and glare impacts as identified for the project and as identified in the Estuary Policy Plan EIR.

L. Public Services and Facilities

Although the Estuary Plan Alternative would not introduce new residential development to the site, existing industrial, manufacturing, and commercial uses would be replaced, and the new commercial and community uses that would occur with this alternative would create new demand for police and fire services in the area. Approximately 33.8 acres of *new* open space would be added to the project site (total 41.5 acres minus existing 7.7-acre Estuary Park and Jack London Aquatic Center) compared to 20.7 acres of *new* open space in the project, and since no residents would be added to the site, this alternative would thereby increase the ratio of park acreage to residents in the nearby area and citywide. As determined in the Estuary Policy Plan EIR, new development and land use changes envisioned in the Estuary Policy Plan would result in less-than-significant impacts on public services and utilities, which would be consistent with the less-than-significant public services impacts identified for the project.

M. Utilities and Service Systems

Under this alternative, existing industrial, manufacturing, and commercial development would be replaced with new commercial, recreation, and educational/cultural facilities, as well as expanded manufacturing, service, and artisan studio uses in Fifth Avenue Point. These new uses would create demand for water, wastewater, and storm drain service and facilities, solid waste, and gas and electricity services. The Estuary Policy Plan EIR determined that the Estuary Plan development would have a less-than-significant impact on sanitary sewer utilities (with adherence

to General Plan policies), and this alternative would likely result in the same less than significant impact on all public utilities as the project.

Alternative 2: Enhanced Open Space / Partial Ninth Avenue Terminal Preservation and Adaptive Reuse

The Enhanced Open Space / Partial Ninth Avenue Terminal Preservation Alternative (Open Space / Partial Preservation Alternative) is included in the EIR to allow a comparison of the project to a scenario with increased open space acreage on the site and additional preservation of a portion of the Ninth Avenue Terminal building.

Description

With approximately 40.6 acres of parks and open space, this alternative has a comparable amount of parks and open space area to the Estuary Plan Alternative (approximately 41.5 acres) and the Reduced Development / Partial Preservation Alternative (39.9 acres). However, the site layout of this alternative includes a new major park that is substantially larger than that proposed by the project and for each of the alternatives. This alternative entails preservation and adaptive reuse of the bulkhead and 1920s portion of the Ninth Avenue Terminal building. Most of the 1950s portion of the Terminal building would be demolished, except the alternative could include maintaining aspects of the 1950s roof trusses to span an open space pavilion where that portion of the Terminal building currently exists. The project would be a mixed use residential neighborhood that would be designed and configured similar to the project. New residential buildings with ground-floor retail/commercial uses would be developed adjacent to Fifth Avenue Point.

Approximately 1,800 residential units, 95,000 square feet of commercial retail/restaurant use and open space would result with this alternative. Approximately 88,000 square feet of community use (educational, cultural, and/or recreational activities) would occur in the retained 1920s portion of the Terminal building.

Development of this alternative is depicted in **Table V-3** and **Figure V-2**. New building development would occur in two areas: three development parcels around Fifth Avenue Point, and five development parcels clustered in the northeast portion of the site, north of the Embarcadero which would be realigned to the south, between 6th and 9th Avenues. Together, the eight development parcels total approximately 18.7 acres of building area. New development would result in residential densities ranging from 40 to 150 units per net acre.

Generally, all existing building development (excluding that in Fifth Avenue Point and the Ninth Avenue Terminal building as described above) would be replaced under this alternative. Buildings would vary in height with lower buildings of four to five stories (about 50 feet tall) located around Fifth Avenue Point on the west edge of Clinton Basin and fronting on the proposed Shoreline Park. Mid-rise buildings of six to nine stories (about 65 to 85 feet tall) and

two high-rise towers (about 65 to 240 feet tall) would be concentrated in the northeast portion of the site.

Existing storage uses in the retained 1920s portion of the Ninth Avenue Terminal building would be removed to accommodate the 88,000 square feet of community uses. The existing wharf structure, which is considered a part of the intact historic resource would be removed to accommodate the new major open space. Partial demolition of the Terminal building would not avoid the significant and unavoidable impact on historic resources that would occur with the project.

It is assumed that the uses in all parts of the remaining Terminal building (and surrounding open space) would be Tidelands Trust compliant. Therefore, land uses in these areas of the project site would be limited to commerce, navigation, and fisheries, open space, and/or recreation, consistent with the Public Trust Doctrine, and subject to determination by the State Lands Commission. The 18.7 acres of land proposed for residential and retail uses with this alternative would require the Tideland's Trust designation be removed from these areas in exchange for new trust-designated lands offsite.

As mentioned above, this alternative would realign the Embarcadero to curve through the eastern part of the site (generally between 6th and 9th Avenues), separating the new, major park (east of and around Clinton Basin) from the clustered residential development parcels in the northeast area of the site. A connector street (generally within the existing right-of-way of the Embarcadero) and new street grid to serve the development area would be created north of the realigned Embarcadero and would have intersecting points along this new curved "parkway."

A total of approximately 40.6 acres of parks and open spaces would result with the Open Space / Partial Preservation Alternative, including the expanded Estuary Park. The Jack London Aquatic Center would remain unchanged. Nearly 24 acres of new park and open space would be created east of 5th Avenue, most of which would be in the new 18-acre Shoreline Park between Clinton Basin and Brooklyn Basin, created by the realigned Embarcadero (the park's north boundary) and demolition the 1950s portion of the Ninth Avenue Terminal building. The expanded Estuary Park and new Channel Park would create approximately 16.6 acres of open space along Lake Merritt Channel and the Embarcadero, west of 5th Avenue. As in each other development alternative, a series of parks and open spaces (including a continuous pedestrian and bicycle trail) would occur along the entire project site shoreline.

Like the proposed project and each other alternative (except No Project Alternative), the Open Space / Partial Preservation Alternative would improve the Clinton Basin seawall and the existing shoreline along the entire project site. Site remediation to appropriate levels for residential and other uses would occur on the project site.

Total employment on the project site would increase from the existing 231 employees: new retail/commercial uses on neighborhood streets, park-oriented retail, and retail/restaurant uses around Clinton Basin Marina would require approximately 314 employees, and the community uses (education, cultural, recreation) in the partially-retained Terminal building would result in

additional employment, possibly in the range of 30 to 60 employees depending on the uses. Approximately 1,728 households and 2,938 new residents would be introduced to the project site.[8]

[8] See Footnote 1.

TABLE V-3

ALTERNATIVE 2: ENHANCED OPEN SPACE / PARTIAL NINTH AVENUE TERMINAL PRESERVATION

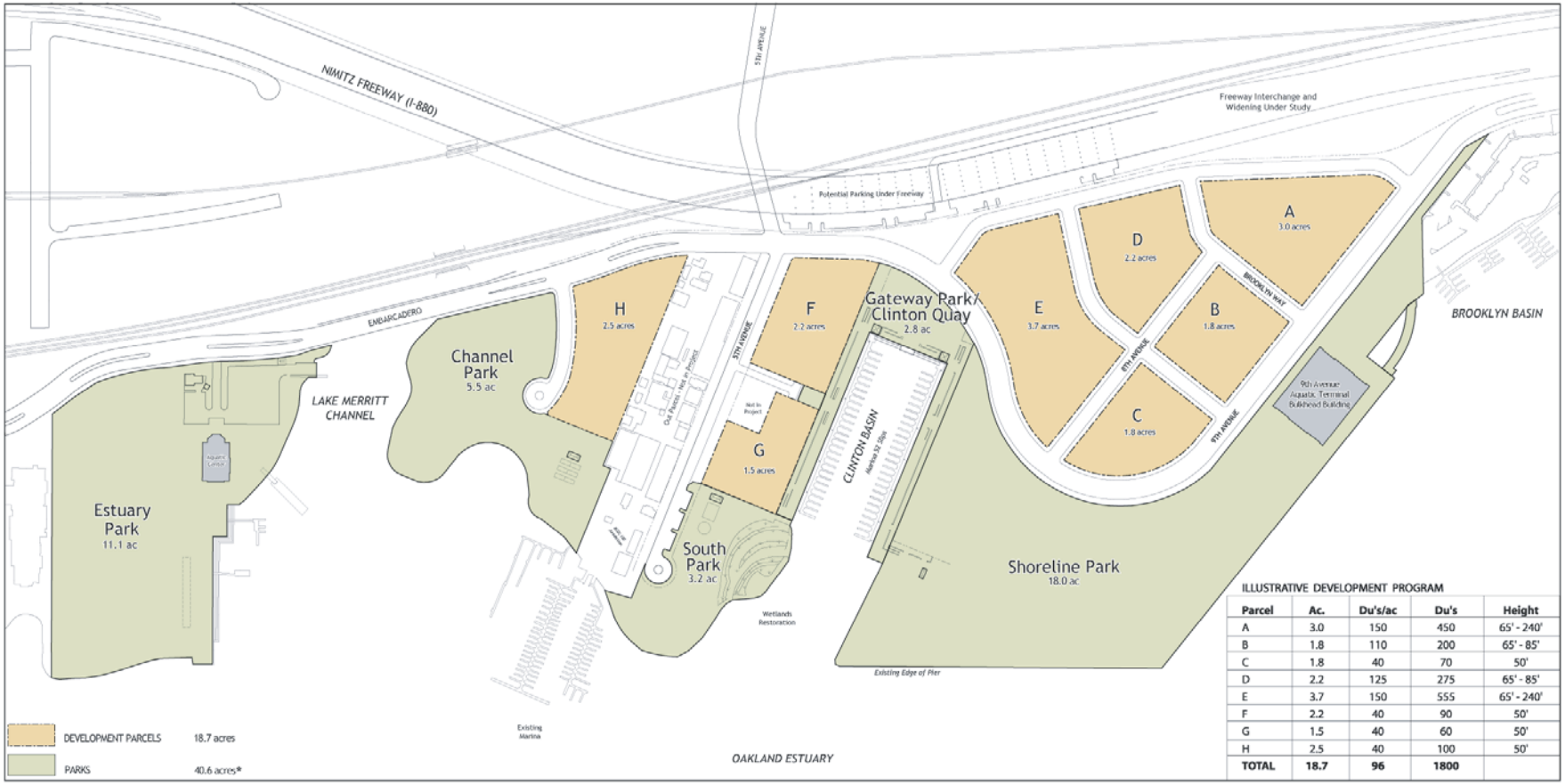
Subareas[a] /Parcels	Parcel Acreage (Gross)	Dwelling Units (#)	Du/Net Acre	Development / Uses (Sq. Ft.)[b]		Max. Approx. Bldg. Ht.
Subarea 5:				58,000	nghd retail/ commercial	
Alt Parcel 1	3.0	450	150/ac			65–240 ft.
Alt Parcel 2	1.8	200	110/ac			65–85 ft.
Alt Parcel 3	1.8	70	40/ac			50 ft.
Alt Parcel 4	2.2	275	125/ac			65–85 ft.
Alt Parcel 5	3.7	555	150/ac		edu/cultural/ recreation	65–240 ft.
Terminal	-	-	-	88,000		40 ft.
Subarea 4				32,000	retail/restaurant	
Alt Parcel 6	2.2	90	40/ac			50 ft.
Alt Parcel 7	1.5	60	40/ac			50 ft.
Subarea 2				5,000	park-oriented retail	
Alt Parcel 8	2.5	100	40/ac			50 ft.
Subarea 1	-	0	-	0		30 ft.
Total	**18.7**	**1800**	**96/ac**	**183,000**		
Subarea 3 *(Fifth Ave. outparcels)*	*5.43 acres (gross)*	*42 (work-live)*	n/a	*102,891* *35,000*	*manu/svs* *infill studios*	10 to 30 ft.
Parks and Open Space	Expanded Estuary Park and Aquatic Ctr.			11.1 acres		
	New Channel Park *(Open Meadow)*			5.5 acres		
	New Shoreline Park *(Crescent)*			18.0 acres		
	New Gateway Park *(Clinton Basin north)*			2.8 acres		
	New South Park *(Clinton Basin south)*			3.2 acres		
			TOTAL	**40.6 acres** (64 percent of total project site)		
Ninth Avenue Terminal	1920s portion retained and reused; wharf removed					

a Numbered development parcels are defined for the Enhanced Open Space / Partial Preservation Alternative to allow for comparison to project development parcels.

b Net acreage shown for development parcels only and excludes right-of-ways and open space.

c Total floor area is shown, with total land area included for outdoor uses.

SOURCE: Hausrath Economic Group, 2004; Oakland Harbor Partners, 2005.



ILLUSTRATIVE DEVELOPMENT PROGRAM

Parcel	Ac.	Du's/ac	Du's	Height
A	3.0	150	450	65' - 240'
B	1.8	110	200	65' - 85'
C	1.8	40	70	50'
D	2.2	125	275	65' - 85'
E	3.7	150	555	65' - 240'
F	2.2	40	90	50'
G	1.5	40	60	50'
H	2.5	40	100	50'
TOTAL	**18.7**	**96**	**1800**	

* Includes 9th Avenue Terminal Bulkhead Building

0 400
Feet

SOURCE: Roma Design Group

Oak to Ninth Avenue . 202622

Figure V-2
Alternative 2: Enhanced Open Space/
Partial Ninth Avenue Terminal Preservation

Impacts

A. Land Use, Plans, and Policies

Like the project, the Open Space / Partial Preservation Alternative would develop new housing, commercial uses, and waterfront parks and open spaces and trails and would transform the project site's maritime and marine industrial character into a publicly-accessible mixed-use waterfront district and major open space resource on the estuary. Existing industrial and manufacturing uses would be removed, except those in Fifth Avenue Point. A General Plan Amendment and Rezoning to accommodate residential uses and increased densities (from those allowed by the existing PWD-1 land use classification) would be required, as with the project.

This alternative is expected to have the same policy conflicts as the project: Inconsistency with Historic Preservation Element Policy 3.1 *(Avoid or Minimize Adverse Historic Preservation Impacts Related to Discretionary City Actions)*, but to a lesser extent since the 1920s (and 1950s) portion of the Ninth Avenue Terminal building would be retained and reused. This alternative would have the same conflict with Noise Element Policy 3 *(Reduce the Community's Exposure to Noise)* by introducing residential and park uses to the existing noise environment of the project site (discussed below in G. Noise). This alternative would more fully support policies that call for the creation of new waterfront open spaces and views along the estuary. This is particularly due to the reconfiguration of Shoreline Park between Clinton Basin and Brooklyn Basin, as well as the realignment of the Embarcadero into a curvilinear parkway aligning the park, allowing unobstructed views of the estuary. This alternative is expected to have the same potentially significant impact with respect to creating substantial change in the existing environment and existing land uses. Although less development would occur compared to the project, the alternative would still substantially change the existing land use character and development intensity on the project site. This alternative would also result in the same impact of dividing Fifth Avenue Point, an established community, from the existing industrial district of which it is currently an integral part. However, the lower building heights (up to 50 feet, versus up to 86 feet with the project) and the reduced development around Fifth Avenue Point specifically (250 units versus 1,081 with the project) that would occur compared to the project would reduce the severity of these two impacts, but they would remain potentially significant, reduced to less than significant after mitigation.

B. Transportation, Circulation, and Parking

Development in the Open Space / Preservation Alternative would result in fewer peak-hour vehicle trips than the proposed project (i.e., about 42 percent fewer under buildout conditions), which would reduce project effects on area roadways and intersections proportionately. The significant project impact on regional roadways under Buildout (2025) conditions would not occur with this alternative. Significant (but mitigable, except at the 5th Street / Broadway, 6th/Jackson Streets, and Lakeshore Avenue / MacArthur Boulevard intersections) project impacts at the area intersections under Buildout (2025) conditions would occur under this alternative, but at fewer locations. The project would have a significant impact at 17 intersections, whereas this alternative would have a significant impact at 11 intersections. (See **Appendix I** for alternatives' traffic data.)

C. Air Quality and Meteorological Conditions

Development in the Open Space / Preservation Alternative would generate fewer daily vehicle trips than the proposed project, as stated above. As a result, criteria air pollutant emissions associated with project operation would be reduced with this alternative. The significant and unavoidable impact associated with project emissions of PM10 (2025 cumulative conditions) remain significant, as with the project. (See **Appendix I** for alternatives' operational emissions.)

Compared to the project and each of the alternatives, the Open Space / Preservation Alternative would be expected to result in the windiest conditions on the site since it proposes the greatest amount of consolidated parkland relative to the amount of concentrated built development on the site**.** Conditions are expected to be windy in areas of wide-open spaces along the waterfront not shielded by building masses and would decrease closer to the Embarcadero. The proposed Shoreline Park would experience unshielded hazardous west winds that currently occur under existing conditions.

D. Hydrology and Water Quality

As with the project, the Open Space / Preservation Alternative would improve existing conditions on the site that currently allow uncontrolled stormwater flow into the storm drains and/or directly into the estuary (and ultimately the Bay). These improvements include reducing the amount of impervious surfaces, removing industrial and manufacturing uses and hazardous material use and storage, improving the onsite storm drain system, and implementing measures to treat runoff. Approximately 63 percent of the project site in this alternative would be impervious surfaces (open spaces and parks), substantially more than the 44 percent that would occur with the project, and this alternative would include a sizable new open space of 18 acres (compared to 9.74 acres in the project). This larger, single open space would not, however, significantly decrease total site runoff or total volumes of runoff potentially affected by fertilizers and pesticides. Development activity with this alternative would adhere to all agency standards, requirements and specific project management measures to reduce soil erosion and the release of hazardous materials into watercourses, as would the project. As a result, this alternative would result in the same less-than-significant (after mitigation) water quality and hydrology impacts during construction, and the same less-than-significant / beneficial (after mitigation) impacts that would occur with the project during operations.

E. Cultural Resources

Building development would occur with the Open Space / Partial Preservation Alternative. Therefore, the same potentially significant impacts (reduced to less than significant, after mitigation) related to archaeological and paleontological resources that would occur with the project would occur with this alternative.

Also, the 1950s portion of the Ninth Avenue Terminal building and portions of the associated wharf structure would be demolished, and the 1920s portion of the Terminal building would be retained and reused. As discussed in Section IV.E, Cultural Resources, Impact E.3, "the entire building, including the 1951 addition, is considered an historic resource." Therefore, the

significant and unavoidable impacts (project and cumulative) that would occur with the project as a result of the substantial demolition of the Terminal building, would also occur with this alternative, but to a lesser degree.

F. Geology, Soils, and Seismicity

Building development would occur with the Open Space / Partial Preservation Alternative. Therefore, the same potentially significant and significant impacts (reduced to less than significant, after mitigation) related to geology, soils, and seismic hazards that would occur with the project would occur with this alternative.

G. Noise

Development under the Open Space / Preservation Alternative would generate fewer daily vehicle trips than the project, which would result in reduced vehicular noise levels associated with the alternative's operation compared to the project's operation. However, this alternative would introduce residential and park uses to the existing noise environment considered "normally unacceptable" for such uses, resulting in the same significant and unavoidable impact as the project. Like the project, development of this alternative on the project site would require construction involving a significant number of piles for an extended duration. To develop this estimated 1,800-unit scenario with buildings generally the same height range (maximum 86 to 240 feet tall) and relatively shorter duration as the project, an estimated average of 500 piles per parcel (compared to 675 for the project) would be required over an average duration of 10 weeks per parcel (compared to 12 weeks for the project). As a result, this alternative would result in the same significant and unavoidable impact resulting from construction noise as the project.

H. Hazardous Materials

The Open Space / Partial Preservation Alternative would involve new development on the site. Therefore, this alternative is would have the same potentially significant impacts (reduced to less than significant, after mitigation) associated with exposing construction workers and the public to hazardous materials during construction that would occur with the project. Remediation of the site would occur (as described for the project), and any operational hazardous materials impacts would be less than significant (after mitigation), as with the project.

I. Biological Resources

Construction activities, including shoreline improvements, would occur with the Open Space / Partial Preservation Alternative, including the same shoreline improvements as proposed for the project. Therefore, the same potentially significant impacts (reduced to less than significant, after mitigation) to potential jurisdictional wetlands, fisheries, and nesting/breeding habitats and specific status species that would occur with the project would occur with this alternative.

J. Population, Housing, and Employment

Like the project, the Open Space / Partial Preservation Alternative would remove all existing uses as the site transitions from existing industrial and marine-oriented uses to a mix of new uses in the future. There would be similar, new land uses, but less total new development because a larger share of the project site would be devoted to parks and open space, however a larger portion of the existing Ninth Avenue Terminal building would be retained. Thus, there would be less growth of housing and population (about 40 percent less), and less employment (about 45 percent less) under this alternative compared to the project. Generally, the types of less-than-significant impacts identified for the project would be similar for this alternative, but of still less significance because of lower growth.

Impacts from induced population growth would be less under the Open Space / Partial Preservation Alternative, compared to the less-than-significant impacts of the project. Like the project, this alternative would provide beneficial housing market effects from additional housing opportunities and improved jobs/housing balance, although to a lesser extent. By creating a new neighborhood with park and open space amenities along the estuary, this alternative would enhance the desirability of the waterfront and increase demand for nearby locations that offer proximity and access to the site and for other locations along the waterfront. Like the project, there could be indirect effects that encourage additional new development sooner than would otherwise occur in adjacent areas and other waterfront locations. Like the project, demand effects could contribute upward pressures on housing prices and rents in limited areas nearby, although such effects are not anticipated to lead to indirect physical impacts such as displacement or increased physical deterioration of housing or neighborhoods.

The Open Space / Partial Preservation Alternative would include less retail/commercial development and opportunities for retail shopping and waterfront eating and drinking than would occur with the project. Similar to the project, the new retail development under this alternative is not anticipated to create competition with existing retailers that could lead to indirect physical impacts from long-term vacancies and physical deterioration.

K. Visual Quality and Shadow

The Open Space / Partial Preservation Alternative would substantially change the character of the project site, as would each of the development alternatives and the project. The existing mix of commercial and manufacturing uses that give the project its overall industrial character would be replaced with a residential development of varying density and building heights, expansive open space, and the north half of the Ninth Avenue Terminal building. The site would be characterized by the realigned Embarcadero parkway that would curve through the eastern portion of the site along the new approximately 18-acre park. Fifth Avenue Point would not be incorporated into the project site in this alternative.

Like the project, this alternative would require amendments to the PWD-1 Estuary Policy Plan land use classification and rezoning of the M-40 zone to accommodate the proposed residential densities that range from 40 to 150 dwelling units per net acre (compared to the 40 units per net acre permitted in the PWD-1). At the proposed densities and given the development parcel

acreages, the projected building heights in this alternative would range from approximately 50 to 85 feet tall, with the high-rise buildings being approximately 240 feet tall, as with the project. The retained portion of the Terminal building would remain 40 feet tall and would be prominent from higher elevations (i.e., I-880, long-range viewpoints).

Buildings would be approximately 50 feet tall immediately west of Clinton Basin and around the Fifth Avenue Point outparcels, which currently have buildings ranging from approximately 15 to 30 feet tall and that are not anticipated to change substantially. The taller buildings about 65 to 85 feet tall, as well as the two high-rises, would be clustered in the northeastern most area of the site, and a relatively lower building of maximum 50 feet would be situated at the parkfront location, effectively stepping down toward the Embarcadero parkway and the Shoreline Park.

As a result of 1) locating lower building heights in the central portion of the site, 2) clustering taller buildings (up to approximately 85 feet and 240-foot towers) toward the northeastern most area of the site, and 3) removing the south half of the Ninth Avenue Terminal building, this alternative would have less-than-significant impacts on visual quality (views of the estuary and open spaces from public vantage points would be created and expanded; substantial shadowing would not occur on sensitive uses or public spaces), as would the project. The alternative would further reduce these impacts by allowing additional views from points along the Embarcadero at 5th Avenue and Fallon Street, as well as continuous views from the realigned Embarcadero parkway. More of the existing distant view of the Oakland Hills from the Amtrak pedestrian bridge at Jack London Square (see **Figure IV.K-4**) may be retained.. Also, the combination of not locating development sites immediately southeast of Clinton Basin and removing the south half of the Terminal building would allow more views of the estuary from onsite, as well as views of the new Shoreline Park and Estuary from distant public vantage points. Shadows cast by the lower buildings in this alternative (compared to the project) would have less-than-significant shadow impacts, as with the project, and would further reduce the less-than-significant impacts on areas around Fifth Avenue Point and near Clinton Basin.

The increased level of light and glare with this alternative would be comparable to that of other urban development in the area. No development would occur west of Lake Merritt Channel, near existing residential developments. Therefore, as with the project, this alternative would result in a less-than-significant light and glare impact that would likely be slightly reduced from that of the project.

Overall, this alternative would have the same less-than-significant visual quality, shadow, and light and glare impacts as identified for the project, providing slightly more beneficial effects related to views of open spaces and the estuary given the realignment of the Embarcadero.

L. Public Services and Facilities

Compared to the project, the Open Space / Partial Preservation Alternative would introduce fewer new residents (2,938 compared to 5,270) and households (1,728 compared to 3,100[9]) to the

[9] 1,658 households compared to 2,976 project households, with 4 percent vacancy rate applied.

project site. Approximately 33.4[10] acres of new park would be added to the project site (compared to 19.25 new acres with the project), which would result 11.4 acres per 1,000 residents on the project site. Overall, this alternative would result in the same less-than-significant impacts on public services and facilities that would occur with the project.

M. Utilities and Service Systems

The reduced development of residential, commercial, and community uses that would occur with the Open Space / Partial Preservation Alternative would create a lower demand for water, wastewater, and storm drain service and facilities, solid waste, and gas and electricity services than would result from the project and would likely result in the same less than significant impacts as the project.

Alternative 3: Reduced Development / Ninth Avenue Terminal Preservation

The Reduced Development / Ninth Avenue Terminal Preservation Alternative (Reduced Development / Preservation) is included in the EIR to allow consideration of a reduced development scenario that could be developed on the site, and comparison of this scenario to the project.

Description

This alternative involves preservation and adaptive reuse of the entire Ninth Avenue Terminal, except for partial removal of its associated wharf structure, which would accommodate new public open space. Approximately 540 residential units, 10,000 square feet of retail/restaurant use, and 39.9 total acres of parks and open space would result with this alternative. The Ninth Avenue Terminal building would contain a conference facility (about 50,000 sq. ft.), and a potential mix of educational, cultural, and/or recreational uses (70,000 sq. ft.), totaling 120,000 square feet of community use.[11] The development of this alternative is depicted **in Table V-4** and **Figure V-3**. Fifth Avenue Point would not be incorporated into the project site.

All new building development would be located east of 5th Avenue, concentrated around Clinton Basin and between the Basin and the retained Ninth Avenue Terminal. Seven development parcels configured in a square-block street layout would total 19 acres of building area. Generally, all existing building development (excluding Fifth Avenue Point) would be replaced in this alternative, and new development would occur at approximately 28 units per net acre. New buildings would be four to five stories (about 50 feet tall).

All existing uses on the project site would be removed, including the storage uses in the Ninth Avenue Terminal building. The nearly 120,000 square feet of community use that would be

[10] Total 40.6 acres proposed, minus existing 7.2-acre Estuary Park and Jack London Aquatic Center.
[11] Proposed uses are consistent with those envisioned in the Estuary Policy Plan and assumed in Alternative 1B.

introduced into the Terminal building would be Tidelands Trust compliant. As previously discussed, this means that the land uses in these areas of the project site would be limited to commerce, navigation, and fisheries, open space, and/or recreation, consistent with the Public Trust Doctrine, and subject to determination by the State Lands Commission. The 19 acres of land proposed for residential and retail uses in this alternative would require the Tidelands Trust designation be removed from these areas in exchange for new trust-designated lands offsite.

As with each development alternative, a series of parks and open spaces would create a continuous pedestrian and bicycle trail along the entire shoreline of the project. The seawall around Clinton Basin and the existing shoreline along the entire site would be improved, and project site remediation would occur to appropriate levels for the proposed uses.

Total employment on the project site with this alternative would be approximately 100 jobs, compared to the 231 jobs that currently exist. Approximately 518 households and 881 new residents would be introduced.[12]

[12] See Footnote 1.

TABLE V-4

ALTERNATIVE 3: REDUCED DEVELOPMENT / NINTH AVENUE TERMINAL PRESERVATION AND ADAPTIVE REUSE

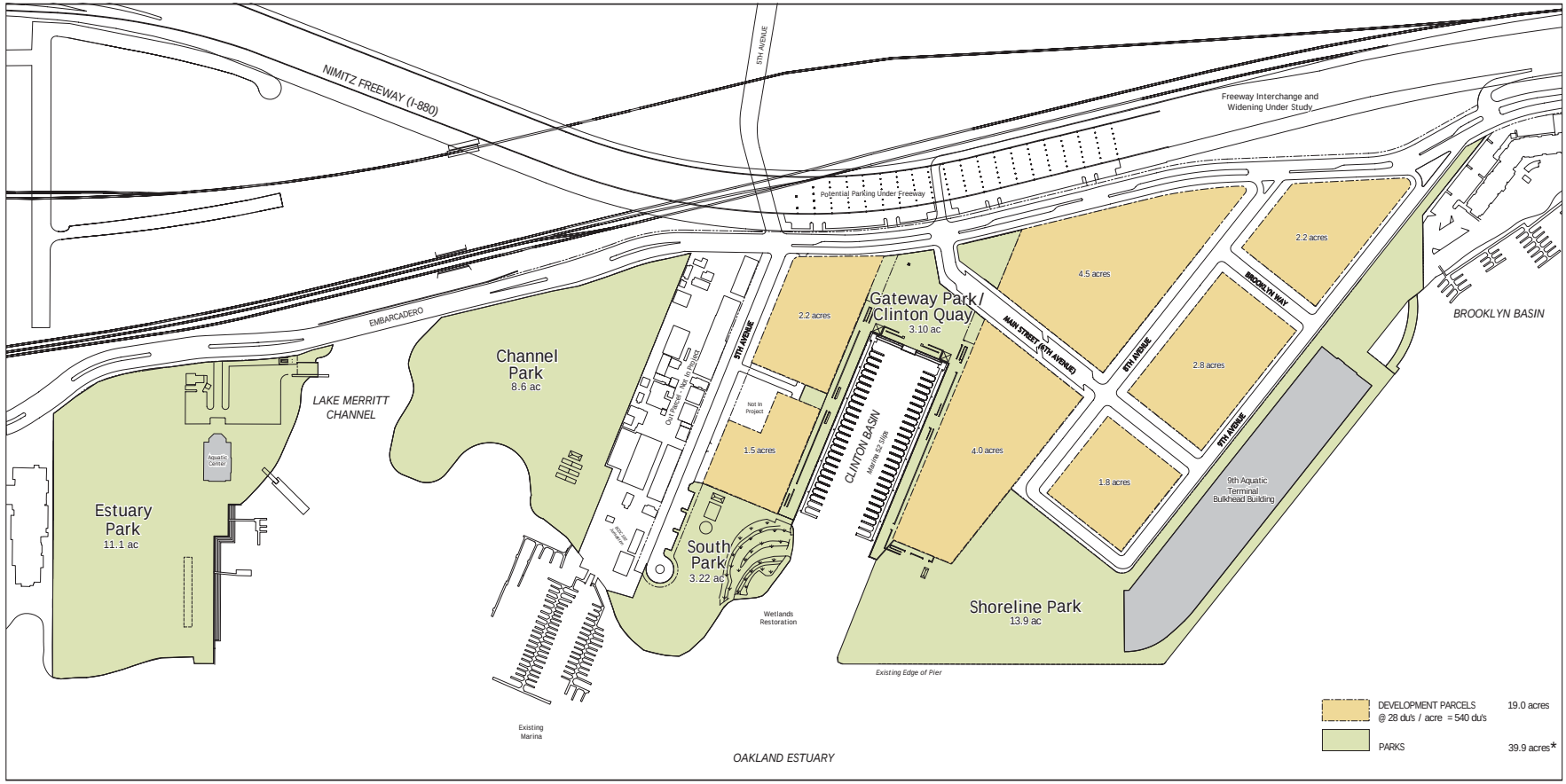
Subareas[a] /Parcels	Parcel Acreage (Gross)	Dwelling Units (#)	Du/Net Acre	Development / Uses (Sq. Ft.)[b]		Max. Approx. Bldg. Ht.
Subarea 5 (Parcels A thru H, and J) Terminal	15.3	432	28/ac	0 50,000 70,000	 conference edu/cultural/ recreation	50 ft. 40 ft.
Subarea 4 (Parcels K, L)	3.7	108	28/ac	10,000	retail/restaurant	50 ft.
Subarea 2 (Parcel M)	0	0	0	0		-
Subarea 1 (Includes Parcel N)	0	0	0	0	-	30 ft.
Total	**19.0**	**540**	**28/ac**	**130,000**	**sq.ft.**	
Subarea 3 *(Fifth Ave. outparcels)*	*5.43 acres (gross)*	*42 (work-live)*	n/a	*102,891* *35,000*	*manu/svs* *infill studios*	10 to 30 ft.
Parks and Open Space	Expanded Estuary Park and Aquatic Ctr. New Channel Park*(Open Meadow)* New Shoreline Park *(Crescent)* New Gateway Park *(north Clinton Basin)* New South Park *(south Clinton Basin)* **TOTAL**			11.1 acres 8.6 acres 13.9 acres 3.10 acres 3.22 acres **39.92 acres** (63 percent of total site)		
Ninth Avenue Terminal	1920s and 1950s portions retained and reused; wharf removed					

a The geographic subareas defined in Section IV.J, Population, Housing, and Employment, and shown in **Figure IV.J-1** are used for comparative purposes. The noted project parcels correspond to the geographic subarea, except for Parcel N, which is approximately one-third of subarea 1, west of Lake Merritt Channel.

b Net acreage shown for development parcels only and excludes right-of-ways and open space.

c Total floor area is shown, with total land area included for outdoor uses.

SOURCE: Hausrath Economics Group, 2004; Oakland Harbor Partners, 2005.



* Includes 9th Avenue Terminal Bulkhead Building

0 400
Feet

SOURCE: Roma Design Group

Oak to Ninth Avenue . 202622

Figure V-3

Alternative 3: Reduced Development/ Ninth Avenue Terminal Preservation

Impacts

A. Land Use, Plans, and Policies

Like the project and each development alternative, the Reduced Development / Preservation Alternative would develop new housing, waterfront parks and open spaces and trails, and transform the project site's maritime and marine industrial character into a publicly-accessible, mixed-use waterfront district and major open space resource on the estuary. Existing industrial and manufacturing uses would be removed, except those in Fifth Avenue Point. A General Plan Amendment and Rezoning to accommodate residential uses and increased densities (from those allowed by the existing PWD-1 land use classification) would be required, as with the project.

This alternative is expected to have the same potentially significant impact with respect to creating substantial change in the existing environment and existing land uses. Although less development would occur compared to the project (and each of the other alternatives), the project would still substantially change the existing land use character and development intensity on the project site. Although development would not occur west of Fifth Avenue Point in this alternative, the same impact of dividing Fifth Avenue Point, an established community, from the existing industrial district of which it is currently an integral part would occur. This impact would likely be reduced compared to the project and the other alternatives, however, since, since the Fifth Avenue Point appears to be more compatible and integrated (with regard to building types and uses) with the area to its east rather than the sand and gravel concrete batch plant that lies to its west. The lower building heights (up to 50 feet, versus up to 86 feet with the project), and the reduced development around Fifth Avenue Point specifically (about 105 units, versus 1,081 with the project) that would occur compared to the project would also reduce the severity of these two impacts, but they would remain potentially significant, reduced to less than significant with mitigation .Also, this alternative is expected to have the same policy conflicts as the project: Inconsistency with Historic Preservation Element Policy 3.1 *(Avoid or Minimize Adverse Historic Preservation Impacts Related to Discretionary City Actions)*, but to a lesser extent since the entire Ninth Avenue Terminal would be retained and reused, except for portions of its associated wharf, which would be removed. This alternative would have the same conflict with Noise Element Policy 3 *(Reduce the Community's Exposure to Noise)* by introducing residential and park uses to the existing noise environment of the project site (discussed below in G. Noise). This alternative would also more fully support policies that call for the creation of new waterfront open spaces along the estuary than the project would, primarily given the increased size of Channel Park along the Embarcadero at Lake Merritt Channel.

B. Transportation, Circulation, and Parking

Development under the Reduced Development / Preservation Alternative would result in fewer peak-hour vehicle trips than the proposed project (i.e., about 78 to 83 percent fewer under buildout conditions), which would reduce project effects on area roadways and intersections proportionately. The significant project impact on regional roadways under Buildout (2025) conditions would not occur with this alternative. Significant (but mitigable, except at the 6th/Jackson Streets intersection) project impacts at the area intersections under Buildout (2025) conditions would occur under this alternative, but at fewer locations. The project would have a

significant impact at 17 intersections, whereas this alternative would have a significant impact at 4 intersections.

C. Air Quality and Wind

Development in the Reduced Development / Preservation Alternative would generate fewer daily vehicle trips than the proposed project, which would reduce criteria air pollutant emissions associated with project operation. As a result, the significant and unavoidable impact resulting from project emissions of PM10 (2025 cumulative conditions) would be reduced to less than significant. (See **Appendix I** for alternatives' operational emissions.)

Under this alternative, the location and size of the parkland relative to the amount of concentrated built development on the site would be similar to the project. Therefore, wind conditions can be expected to be similar to speeds reported for existing conditions on the project site due to the large, flat area along the waterfront that would be exposed to direct hazardous wind off the estuary that currently occur under existing conditions.

D. Hydrology and Water Quality

Similar to the project and each of the alternatives (except the No Project Alternative), the Reduced Development / Preservation Alternative would improve existing conditions on the site that currently allow uncontrolled stormwater flow into the storm drains and/or directly into the estuary (and ultimately the Bay). This alternative would provide increased impervious surfaces onsite, remove existing industrial and manufacturing uses and onsite handling and storage of hazardous material from the site, improve the onsite storm drain system, and implement measures to treat runoff. This alternative would provide a greater total amount of impervious surface on the project site (open spaces and parks) than the project would provide (approximately 62 percent compared to 44 percent). Development activity in this alternative would also adhere to all agency standards, requirements, and specific project management measures to reduce soil erosion and the release of hazardous materials into watercourses, as would the project. As a result, this alternative would result in the same less-than-significant (after mitigation) water quality and hydrology impacts during construction, and the same less-than-significant /beneficial (after mitigation) impacts that would occur with the project during operations.

E. Cultural Resources

Building development would occur with the Reduced Development / Preservation Alternative, therefore the same potentially significant impacts related to archaeological and paleontological resources that would occur with the project (and reduced to less than significant, after mitigation) would occur with this alternative.

With this alternative, the 1920s and the 1950s portion of the Ninth Avenue Terminal would be retained and reused, but the associated wharf structure would be partially demolished to allow creation of a new, large-scale open space. As discussed in Section IV.E, Cultural Resources, Impact E.4, the wharf structure that supports the Terminal was constructed as part of the initial construction of the Terminal, its loss or substantial alteration would be substantially impair the

historic resource (Terminal and wharf) and result in the loss of its industrial character. Therefore, the significant and unavoidable impact that would occur with the project (and cumulatively) as a result of the substantially altering the wharf structure, would also occur with this alternative, although to a lesser extent since the Terminal building itself would be retained.

F. Geology, Soils, and Seismicity

Building development would occur with the Reduced Development / Preservation Alternative, therefore the same potentially significant and significant impacts (reduced to less than significant, after mitigation) related to geology, soils, and seismic hazards that would occur with the project would occur with this alternative.

G. Noise

Development under the Reduced Development / Preservation Alternative would generate fewer daily vehicle trips than the proposed project, which would result in reduced vehicular noise levels associated with the alternative operation compared with the project operation. However, this alternative would introduce residential and park uses to the existing noise environment considered “normally unacceptable” for such uses, resulting in the same significant and unavoidable impact as the project. Like the project, development of this alternative on the project site would require construction involving a significant number of piles for an extended duration. To develop this 540-unit scenario with 50-foot tall buildings (compared to 86 to 240 feet tall with the project) and relatively shorter duration than the project, an estimated average of 357 piles per parcel (compared to 675 for the project) would be required over an average duration of 10 weeks per parcel (compared to 12 weeks for the project). Therefore, this alternative would result in the same significant and unavoidable impact resulting from construction noise as the project.

H. Hazardous Materials

The Reduced Development / Preservation Alternative would involve new development on the site. Therefore is the alternative would have the same potentially significant impacts (reduced to less than significant, after mitigation) associated with exposing construction workers and the public to hazardous materials during construction that would occur with the project. Remediation of the site would occur (as described for the project), and any operational hazardous materials impacts would be less than significant, as with the project.

I. Biological Resources

Construction activities would occur with the Reduced Development / Preservation Alternative, including the same shoreline improvements as proposed for the project. Therefore, the same potentially significant impacts (reduced to less than significant, after mitigation) to potential jurisdictional wetlands, fisheries, and nesting/breeding habitats and specific status species that would occur with the project (and that would be reduced to less than significant, after mitigation) would occur with this alternative.

J. Population, Housing, and Employment

Like the project, the Reduced Development / Preservation Alternative would remove all existing uses , therefore there would be similar less-than-significant impacts from displacing businesses and jobs.

There would be substantially less growth of housing and population (about 83 percent less), less retail/commercial development (about 95 percent less), and less employment on the site (about 84 percent less). Generally, the types of less-than-significant impacts identified for the project would also occur under this alternative, but they would be of much less significance yet because of the substantially lower growth.

Impacts from induced population growth would be much less under the Reduced Development/Preservation Alternative, compared to the less-than-significant impacts of the project. Like the project, this alternative would provide beneficial housing market effects from additional housing opportunities and improved jobs/housing balance, although to a much less extent. The new waterfront amenities would increase demand for nearby locations that offer proximity and access to the site and for other locations along the waterfront. Like the project, there could be indirect effects that encourage additional new development sooner than would otherwise occur in adjacent areas and other waterfront locations. The Reduced Development/Preservation Alternative would result in less waterfront eating and drinking and retail shopping opportunities compared to the project, and would include substantially more community uses (conference, educational, cultural, and/or recreational uses) in the Ninth Avenue Terminal building. Therefore, impacts from increased competition with other retailers are not anticipated. New residents on the site would contribute some additional retail spending to support business activity elsewhere in Oakland and surrounding areas, although the amount of additional spending would be substantially less than under the project.

K. Visual Quality and Shadow

The existing character of the project site would change substantially with the Enhanced Reduced Development / Preservation Alternative, as it would with each of the development alternatives and the project. The existing industrial character would be replaced with a residential development of varying density and building heights and open spaces.

The proposed maximum residential density of 28 units per net acre would be consistent with the 40 units per net acre permitted in the PWD-1. At the proposed density and given the development parcel acreages, the projected building heights in this alternative would range from approximately 40 to 50 feet tall throughout the development areas, which is all west of 5th Avenue. No high-rise buildings would be developed in this alternative. The retained Terminal building would remain 40 feet tall and prominent from higher elevations (I-880, long-range viewpoints). Existing buildings in Fifth Avenue Point are approximately 15 to 30 feet tall and are not anticipated to change substantially.

Although relatively lower in height and density than the some of the other alternatives, building development would occur on all sides of Clinton Basin and in proximity to the Terminal building

and new open spaces. A local street layout would be a modified grid, which creates view corridors directly of Shoreline Park and the estuary on its main northeast-southwest axis from the Embarcadero. The retained Ninth Avenue Terminal building would limit view corridors to open spaces and the estuary along the main, intersecting northwest-southeast axis.

As a result of having overall lower building development, this alternative would have the same less-than-significant impacts on visual quality (views and shadows) as the project. The alternative would further reduce these impacts by allowing additional views from points along the Embarcadero at 5th Avenue and Fallon Street. More of the existing distant views of the Oakland Hills from the Amtrak pedestrian bridge at Jack London Square (see **Figure IV.K-4**) may be retained**.** Although the Terminal is a Estuary-related feature, retaining the entire Terminal building would continue to block views of the estuary from within the site as well as from distant public vantagepoints. Also, since development would encompass Clinton Basin, as with the project, views would be limited from this area. Additionally, shadows cast by the lower buildings in this alternative (compared to the project) would have less-than-significant shadow impacts, as with the project, and would further reduce these effects on areas around Fifth Avenue Point and near Clinton Basin.

The increased level of light and glare with this alternative would be comparable to that of other urban development in the area. No development would occur west of Lake Merritt Channel and Fifth Avenue Point, near existing residential and work-live developments. Therefore, as with the project, this alternative would result in a less than-significant light and glare impact that would likely be slightly reduced from that of the project.

Overall, this alternative would have the same less-than-significant visual quality, shadow, and light and glare impacts as identified for the project.

L. Public Services and Facilities

Compared to the project, the Reduced Development / Preservation Alternative would introduce fewer new residents (881 compared to 5,270) and households (518 compared to 3,100)[13] to the project site. Approximately 32.7[14] acres of new park would be added to the project site (compared to 19.25 new acres with the project), which would result 37.1 acres per 1,000 residents on the project site. Overall, this alternative would result in the same less-than-significant impacts on public services and facilities that would occur with the project.

M. Utilities and Service Systems

The reduced development of residential, commercial, and community uses that would occur with the Reduced Development / Preservation Alternative would create a lower demand for water, wastewater, and storm drain service and facilities, solid waste, and gas and electricity services than would result from the project. However, the new development on the site would likely result in the same less than significant impacts.

[13] 497 households compared to 2,976 project households, with 4 percent vacancy rate applied.
[14] Total 39.9 acres proposed, minus existing 7.2-acre Estuary Park and Jack London Aquatic Center.

Sub-Alternative: Full Ninth Avenue Terminal Preservation and Adaptive Reuse

Description

The Ninth Avenue Terminal Preservation Full Preservation Sub-Alternative would retain and adaptively reuse the Ninth Avenue Terminal and related wharf structure to avoid the significant and unavoidable impacts (project and cumulative) that would occur with the project. As concluded in the cultural resources impacts analysis in this EIR (Section IV.E), the entire Ninth Avenue Terminal building and its related wharf appear to be individually eligible for listing on the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR). Because major additions to the structure in 1951 were in keeping with the original design and intent and of the original 1930 structure, the entire Terminal building and wharf retain an overall high level of integrity.[15] The structure also is considered to be listed on the City of Oakland's Local Register of Historic Resources by virtue of its status as a Potential Designated Historic Property with an "A" rating (primary importance). Therefore, the original 1920s portion of the building, the 1951 addition, and the related wharf (in its existing paved nature) form an intact historic resource and would result in a significant unavoidable impact if removed, wholly or partially. Removal of the 1951 addition alone would substantially alter the integrity of the resource, such that it would probably no longer qualify as a federal, state, and local historical resource.

This alternative is considered a stand-alone alternative that could be combined with the proposed project and other alternatives. Full preservation of the Ninth Avenue Terminal that avoids the significant and environmental impact is addressed in this Sub-Alternative only and is not addressed elsewhere in the EIR. Alternatives that retain less of the Terminal are addressed in Alternative 2 (Open Space / Partial Preservation), which would retain the 1920s portion of the Terminal building, and in Alternative 3 (Reduced Development / Preservation), which would retain the entire Terminal building. However, each of these alternatives would demolish parts of its associated wharf structure and replace the historic paved surface with landscaped open space.

As with each of the alternatives that would retain the Terminal building (except the No Project Alternative), adaptive reuse of (as well as any physical alterations to) the remaining parts of the structure would be done consistent with the Secretary of Interior Standards for the Treatment of Historic Properties and City approvals. Future uses also would be consistent with the Tidelands Trust designation that currently exists on the project site (i.e., commerce, navigation, and fisheries, open space, and/or recreation), consistent with the Public Trust Doctrine. Any reuse or alterations (including structural repair) of the wharf structure would also be consistent with the Secretary of Interior Standards for the Treatment of Historic Properties and City approvals.

[15] This comment refers to the building's historical "integrity," which pursuant to the NRHP and CRHR, consists of seven aspects: location, design, setting, materials, workmanship, feeling, and association. This does not address structural/seismic integrity.

Impacts

Traffic and air pollutant emissions and noise resulting from increased traffic are covered in Alternative 3 since the same new community uses are assumed within the Terminal building. Since this Sub-Alternative would not remove the wharf structure, potential water quality impacts associated with construction activities and bottom disturbance (removal/replacement of wharf structure) could be reduced and remain less than significant, as with the project. However, since the wharf would remain paved, the amount of pervious surface (and thus reduced stormwater runoff) that would be removed would be less than that with the project and each development alternative that propose large, new open space area in where the wharf currently exists. Coupling this Sub-Alternative with any of the alternatives analyzed in this EIR, or with the project, would avoid the significant and unavoidable impacts (project and cumulative) that would occur with demolition or substantial alteration of the Ninth Avenue Terminal building and its associated wharf, pursuant to CEQA and the Historic Preservation Element of the General Plan.[16]

The summary of the significant environmental effects of the project and each alternative are shown in **Table V-5**.

D. Environmentally Superior Alternative

Alternative 1A (No Project) would avoid all significant unavoidable and significant impacts associated with the project and each of the other alternatives, and therefore would be the environmentally superior alternative. This would be the case even though there are existing conditions on the project site that may be more adverse than would occur with the project (or other alternatives), and that would continue with Alternative 1A. These include hazardous materials (soils contamination) on the site, added to less-than optimal stormwater runoff conditions detrimental to water quality, blocked views of the estuary from public vantage points, and the protection of existing biologically sensitive resources or habitat on the site, including wetlands.

However, CEQA requires that that a second alternative be identified when the “no project” alternative emerges as the Environmentally Superior Alternative (CEQA *Guidelines*, Section 15126.6(e)). In this case, Alternative 3 (Reduced Development / Preservation) with the Full Preservation Sub-Alternative would therefore be considered environmentally superior since it would avoid (or reduce to the greatest extent) several significant and unavoidable impacts that would occur with the project. (Alternative 1B, No Project / Estuary Plan, is also considered a “no project” alternative, but is discussed further below in comparison to the other alternatives.) **Appendix I** includes the comparative technical information related to traffic, air quality emissions, and noise, related to the project and each alternative

16 It is assumed that the overall amount of new open space that would occur with the project or either of the development alternatives would be reduced equally (or reconfigured) to account for the paved wharf area that would remain under the Sub-Alternative.

Alternative 3 (Reduced Development / Preservation) – Environmentally Superior

Alternative 3 (Reduced Development / Preservation) (540 units) would avoid two of the three significant and unavoidable project impacts at area intersections under Buildout (2025) that would occur with the project: 6th/Jackson Streets and Lakeshore Avenue/MacArthur Boulevard intersections (Impact B.2). (A significant and unavoidable impact would only occur at 6th/Jackson Streets.) Alternative 1B (No Project / Estuary Plan) would avoid the significant and unavoidable impacts at these two area intersections under Buildout (2025) during the AM peak hour only. Overall, Alternative 3 would have a significant (but mitigable, except at 6th/Jackson Streets intersection) impact at 4 intersections, whereas the project would have a significant impact at 17 intersections, and Alternative 1B would have a significant impact at 8 intersections Also, the significant project impact on regional roadways under Buildout (2025) conditions would not occur with Alternative 3 (nor with any of the alternatives).

Alternative 3 would result in two of the six significant and unavoidable project impacts resulting from the project's contribution to cumulatively significant impacts at local intersections in 2025: 1) 5th Street/Broadway and 2) 6th/Jackson Streets (Impact B.3). Overall, Alternative 3 would result in a significant or significant unavoidable impacts under cumulative conditions at five area intersections, whereas the project would result in a significant impact under cumulative conditions at 14 intersections, and Alternative 1B would result in significant (but mitigable, except at 5th Street/Broadway, 6th/Jackson Streets intersections) impacts at 8 area intersections .

Alternative 3 would avoid the project's significant and unavoidable impact on regional air emissions (PM-10) in cumulative conditions (2025) (Impact C.7), and would do so only slightly better than Alternative 1B (No Project / Estuary Plan). The project would generate 210 lbs/day under net cumulative plus project conditions, compared to 49 lbs/day with Alternative 1B, and 40 lbs/day with Alternative 3 (the environmentally superior).

Alternative 3 would also reduce the significant and unavoidable impacts that would occur with the project in terms of demolition of a historic resource (Impact E.3, Impact E.4, and Impact E.8). Except for the Full Preservation Sub-Alternative, Alternative 3 is the only alternative that would retain the entire Ninth Avenue Terminal building, although portions of the associated wharf structure would still be removed and the remainder paved to result in a significant and unavoidable impact (since the wharf in its existing paved nature is considered an integral part of the historic resource). This would be avoided with implementation of the Full Preservation Sub-Alternative to this alternative.

Less overall development would occur with Alternative 3 compared to the project (and each of the other alternatives). Specifically relative to Fifth Avenue Point, adjacent new buildings would be lower in height and contain substantially fewer new dwelling units that would occur with the project. Channel Park would abut Fifth Avenue Point on the west. As a result, this alternative would have less adverse effect on Fifth Avenue Point in terms of new, incompatible land uses and change in environment (Impact A.1 and Impact A.3), but this impact would continue to be considered less than significant (after mitigation), as would occur with the project.

Alternative 3 would not, however, fully support the project objectives to provide a range of needed housing opportunities, help address the existing jobs/housing imbalance, and provide housing with access to alternative modes of transportation, each of which is consistent with policies in the General Plan LUTE, the Estuary Policy Plan, and the Housing Element. With 540 dwelling units (compared to 3,100 with the project, no units with Alternative 1B, and 1,800 units with Alternative 2), these objectives and policies would be met to a much lesser degree than with the project or any of the other alternatives.

E. Alternatives Considered but not Analyzed in Detail

Offsite Alternative

Other possible alternatives were considered but not further analyzed in this EIR. As discussed in Section B of this chapter, most of the suggested alternatives (and possible components of alternatives) have been incorporated into the alternatives selected for analysis. A possible alternative that was considered but not analyzed further is an offsite alternative.

An offsite alternative would evaluate whether significant and unavoidable impacts to traffic, air quality, noise, or historic resources that would occur with the project could be avoided or substantially reduced by developing the project on another site within the city of Oakland. It is possible that the traffic, air quality, and noise impacts that occur with the project could be avoided or substantially reduced on a project site located in a less traffic-impacted area of the city or on a site not in proximity to a major freeway, however, an alternative site would not fulfill the basic project objective of redeveloping the Oak-to-Ninth District of the Oakland Estuary. Additionally, the alternatives evaluated in this EIR successfully avoid and/or substantially reduce traffic, air quality, and noise impacts relative to the project's impacts. Regarding historic resources, locating the project at another site may avoid significant and unavoidable impacts to the Ninth Avenue Terminal. However this is accomplished within the alternatives evaluated in this EIR while continuing to meet the basic project objectives.

Overall, this alternative was not considered in detail since an offsite location would not meet basic project objectives to redevelop the Oak-to-Ninth District. Other sites beyond the Oak-to-Ninth District and the Oakland Estuary would not meet the project's objectives of fulfilling specific goals and objectives for the waterfront and the Oakland Estuary, as identified in the General Plan Land Use and Transportation Element (LUTE), the Estuary Policy Plan, and the Open Space, Conservation, and Recreation Element (OSCAR).

TABLE V-5

SUMMARY OF IMPACTS: PROJECT AND ALTERNATIVES

NOTE: Significance levels shown in the table reflect levels of significance *after mitigation* and indicate maximum impact during buildout and operation, unless otherwise specified.	**Project**	**1A No Project**	**1B No Project / Estuary Plan**	**2 Open Space / Partial Preservation**	**3 Reduced Development / Preservation**	**Full Terminal Preservation**
	3,100 units; min. 15K Terminal bulkhead retained; 28.4 acres open space	Existing conditions; Terminal retained/no reuse; 7.7 acres open space	Community and commercial use; 650-rm hotel; Terminal demolished; 41.5 acres open space	1,800 units, Embarcadero pkwy; 1920s Terminal retained/reused; 40.6 acres open space	540 units; Terminal retained/reused; 39.9 acres open space	Full Terminal and wharf retained and reused
A. Land Use, Plans, and Policies						
A.1: The project would develop new and different uses and buildings immediately adjacent to and surrounding Fifth Avenue Point and may result in the physical division of an existing community.	LSM	N	LSM⇩	LSM	LSM	
A.2: The project would not be consistent with the current existing Estuary Plan land use classification and zoning districts for the project site.	LSM	N	LSM	LSM	LSM	-
A.3: The project would introduce new land uses, and residential densities, and large building masses, forms, and significant height to the project site. The project may likely increase noise, light and glare, and traffic, and that may reduce or eliminate existing views from public vantage points. As a result, the project would result in a substantial change in existing environment and existing land uses.	LSM	N	LSM	LSM	LSM	
B. Transportation, Circulation, and Parking						
B.1: Traffic generated by Phase 1 of the project would affect traffic levels of service at local intersections in the project vicinity in 2010.	SU	N	SU⇩	SU⇩	LS	-

Legend

LS	Less than significant or negligible impact; no mitigation required
LSM	Less than significant adverse impact, after mitigation
SU	Significant and unavoidable adverse impact, after mitigation
N	No impact
B	Beneficial
⇧⇩	Impact is more severe or less severe than project impact, after mitigation

[a] Not considering the Sub-Alternative which can be applied to these alternatives and would result in less than significant historic resource impacts.

TABLE V-5 (continued)

SUMMARY OF IMPACTS: PROJECT AND ALTERNATIVES

NOTE: Significance levels shown in the table reflect levels of significance *after mitigation* and indicate maximum impact during buildout and operation, unless otherwise specified.	**Project**	**1A No Project**	**1B No Project / Estuary Plan**	**2 Open Space / Partial Preservation**	**3 Reduced Development / Preservation**	**Full Terminal Preservation**
	3,100 units; min. 15K Terminal bulkhead retained; 28.4 acres open space	Existing conditions; Terminal retained/no reuse; 7.7 acres open space	Community and commercial use; 650-rm hotel; Terminal demolished; 41.5 acres open space	1,800 units, Embarcadero pkwy; 1920s Terminal retained/reused; 40.6 acres open space	540 units; Terminal retained/reused; 39.9 acres open space	Full Terminal and wharf retained and reused
B.2: Traffic generated by buildout of the project would affect traffic levels of service at local intersections in the project vicinity in 2025.	SU	N	SU⇩	SU⇩	SU⇩	-
B.3: Traffic generated by buildout of the project would contribute to cumulatively significant impacts at local intersections in the project vicinity in 2025.	SU	N	SU⇩	SU⇩	SU⇩	-
B.4: The project would generate demand for alternative transportation service for the area.	LSM	N	LSM	LSM	LSM	-
B.7: The project would increase the potential for conflicts among different traffic streams.	LSM	N	LSM	LSM	LSM	-
B.9: The project would contribute to 2025 changes to traffic conditions on the regional and local roadways.	SU	N	LS	LS	LS	-
B.10: Project construction would temporarily affect traffic flow and circulation, parking, and pedestrian safety.	LSM	N	LSM	LSM	LSM	-
C. Air Quality and Meteorological Conditions						
C.1: Activities associated with demolition, site preparation and construction would generate short-term emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions	LSM	N	LSM	LSM	LSM	--

Legend

LS	Less than significant or negligible impact; no mitigation required
LSM	Less than significant adverse impact, after mitigation
SU	Significant and unavoidable adverse impact, after mitigation
N	No impact
B	Beneficial
⇧⇩	Impact is more severe or less severe than project impact, after mitigation

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C.7: The project together with anticipated future cumulative development in Oakland and the Bay Area in general would contribute to regional air pollution.	SU	N	LS	SU⇩	LS	-
D. Hydrology and Water Quality						-
D.1: Project construction would involve activities (excavation, soil stockpiling, boring and pile driving, grading, and dredging, etc.) that would generate loose, erodable soils that, if not properly managed, could violate any water quality standards or waste discharge requirements; result in substantial erosion or siltation; create or constitute substantial polluted runoff; or otherwise substantially degrade water quality.	LSM	N	LSM	LSM	LSM	-
D.2: Project construction activities would include dredging in Clinton Basin, which could require disturbance, removal, and disposal of contaminated sediment that may result in adverse impacts to aquatic organisms and water quality.	LSM	N	LSM	LSM	LSM	-

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D.5: Site development under the project would involve new landscaping and open lawns. If not properly handled, chemicals used to establish and maintain landscaping and open lawn areas, such as pesticides and fertilizers, could flow into the waterways and result in water quality impacts to the Oakland Estuary, and eventually San Francisco Bay.	LSM	N	LSM	LSM	LSM	-
D.6: The project sponsor could deplete groundwater supplies or interfere with groundwater recharge and cause contamination of surface.	LSM	N	LSM	LSM	LSM	-
E. Cultural Resources						
E.1: Construction of the project could cause substantial adverse changes to the significance of currently unknown cultural resources at the site, potentially including an archaeological resource pursuant to CEQA Guidelines Section 15064.5 or CEQA Section 21083.2(g), or the disturbance of any human remains, including those interred outside of formal cemeteries.	LSM	N	LSM	LSM	LSM	-

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E.2: The project may adversely affect unidentified paleontological resources at the site.	LSM	N	LSM	LSM	LSM	-
E.3: The project would result in the substantial demolition of the Ninth Avenue Terminal, which is an historic resource as defined in CEQA Guidelines Section 15064.5.	SU	N	SU	SU⇩	SU⇩	N
E.4: The project would substantially alter the wharf structure supporting the Ninth Avenue Terminal and surrounding areas, which is an historic resource, as defined in CEQA Guidelines Section 15064.5.	SU	N	SU	SU⇩	SU⇩	N
E.5: The project would construct a new mixed-use, multi-story development immediately adjacent to the remaining Bulkhead Building which may not be architecturally compatible with this structure as a potential future Oakland City Landmark.	SU	N	-	SU⇩	SU⇩	-
E.8: The substantial demolition of the Ninth Avenue Terminal, in combination with the previous loss of the other two Oakland Municipal Terminals, would result in cumulative impacts to historic resources.	SU	N	SU	SU⇩	SU⇩	N

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F. Geology, Soils, and Seismicity						
F.1: In the event of a major earthquake in the region, seismic ground shaking could potentially injure people and cause collapse or structural damage to proposed structures.	LSM	N	LSM	LSM	LSM	-
F.2: In the event of a major earthquake in the region, seismic ground shaking could potentially expose people and property to liquefaction and earthquake-induced settlement.	LSM	N	LSM	LSM	LSM	-
F.3: Development at the project site could be subjected to settlement.	LSM	N	LSM	LSM	LSM	-
F.4: Development at the project area may include use of dredged material as fill which would be subject to settlement and subsidence.	LSM	N	LSM	LSM	LSM	-
F.5: Construction activities at the project area could loosen and expose surface soils. If this were to occur over the long term, exposed soils could erode by wind or rain causing potential loss of topsoil. In addition, shoreline areas exposed to wave action could be subject to erosion and loss of topsoil.	LSM	N	LSM	LSM	LSM	-

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G. Noise						
G.1: Project construction activities would intermittently and temporarily generate noise levels above existing levels in the project vicinity. Project construction noise levels could exceed City of Oakland standards and cause disturbances in noise-sensitive areas, such as residential areas.	SU	N	SU	SU	SU	-
G.2: Noise from project-generated traffic and other operational noise sources, such as mechanical equipment and truck loading/unloading, could exceed City of Oakland Noise Ordinance standards and disturb project occupants and nearby residents.	LSM	N	LSM⇩	LSM	LSM	-
G.3: The project would locate noise-sensitive multifamily residential uses in a noise environment where noise levels are above what is considered “normally acceptable” according to the City of Oakland General Plan Noise Element.	LSM	N	N	LSM	LSM	-

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G.4: The project would locate noise-sensitive multifamily residential uses and public parks in a noise environment where noise levels are above what is considered "normally acceptable" according to the City of Oakland General Plan Noise Element.	SU	N	SU	SU	SU	-
H. Hazardous Materials						
H.1: Disturbance and release of contaminated soil during remediation, demolition and construction phases of the project, or transportation of excavated material, contaminated groundwater or dredged sediment could expose construction workers, the public, or the environment to adverse conditions related to hazardous materials handling.	LSM	N	LSM	LSM	LSM	-
H.2: Disturbance and release of hazardous structural and building components (i.e. asbestos, lead, PCBs, USTs, and ASTs) during demolition and construction phases of the project or transport of these materials could expose construction workers, the public, or the environment to adverse conditions related to hazardous materials handling.	LSM	N	LSM	LSM	LSM	-

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H.3: Hazardous materials used onsite during construction activities (i.e., solvents) could be released to the environment through improper handling or storage.	LSM	N⇧	LSM	LSM	LSM	-
I. Biological Resources / Wetlands						
I.2: Construction activities required for the project would result in a substantial adverse effect on potentially jurisdictional wetlands or waters of the U.S. under the jurisdiction of the Corps, waters of the state under the jurisdiction of the Regional Water Quality Control Board (RWQCB), and wetlands under the jurisdiction of BCDC jurisdiction.	LSM	N	LSM	LSM	LSM	-
I.3: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on fisheries resources in the Oakland Inner Harbor.	LSM	N	LSM	LSM	LSM	-
I.4: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on nesting habitat for breeding raptors and passerine birds, including Cooper's hawk	LSM	N	LSM	LSM	LSM	-

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I.5: The project could have a substantial adverse effect, either directly or through habitat modifications, on special-status nesting and roosting bats.	LSM	N	LSM	LSM	LSM	-
Less Than Significant, and as noted, Beneficial or No Impacts						
B. Transportation, Circulation, and Parking						
B.5: The project would create demand for bicycle parking.	LS	N	LS	LS	LS	-
B.6: The project would increase the potential for pedestrian safety conflicts.	LS	N	LS	LS	LS	-
B.8: The project would contribute to 2010 changes to traffic conditions on the regional and local roadways.	LS	N	LS	LS	LS	-
C. Air Quality and Meteorological Conditions						
C.2:-The project would result in an increase in regional ROG, NOx, and PM emissions due to project-related traffic.	LS	N	LS	LS	LS	-

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C.3: Project traffic would increase localized carbon monoxide concentrations at intersections in the project vicinity.	LS	N	LS	LS	LS	-
C.4:-Operation of project facilities would produce objectionable odors that would affect a substantial number of people.	LS	N	LS	LS	LS	-
C.5: Construction and operation of the project would expose existing sensitive receptors in the project vicinity and planned multifamily residential land uses associated with the project to health risks from diesel emissions.	LS	N	LS	LS	LS	-
C.6: The proposed project could result in hazardous wind conditions.	LS	N	LS	LS	LS	-
C.8: The proposed project could result in cumulative hazardous wind conditions.	LS	N	LS	LS	LS	

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D. Hydrology and Water Quality						
D.3: Development of the project would result in a substantial decrease in impervious area. The project would implement post-construction BMPs to increase stormwater infiltration; to treat and direct stormwater runoff or discharge into a stormwater system and the estuary; and to prevent illicit discharge. Therefore, the project would not violate regulatory water quality standards or waste requirements.	LS/B	N	LS/B	LS/B	LS/B	-
D.4: Project operation would involve increased use of the marinas at the project site. As required by the RWQCB, the project design would incorporate post construction BMPs to treat stormwater and control discharge of wastes from the vessels used at the marinas. Therefore, the project would not violate water quality standards or waste discharge requirements.	LS	N	LS	LS	LS	-
D.7: The project would not result in flooding due to its proximity to a 100-year flood hazard area, or expose to other substantial risk related to flooding, seiche, tsunami, or mudflow.	LS	N	LS	LS	LS	-

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D.8: The project would result in a net decrease in impervious surfaces and would reconfigure and stabilize the shoreline along the project site, thereby decreasing the volume of stormwater runoff. Therefore the project would not increase runoff and result in substantial flooding on or offsite, or exceed the capacity of the existing stormwater drainage system.	LS/B	N	LS/B	LS/B	LS/B	-
D.9: The increased construction activity and new development resulting from the project, in conjunction with population and density of other foreseeable development in the city, would not result in cumulative impacts with respect to hydrology and water quality.	LS	N	LS	LS	LS	-
E. Cultural Resources						
E.6: The project would demolish the remaining buildings on the project site	LS	N	LS	LS	LS	-
E.7: The project would construct a new mixed-use, multi-story development, diminishing the industrial character of the project site and vicinity, and altering the existing setting of the Fifth Avenue Point neighborhood.	LS	N	LS	LS	LS	LS

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F. Geology, Soils, and Seismicity						
F.6: The project would not expose people or structures to substantial risk or hazards as a result of 1) expansive soils, or 2) conditions that would potentially result in landslides or 3) surface fault rupture.	LS	N	LS	LS	LS	-
F.7: The project would not create substantial risks to life or property as a result of being located above a well, pit, swamp, mound, tank vault, or unmarked sewer line; above landfills for which there is no approved closure and post-closure plan, or unknown fill soils; or soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.	LS	N	LS	LS	LS	-
F.8: The development proposed as part of the project, when combined with other reasonably foreseeable development in the vicinity, would not result in significant cumulative impacts with respect to geology, soils or seismicity.	LS	N	LS	LS	LS	-

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G. Noise						
G.5: The proposed project, together with anticipated future development in Oakland, could result in long-term traffic increases that could cumulatively increase noise levels.	LS	N	LS	LS	LS	-
H. Hazardous Conditions						
H.4: Project operations would generate and involve the handling of general commercial/retail and household hazardous waste in small quantities, and therefore would not cause an adverse effect on the environment.	LS	N	LS	LS	LS	-
H.5: The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	LS	N	LS	LS	LS	-
H.6: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	LS	N	LS	LS	LS	-

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H.7: Development proposed as part of the project, when combined with other foreseeable development in the vicinity, would not result in cumulative hazardous materials impacts.	LS	N	LS	LS	LS	-
I. Biological Resources						
I.1: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on special-status mammal species, specifically the Pacific harbor seal.	LS	N	LS	LS	LS	-
I.6: Increased lighting and shading associated with the new project buildings could have a substantial adverse effect, either directly or through habitat modifications, on biological resources.	LS	N	LS	LS	LS	-
I.7: The removal of any protected trees identified within the project site would be conducted in compliance with the City of Oakland's Tree Preservation and Removal Ordinance.	LS	N	LS	LS	LS	-

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I8: Construction activity and new development resulting from the project, in conjunction with other foreseeable development in the city and along its shoreline, could result in impacts on wetlands, other waters of the U.S., and special-status species.	LS	N	LS	LS	LS	-
J. Population, Housing, and Employment						
J.1: The project would not displace substantial numbers of existing housing units; nor would the project displace substantial numbers of people, necessitating construction of replacement housing.	N	N	N	N	N	-
J.2: The project would displace existing businesses and jobs, but not in substantial numbers necessitating construction of replacement facilities, or resulting in substantial increases in distances traveled.	LS	N	LS	LS	LS	-
J.3: The project would not induce substantial population growth directly by proposing new housing,	LS	N	N	LS⇩	LS⇩	-
or indirectly through infrastructure improvements.	LS	N	LS	LS	LS	

Legend

LS Less than significant or negligible impact; no mitigation required
LSM Less than significant adverse impact, after mitigation
SU Significant and unavoidable adverse impact, after mitigation
N No impact
B Beneficial
⇧⇩ Impact is more severe or less severe than project impact, after mitigation

[a] Not considering the Sub-Alternative which can be applied to these alternatives and would result in less than significant historic resource impacts.

TABLE V-5 (continued)

SUMMARY OF IMPACTS: PROJECT AND ALTERNATIVES

NOTE: Significance levels shown in the table reflect levels of significance *after mitigation* and indicate maximum impact during buildout and operation, unless otherwise specified.	**Project**	**1A No Project**	**1B No Project / Estuary Plan**	**2 Open Space / Partial Preservation**	**3 Reduced Development / Preservation**	**Full Terminal Preservation**
	3,100 units; min. 15K Terminal bulkhead retained; 28.4 acres open space	Existing conditions; Terminal retained/no reuse; 7.7 acres open space	Community and commercial use; 650-rm hotel; Terminal demolished; 41.5 acres open space	1,800 units, Embarcadero pkwy; 1920s Terminal retained/reused; 40.6 acres open space	540 units; Terminal retained/reused; 39.9 acres open space	Full Terminal and wharf retained and reused
J.4: The project would not induce substantial population growth in a manner not contemplated in the General Plan, with infrastructure requirements not previously considered or analyzed.	LS	N	N	LS	N	-
J.5: The project would not induce substantial population growth as a result of business and employment growth proposed in the project.	LS	N	LS⇧	LS	LS	-
(Non-CEQA) Potential for new retail development to cause ripple effects of store closures and long-term vacancies that result in physical deterioration and urban decay.	LS	N	LS⇩	LS⇩	N⇩	-
(Non-CEQA) Potential for housing market effects to lead to displacement or physical deterioration of housing or neighborhoods	LS	N	LS	LS	LS	-
K. Visual Quality and Shadow						

Legend

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K.1: The project would construct new buildings that would be taller and have more bulk than existing buildings in the area along pedestrian and vehicular routes and adjacent to the Oakland Estuary, and would substantially demolish the Ninth Avenue Terminal building. This would substantially, but not adversely, alter the existing visual character and quality of the project area.	LS/B	N	LS/B	LS/B	LS/B	-
K.2: The project would construct new buildings that would be taller and have more bulk than existing nearby buildings which would result in changes to views from nearby public viewpoints, but that would not adversely affect scenic vistas of which the project site is a part.	LS	N	LS⇩	LS⇩	LS⇧	LS⇧
K.3: The project would increase the amount of light and glare emitted from the project site but would not result in substantial adverse effects to day or nighttime views.	LS	N	LS	LS	LS	-

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K.4: The project would create additional shadow on adjacent areas west and north of the project site, however, the project would not cast shadow on historic resources (retained Ninth Avenue Terminal Bulkhead Building), would not introduce landscaping conflicting with the California Public Resource Code; would not cast shadow on buildings using passive solar heat, solar collectors for hot water heating, or photovoltaic solar collectors; and would not cast shadow that impairs the use of any public or quasi-public park, lawn, garden, or open space.	LS	N	LS⇩	LS⇩	LS⇩	-
K.5 The project would require approval of a general plan amendment and rezoning (among other discretionary approvals), but would be consistent with the policies and regulations addressing the provision of adequate light to appropriate uses.	LS	N	LS⇩	LS	LS	-
L. Public Services and Recreation Facilities						

Legend

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L.1: The increased population and density resulting from the project would not involve or require new or physically altered governmental facilities in order to maintain acceptable service ratios, response time, or other performance objectives for police protection services.	LS	N	LS	LS	LS	-
L.2: The increased population and density resulting from the project would not involve or require new or physically altered governmental facilities in order to maintain acceptable service ratios, response time, or other performance objectives for fire protection and emergency medical services and facilities.	LS	N	LS	LS	LS	-
L.3: The students generated by the project would not require new or physically altered school facilities in order to maintain acceptable service ratios or other performance objectives at local public schools.	LS	N	LS	LS	LS	-

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L.4: The project would create new parks, and the increased population resulting from the project would not result in increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of these facilities would occur or be accelerated, nor would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.	LS/B	N	LS/B	LS/B	LS/B	-
L.5: The project would increase the on-site resident population and increase the demand for library services; however, the increase in demand for such services would not result in the need to construct or expand libraries that might have an adverse physical effect on the environment.	LS	N	LS	LS	LS	-
L.6: The increased population and density resulting from the project, in conjunction with population and density of other foreseeable development in the city, would result in a cumulative increase in the demand for public services and parks. However, the project's contribution to such impacts would not be cumulatively considerable.	LS	N	LS	LS	LS	-

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M. Utilities and Service Systems						
M.1: The project would not exceed water supplies available to serve the project from existing entitlements and resources and require or result in the construction of water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	LS	N	LS	LS	LS	-
M.2: The project's projected wastewater demand would not result in the city of Oakland exceeding its citywide allocation under the Wet Weather Program or East Bay Municipal Utility District's (EBMUD) capacity to serve the project's projected demand in addition to its existing commitments within its service area.	LS	N	LS	LS	LS	-
M.3: The project would not require or result in construction of new offsite stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	LS	N	LS	LS	LS	-

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M.4: The project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs, and therefore the project would not require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects. The project would not impede the City of Oakland's ability to meet the waste diversion requirements of the California Integrated Waste Management Act or the Alameda County Waste Reduction and Recycling Initiative, nor cause the City to violate other applicable federal, state, or local statutes and regulations related to solid waste.	LS	N	LS	LS	LS	-
M.5: The project would not violate applicable federal, state, or local statutes and regulations relating to energy standards. The project would not result in a determination by the energy provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments, nor require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects.	LS	N	LS	LS	LS	-

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M.6: The increased development resulting from the project, in conjunction with population and density of other foreseeable development in the city, would result in increased demand for utilities and service systems. However, the project's contribution to such impacts would not be cumulatively considerable.	LS	N	LS	LS	LS	-

Legend

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CHAPTER VI
Impact Overview

Introduction

This section summarizes the findings with respect to significant, unavoidable environmental impacts, cumulative impacts, and growth-inducing impacts of the proposed project.

A. Significant, Unavoidable Environmental Impacts

The following significant, unavoidable environmental effects have been identified as a result of the proposed project:

- **Impact B.1: Traffic generated by Phase 1 of the project would affect traffic levels of service at local intersections in the project vicinity in 2010.**

- **Impact B.2: Traffic generated by buildout of the project would affect traffic levels of service at local intersections in the project vicinity in 2025.** (Also a Cumulative Impact)

- **Impact B.3: Traffic generated by buildout of the project would contribute to cumulatively significant impacts at local intersections in the project vicinity in 2025.** (Also a Cumulative Impact)

- **Impact B.9: The project would contribute to 2025 changes to traffic conditions on the regional and local roadways.** (Also a Cumulative Impact)

- **Impact C.7: The project together with anticipated future cumulative development in Oakland and the Bay Area in general would contribute to regional air pollution.** (Also a Cumulative Impact)

- **Impact E.3: The project would result in the substantial demolition of the Ninth Avenue Terminal, which is an historic resource as defined in CEQA Guidelines Section 15064.5.**

- **Impact E.4: The project would substantially alter the wharf structure supporting the Ninth Avenue Terminal and surrounding areas, which is an historic resource, as defined in CEQA Guidelines Section 15064.5.**

- **Impact E.5: The project would construct a new mixed-use, multi-story development immediately adjacent to the remaining Bulkhead Building which may not be architecturally compatible with this structure as a potential future Oakland City Landmark.**

- **Impact E.8: The substantial demolition of the Ninth Avenue Terminal, in combination with the previous loss of the other two Oakland Municipal Terminals, would result in cumulative impacts to historic resources.** (Also a Cumulative Impact)

- **Impact G.1: Project construction activities would intermittently and temporarily generate noise levels above existing levels in the project vicinity. Project construction noise levels could exceed City of Oakland standards and cause disturbances in noise-sensitive areas, such as residential areas.**

- **Impact G.4: The project would locate noise-sensitive multifamily residential uses and public parks in a noise environment where outdoor noise levels are above what is considered "normally acceptable" according to the City of Oakland General Plan Noise Element.**

B. Cumulative Impacts

The California Environmental Quality Act (CEQA) defines cumulative impacts as two or more individual impacts which, when considered together, are substantial or which compound or increase other environmental impacts. The cumulative analysis is intended to describe the "incremental impact of the project when added to other, closely related past, present, or reasonably foreseeable future projects" that can result from "individually minor but collectively significant projects taking place over a period of time (CEQA Guidelines Section 15355). The analysis of cumulative impacts is a two-phase process that first involves the determination of whether the project, together with reasonably foreseeable projects, would result in a significant impact. If there would be a significant cumulative impact of all such projects, the EIR must determine whether the project's incremental effect is cumulatively considerable, in which case, the project itself is deemed to have a significant cumulative effect. (CEQA Guidelines Section 15130).

Cumulative impacts that could occur as a result of the project are discussed in the appropriate sections of Chapter IV of this report. In summary, significant cumulative effects to which the project's contribution would be cumulatively considerable include the following:

- **Impact B.2: Traffic generated by buildout of the project would affect traffic levels of service at local intersections in the project vicinity in 2025.** (Also Significant and Unavoidable)

- **Impact B.3: Traffic generated by buildout of the project would contribute to cumulatively significant impacts at local intersections in the project vicinity in 2025.** (Also Significant and Unavoidable)

- **Impact B.9: The project would contribute to 2025 changes to traffic conditions on the regional and local roadways.** (Also Significant and Unavoidable)

- **Impact C.7: The project together with anticipated future cumulative development in Oakland and the Bay Area in general would contribute to regional air pollution.** (Also Significant and Unavoidable)

- **Impact E.8: The substantial demolition of the Ninth Avenue Terminal, in combination with the previous loss of the other two Oakland Municipal Terminals, would result in cumulative impacts to historic resources.** (Also Significant and Unavoidable)

C. Growth-Inducing Impacts

This section addresses the implications of the Oak to Ninth Avenue Project for growth in Oakland, nearby cities, and the Bay Area region. The discussion is organized into five topics:

- Net addition of housing and population: the extent to which project residential development would result in growth of households and population that otherwise would not occur in Oakland, nearby cities, or the Bay Area region;
- Interrelationships between additional spending by project residents and commercial development in the project, and implications for growth inducement;
- The growth-inducing relationship between increases in business activity and employment and associated increases in population and the demand for housing;
- Construction-related business activity and employment supported by development of the project; and
- Nearby area effects of the project on growth in surrounding areas.

This section summarizes impacts addressed in Section IV.J. Population, Housing, and Employment, providing a context for evaluating growth-inducing impacts.

Project Implications for Growth

Net Addition of Housing and Population

Development of the project would result in 3,100 housing units built at the project site. It is estimated that the new housing would accommodate 2,976 households with approximately 5,060 residents. This growth of housing and population would increase the demand for nearby community services and facilities.

The project and associated regulatory changes in land uses and density for development of the project site would increase the supply of land for large-scale, higher-density residential

development in Oakland. Given strong demand for housing and limited locations for creating a new urban neighborhood with the types of higher-density housing proposed for the project, the new housing to be built would add to the housing stock in Oakland and represent additional housing over and above what would otherwise be built. Similarly, development of the project would also provide a net addition of units to the stock of housing in the larger, Inner East Bay area, including Oakland and its nearby cities. Similar to Oakland, there are limited locations in this larger surrounding area for the scale and types of higher-density housing proposed for the project. Because the project would result in more housing units than would otherwise occur, the project also would result in a net addition of households and population in Oakland and the Inner East Bay area.

From the regional perspective of the Bay Area overall, the project would accommodate more housing and population growth in the Oakland area, thereby reducing the demand for housing and the growth of population in more outlying parts of the region. Development of the project would provide additional housing supply in a central Bay Area location with strong housing demand. The project's location is anticipated to attract households with a high proportion of working adults who value the site's close-in regional location with good accessibility to workplaces in Oakland, elsewhere in the Inner East Bay, and San Francisco. Thus, from the regional perspective, the project would add housing in an urban, infill location, adding to the housing supply in the Oakland area, and affecting the distribution of household and population growth within the region. Over the long term, with the project, more higher-density housing in the central parts of the region is likely to result in a larger total regional housing supply than would a more dispersed, lower-density pattern of regional development.

Additional Spending and New Commercial Development

The households to reside in the project would generate additional spending for a variety of goods and services including spending for groceries, drugs, and other convenience items; for eating and drinking out; for retail shopping (clothing, home furnishings, specialty goods, electronics, etc.); for automobile and related purchases and services; and for home maintenance and repair. Retail expenditures by project residents are estimated to total approximately $95 million annually (as discussed in Section IV.J, Population, Housing, and Employment).

The project proposes to include 200,000 sq. ft. of space to be occupied by a mix of retail uses, small offices, local service uses, recreation-oriented services and activities, cultural uses/exhibit space, and community facilities. Just over two-thirds of the space is anticipated to be occupied by neighborhood-serving and visitor-serving retail uses, potentially including a neighborhood-serving grocery, a drug store, specialty food tenants, smaller retail shops, galleries, restaurants, cafés and other eating places, and snack shops. Retail sales for these types of retail tenants are estimated to total approximately $37 million annually (as discussed in Section IV.J, Population, Housing, and Employment).

Project residents are anticipated to provide much of the market support for the convenience retailing in the project. Broader market support is anticipated for the eating and drinking and

specialty retail uses, including spending by project residents and by others attracted to new waterfront restaurant and retail uses, people employed in the project, and people coming to the project site for recreation. The additional retailing in the project is anticipated to capture some spending that would otherwise occur outside of Oakland without the project.

Overall, the additional spending by project residents is estimated to be larger than the retail sales to be captured in retail/commercial development in the project. Thus, the project would contribute a net addition of retail spending to the overall market context. This net addition would support additional retail sales and business activity over and above the amount of retail activity to be accommodated in the project. The result is not anticipated to create pressures for additional commercial growth nearby. The additional spending for convenience retailing would add market support primarily for retailers in surrounding parts of Oakland. Additional spending for comparison retailing and other major shopping would add support for retailers and shopping areas in Oakland and other areas serving the Inner East Bay. The additional spending would provide increased sales for existing retailers, neighborhood districts, and other shopping areas and would add market support for possible retail expansion in Oakland in the future, as desired for downtown Oakland, Jack London Square, and other parts of the city.

Employment and Induced Population Growth / Housing Demand

Retail/commercial businesses and recreational, cultural, and other activities in the project would support the growth of 623 jobs on site. There would be additional household and population growth to provide the additional workers in the project. The additional household growth would translate into increased demand for housing.

The large amount of housing to be developed in the project, however, would more than offset the additional housing demand associated with project employment growth. Project housing is estimated to accommodate 2,976 additional households in Oakland with 3,585 additional employed residents. Growth of jobs in the project (623) compared to growth of employed residents (3,585) indicates a net increase of 2,962 or nearly 3,000 employed residents in Oakland. Thus, employment growth in the project would not induce additional housing and population growth over and above that to be accommodated in the project. Further, the project would improve the jobs/housing relationship in Oakland, providing the ability to better accommodate existing employment and/or other job growth.

Construction-Related Business Activity and Employment

Construction of the project would support business activity and employment. It is estimated that approximately 4,950 person-years of construction labor would be supported over the project's eight phases of development anticipated to occur over 10 to 12 years. In addition, there would be construction spending for building materials, equipment, supplies, and services that would support additional business activity during the construction period. Construction activity and associated employment and spending would also generate indirect (generated by business spending) and induced (generated by household spending) economic activity that would support

additional business activity and employment. It is estimated that project construction would support an additional 5,940 person-years of employment as a result of these multiplier effects.

The individuals employed by project construction would live in Oakland, in other parts of the East Bay, and in communities throughout the greater Bay Area. The business activity and employment generated by construction activity and the subsequent rounds of business and household spending to result also would occur in Oakland, elsewhere in Alameda County, and in other parts of the region.

Nearby Area Effects on Growth

The project would continue the redevelopment of the Estuary waterfront that is already occurring in the Jack London District to the west of the project site and along Embarcadero Cove and in the Kennedy Tract to the east. The waterfront is in transition from industrial and warehouse uses to a mix of retail/commercial, residential, work-live, and recreational uses. Creation of a new neighborhood on the project site with park and waterfront amenities would enhance the attractiveness and image of Oakland's waterfront given the large scale of the project and the visibility of the site. The project would enhance the attractiveness of other waterfront areas for additional residential and commercial development and accelerate trends already in evidence.

The success of the project would enhance potentials for additional new higher-density housing development in similar types of waterfront settings by increasing market interest from both households/housing consumers and landowners and housing developers. These effects are anticipated to focus on the adjacent Fifth Avenue Point Area and other locations along the Estuary waterfront, and are also likely to extend inland to locations along Lake Merritt Channel, particularly if improvements are made along the Channel to connect Lake Merritt to the Estuary. It also is possible that these effects could extend just to the east of the Channel where Fifth Avenue provides a connection to the project site under the freeway, although most of the area south of East 12th Street has a General Plan land use designation of Open Space or Business Mix, which do not accommodate residential land use**.** Housing and other development along the waterfront and in most of the nearby areas would likely occur without the Oak to Ninth Avenue project, although the project is likely to enhance development potentials and accelerate existing growth trends.

The project is less likely to affect growth and change in surrounding inland areas to the north of the project site (the San Antonio Area and Downtown Oakland). The project is somewhat distant and physically separated from inland areas by the I-880 freeway and the rail lines and railroad rights-of-way, and by industrial uses near the freeway and railroad. Not only is the area somewhat distant from the project site, but also much of the San Antonio Area north of I-880 (north and northeast of the project) includes existing residential neighborhoods that are already fully developed and have only limited infill sites for new development. One exception is at the western end of the San Antonio Area where the project could contribute to enhancing demand for additional housing development in the vicinity of Fifth Avenue and Lake Merritt Channel (as identified above), outside of existing neighborhood areas. Another exception includes potential

sites in the older industrial areas between East 12th Street and the freeway/railroad that could eventually be redeveloped in the future. The General Plan anticipates new business and commercial uses in these areas. If anything, the success of the project located across the freeway could enhance the attractiveness of the older industrial areas for eventual redevelopment, although the extent and types of future development potentials for this area are not yet clear.

Downtown Oakland to the north and northwest of the project also is somewhat distant from the project site. Development of higher-density housing and office/commercial uses is already occurring in numerous locations downtown. If anything, the project could further enhance the desirability of downtown development, supporting trends already underway. Such effects are most likely in downtown locations near Lake Merritt Channel. .

Development of the project also would result in additional affordable housing development within the Central City East Redevelopment Project Area. The project would generate tax increment monies to the Redevelopment Agency to be used for affordable housing, and state law requires that 15 percent of all housing developed in the Redevelopment Project Area be affordable housing. As a result, there could be up to 465 additional housing units developed in the Redevelopment Area accommodating additional households and population in the Area. Some of the affordable housing could be built in the nearby San Antonio Area and some in other parts of the Central City East Redevelopment Project Area that extends to the east and includes a large part of East Oakland

Nearby area effects on growth and development of the types described above are included in the cumulative growth scenario for Oakland that is analyzed in this EIR.

CHAPTER VII
Report Preparation

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	Jill Hamilton, *Water Resources*
	Peter Hudson, R.G., *Geology, Hydrology, Hazardous Materials*
	Jack Hutchison, P.E., *Transportation, Circulation and Parking*
	Michael Jacinto, *Visual Quality and Shadow and Wind*
	Matthew Morales, *Air Quality and Noise*
	Dean Martorana, RPA, *Archaeological Resources*
	Paul Miller, *Air Quality and Noise*
	Tom Roberts, CWB, *Biological Resources*
	Jamie Schmidt, AICP, *Public Services and Utilities*
	Eric Schniewind, PG, REA, *Geology and Hazardous Materials*
	Robert Vranka, Ph.D., *Toxic Air Exposure*
Graphics/Production:	Perry Jung
	Ron Teitel
	Linda Uehara
	Shana DeClercq
	Gus JaFolla
	Anthony Padilla
	Tania Sheyner

Transportation

Fehr & Peers
One Walnut Creek Center
100 Pringle Avenue, Suite 600
Walnut Creek, CA 94596
Chris Gray, AICP

Housing, Population, and Employment; Oakland Growth Scenario

Hausrath Economics Group
1221 Broadway, Suite 1500
Oakland, CA 94612
Linda Hausrath

Historic Architecture

Carey & Co. Inc.
460 Bush Street
San Francisco, CA 94108
Hiyashi Sugaya

Visual Simulation

Environmental Vision
2550 Ninth Street, Suite 205
Berkeley, CA 94710
Marsha Gale

Project Sponsor

Oakland Harbor Partners, LLC
4670 Willow Road, Suite 200
Pleasanton, CA 94588
Mike Ghielmetti, President
Patrick Van Ness, Project Manager

APPENDIX A

Notice of Preparation and Initial Study Checklist

City of Oakland
File No. ER04-0009

INITIAL STUDY AND ENVIRONMENTAL REVIEW CHECKLIST

California Environmental Quality Act (CEQA)

1. **Project Title:** Oak to Ninth Avenue Mixed Use Development

2. **Lead Agency Name and Address:** City of Oakland
Community and Economic Development Agency
Planning Division
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

3. **Contact Person and Phone Number:** Margaret Stanzione, Strategic Planning Coordinator
phone: (510) 238-4932
e-mail: mstanzione@oaklandnet.com

4. **Project Location:** Oak to Ninth Avenue (area bounded by the Oakland Estuary, the Embarcadero, Fallon Street and 10th Avenue

APN No's: 0000-0430-001-02, portion of 0000-0430-001-04, 0000-0460-003, 0000-0460-004, 0000-0465-002, and portion of 0000-0470-002

5. **Project Sponsor's Name and Address:** Oakland Harbor Partners
4670 Willow Road, Suite 200
Pleasanton, CA 94588

6. **General Plan Designation:** Estuary Policy Plan Designation: Planned Waterfront District (PWD-1)

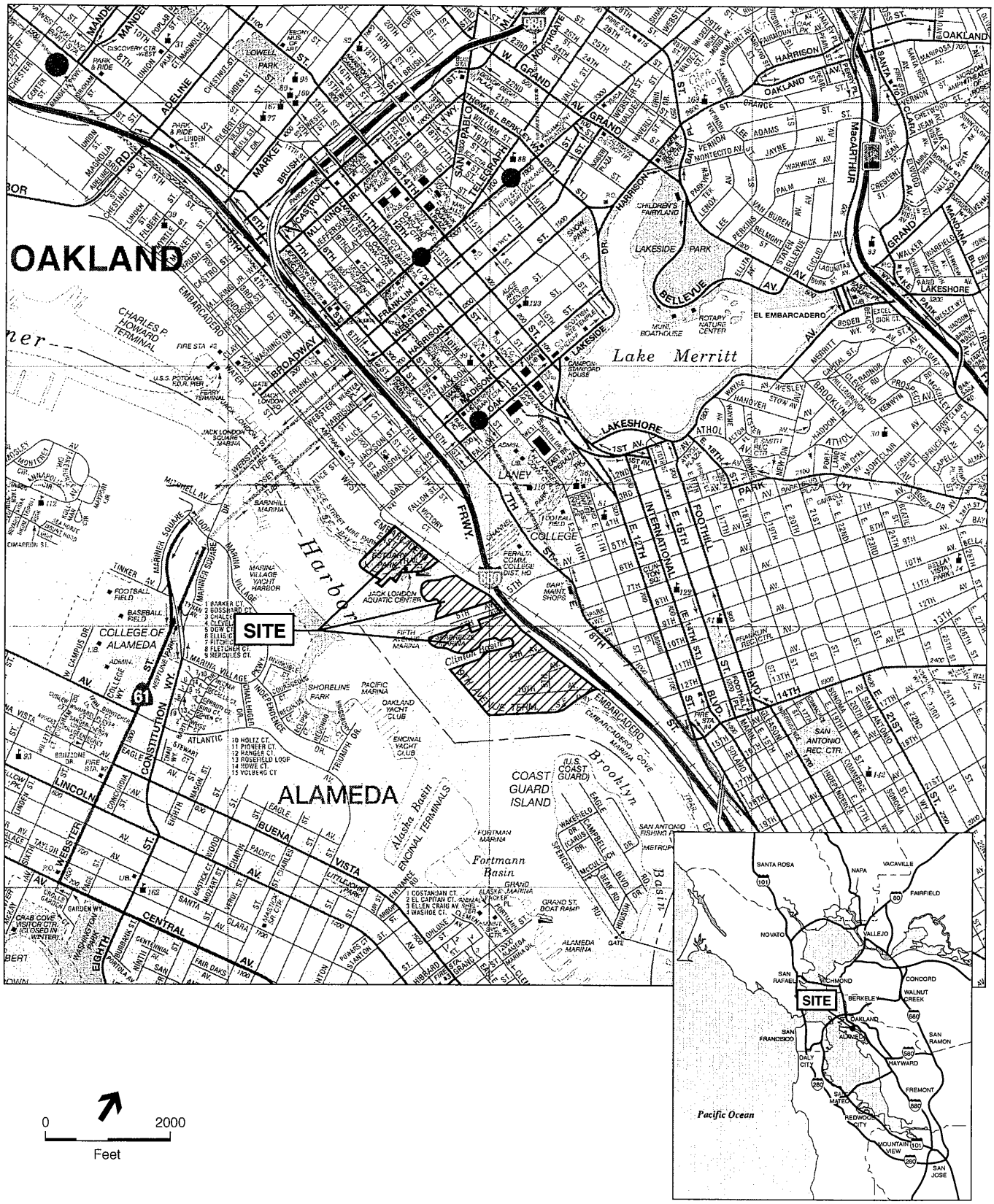
7. **Zoning:** M-40 Heavy Industrial Zone
S-2/S-4 Civic Center Zone/Design Review Overlay

8. **Description of Project:**

Project Area. The proposed project area is located along the Oakland Estuary and is bounded by the Embarcadero between Fallon Street and Tenth Avenue in Oakland and south of Interstate 880 (I-880) (see Figure 1). Jack London Square and District are located to the northwest of the project area, and Brooklyn Basin is located to the southeast of the project area.

Project Description. The entire project site is approximately 62 acres of waterfront property owned by the Port of Oakland. The proposed project includes up to 3,100 residential units, 200,000 square feet of ground-floor commercial space, 3,500 structured parking spaces, approximately 27 acres of public open space, two renovated marinas, and a wetlands restoration area. The project is proposed to be constructed in phases over approximately ten years. The site is currently occupied by a combination of commercial, warehouse and light industrial services. The existing buildings on the site will be demolished, with the exception of a portion of the Ninth Avenue Terminal shed building, Estuary Park, and the Jack London Aquatic Center. The site is primarily zoned M-40 Heavy Industrial with a small portion zoned S-2/S-4 Civic Center/Design Review. The General Plan land use designation is the Estuary Policy Plan's Planned Waterfront District (PWD-1). As it pertains to the project areas, construction of the proposed project will require consideration of amendments to the City of Oakland Estuary Policy Plan, a rezoning of the property because it is not currently designated for residential or commercial uses, approval of a subdivision map, design review approval, a development agreement, and possibly other City approvals/actions. In addition, approvals or permits may also be required from other agencies for activities such as modifications to the shoreline, demolition of structures, site remediation, wetlands restoration, local and regional access (Caltrans), and possibly other activities. One or more parcels in the project area may be listed on the "Cortese List" of hazardous waste sites (Government Code Section 65962.5).

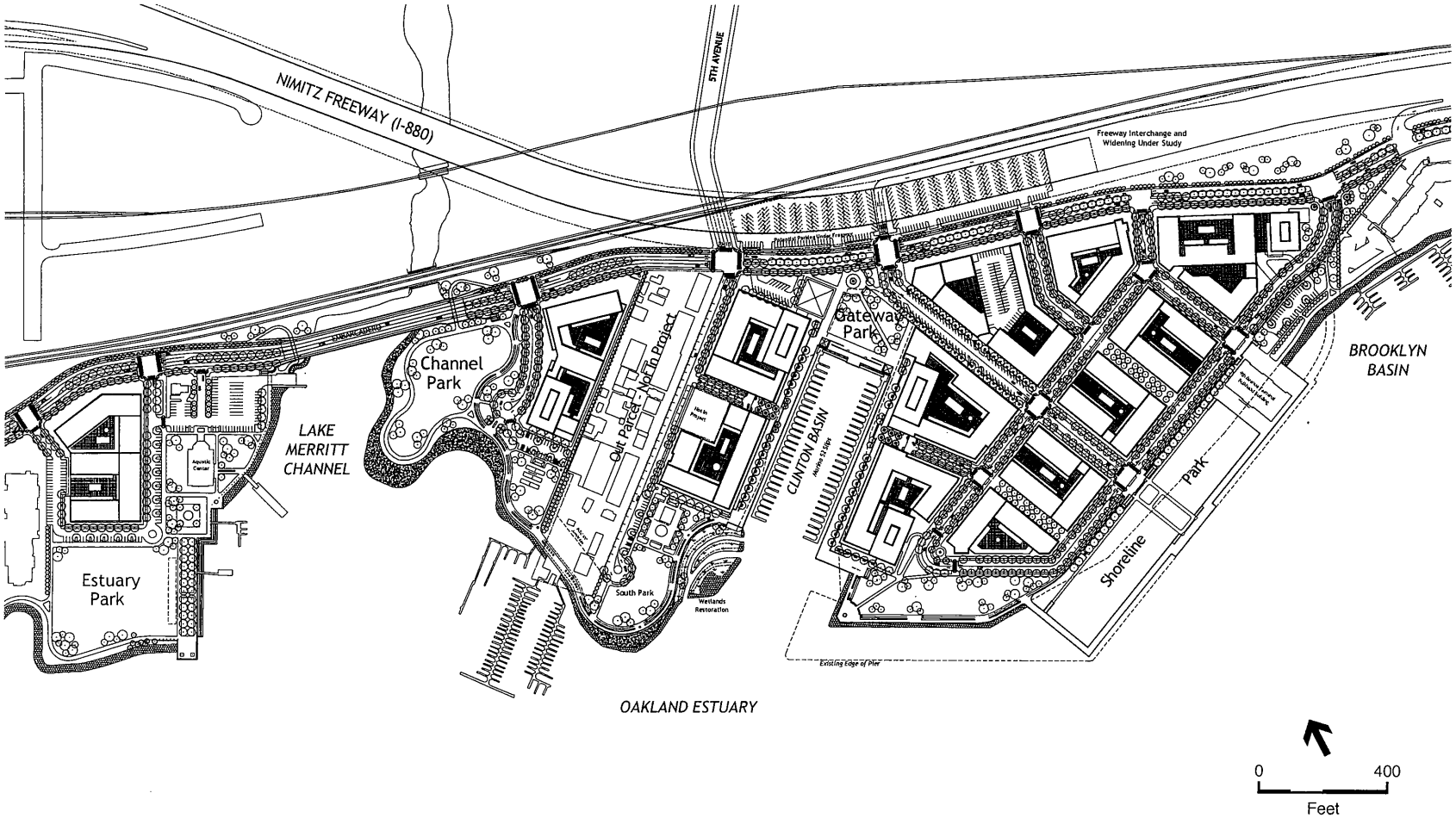
The proposed project requires action by the City of Oakland. This Initial Study is intended to address potential environmental impacts associated with construction and operation of the project including construction of the proposed project and obtainment of all necessary zoning, grading and building permits, and any other discretionary actions required by the City of Oakland and other governmental agencies, including but not limited to a General Plan Amendment, Rezoning, Planned Unit Development, Subdivision, Design Review, and Development Agreement. This Initial Study may also be used by other responsible agencies, including BCDC, Caltrans, and the Port of Oakland.



SOURCE: Environmental Science Associates

Oak to Ninth Avenue . 202622

Figure III-1
Location Map



SOURCE: ROMA Design Group

Oak to Ninth Avenue . 202622

Figure III-3
Illustrative Development Plan

9. **Surrounding Land Uses and Setting:** The project area is along the Oakland Estuary, between Fallon Street and Tenth Avenue, within less than a mile from downtown Oakland. To the northwest of the project area lie commercial uses of Jack London Square, warehouse and live-work lofts in the Jack London District, The Landing residential development, and the Amtrak station. The northern surrounding area, beyond I-880, land uses include Laney College Campus, Union Pacific Railroad, and the San Antonio District which is a neighborhood with residential uses of various densities and commercial uses along the main corridors of International Boulevard and 12th Street. To the southeast lie hotel and retail uses along Brooklyn Basin. Along the western border of the project area lies the City's Estuary Park/Aquatic Center.

   The project area is located adjacent to The Embarcadero and Interstate 880 (I-880), about one-half mile of the Lake Merritt BART Station, and about a mile from the 12th Street/City Center BART Station. The Oakland/San Francisco Ferry, which is located near the western boundary of Jack London Square, and the Amtrak station are northwest of the project area. AC Transit routes within the vicinity of the project site include Transbay Lines OX, S, SA, SB and Local Lines 35X and 36X along Embarcadero Street.

10. **Actions for Which This Initial Study May Be Applied Without Limitation:**

    - General Plan Amendment
    - Rezoning
    - Planned Unit Development under Section 17.122
    - Subdivision
    - Development Agreement under Section 17.138
    - Design Review
    - BCDC Permit
    - Port Agreements
    - Implementation of mitigation measures, as required

11. **Environmental Factors Determined To be Less than Significant:** As noted in the following evaluation, the following environmental factors have been determined to be less than significant and will not require further analysis in the EIR:

    - Agricultural Resources
    - Mineral Resources

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒ Aesthetics	☐ Agricultural Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology/Soils
☒ Hazards/Hazardous Materials	☒ Hydrology/Water Quality	☒ Land Use/Planning
☐ Mineral Resources	☒ Noise	☒ Population/Housing
☒ Public Services	☒ Recreation	☒ Transportation/Traffic
☒ Utilities/Service Systems	☒ Mandatory Findings of Significance	

CITY OF OAKLAND

250 FRANK H. OGAWA PLAZA, SUITE 3330 • OAKLAND, CALIFORNIA 94612-2032

Community and Economic Development Agency
Planning & Zoning Services Division

(510) 238-3941
FAX 510) 238-6538
TDD (510) 839-6451

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT

The City of Oakland, Community and Economic Development Agency, Planning Division, is preparing a Draft Environmental Impact Report (EIR) for the project identified below. Your comments on the scope and content of the EIR are requested. An Initial Study (IS) has been prepared that identifies areas of probable environmental effects. These probable environmental effects are summarized below. The IS is available at the Planning Division office or at http://www.oaklandnet.com/government/ceda/revised/planningzoning/MajorProjectsSection/environmentaldocuments.html. The City of Oakland is the Lead Agency for this project and is the public agency with the greatest responsibility for either approving or carrying out the project. This notice is being sent to Responsible Agencies and other interested parties. Responsible Agencies are those public agencies, besides the City of Oakland, that also have a role in approving or carrying out the project. Responsible Agencies will need to use the EIR that the City prepares when considering approvals related to the project. When the Draft EIR is published, it will be sent to all Responsible Agencies and to others who respond to this Notice of Preparation or who otherwise indicate that they would like to receive a copy.

Written comments on the Notice of Preparation must be received by **5:00 p.m. on June 30, 2004.** Your response and any questions or comments should be directed to Margaret Stanzione, Project Planner, at the address listed below.

The Planning Commission will hold a Scoping Session on Wednesday, June 16, 2004 at 6:30 pm at City Hall, Hearing Room 1, One City Hall Plaza, Oakland.

PROJECT TITLE: Oak to 9th Mixed Use Development (Residential/Commercial/Open Space) Project

PROJECT LOCATION: Approximately Sixty–two acres bounded by Embarcadero Road, the Oakland Estuary, Fallon Street, and 10th Avenue (see attached location map).

PROJECT SPONSOR: Oakland Harbor Partners, LLC

PROJECT DESCRIPTION: The entire project site is approximately 62 acres of waterfront property owned by the Port of Oakland. The proposed project includes up to 3,100 residential units, 200,000 square feet of ground-floor commercial space, 3,500 structured parking spaces, approximately 27 acres of public open space, two renovated marinas, and a wetlands restoration area. The project is proposed to be constructed in phases over approximately ten years. The site is currently occupied by a combination of commercial, warehouse and light industrial services. The existing buildings on the site will be demolished, with the exception of a portion of the Ninth Avenue Terminal shed building, Estuary Park, and the Jack London Aquatic Center. The site is primarily zoned M-40 Heavy Industrial with a small portion zoned S-2/S-4 Civic Center/Design Review. The General Plan land use designation is the Estuary Policy Plan's Planned Waterfront District (PWD-1). As it pertains to the project area, construction of the proposed project will require consideration of amendments to the City of Oakland Estuary Policy Plan, a rezoning of the property because it is not currently designated for residential or commercial uses, approval of a subdivision map, design review approval, a development agreement, and possibly other City approvals/actions. In addition, approvals or permits may also be required from other agencies for activities such as modifications to the shoreline, demolition of structures, site remediation, wetlands restoration, local and regional access, and possibly other activities. One or more parcels in the project area may be listed on the "Cortese List" of hazardous waste sites (Government Code Section 65962.5).

PROBABLE ENVIRONMENTAL EFFECTS: It is anticipated that the proposed project may result in the following potentially significant environmental impacts which will be analyzed in the EIR: aesthetics, air quality, cultural/historic resources, hazards/hazardous materials, noise, transportation/traffic, biological resources, geology/soils, hydrology/water quality, land use/planning population/housing, public services, recreation, and utilities/service systems. The following

environmental effects were analyzed in the IS and determined to result in less-than-significant impacts and thus will not be further studied in the EIR: agricultural resources and mineral resources.

CONTACT INFORMATION: Margaret Stanzione, Project Planner, City of Oakland, Community and Economic Development Department, 250 Frank H. Ogawa Plaza, Suite 3315, Oakland, CA 94612. Phone: (510) 238-4932, Fax: (510) 238-6538, email: mstanzione@oaklandnet.com

Date: May 28, 2004
Case File No.: ER 04-0009

CLAUDIA CAPPIO
Director of Development and Environmental Review Officer

APPENDIX B

Summary of NOP Comments and Comments Received during the Community Input Process on the Project

Appendix B: Summary of Environmental Topics Raised in Response to the Notice of Preparation (NOP) and During the Oak Street to Ninth Avenue Waterfront Project Community Input Process

The following is a summary of topics raised in written and oral comments received in response to the Notice of Preparation of the Environmental Impact Report (EIR) for the project. Also included are comments received from public agencies and members of the public during a series of public meetings (conducted separate from the formal environmental review process) on the proposed project.[1] Only comments that address environmental issues appropriate for inclusion in the EIR pursuant to CEQA are identified.

	TOPIC RAISED	RELEVANT EIR SECTION FOR DISCUSSION
1.	Accessibility of open spaces	Ch.III.Project Description
2.	Location of Bay Trail along waterfront, and connections to JLS and other waterfront areas	Ch.III.Project Description
3.	Recreation types (active vs. passive) within proposed open space	Ch.III.Project Description
4.	Public Trust lands and exchange	Ch.III.Project Description; A.Land Use; Ch.V.Alternatives
5.	Cumulative impacts analysis methodology and affected geography	Ch.IV.Environmental Analysis; Ch.VI.Impact Overview
6.	Indirect, growth inducing, and cumulative impacts	Ch.IV.Environmental Analysis; Ch.VI.Impact Overview
7.	Mitigation funding and phasing	Ch.IV.Environmental Analysis
8.	General Plan / Estuary Plan consistency	A.Land Use
9.	Incorporation of Fifth Avenue Point into development	A.Land Use
10.	Land use compatibility, within the site and with existing adjacent uses	A.Land Use
11.	Access and connections to surrounding areas	A.Land Use; B.Traffic
12.	Incorporate affordable housing	A.Land Use; J.Population/Housing/Employment
13.	Neighborhood-scale development around Fifth Avenue	A.Land Use; K.Aesthetics
14.	Expand Estuary Park, per Estuary Policy Plan	A.Land Use; L.Public Services
15.	Provision and definition of open space	A.Project Description; L.Public Services
16.	Access to and by alternative transit modes	B.Traffic
17.	Adequate parking for proposed intensity of development	B.Traffic
18.	Countywide bicycle routes	B.Traffic
19.	Cumulative Traffic analysis using the Countywide Transportation Demand Model, 2010 and 2025	B.Traffic
20.	Emergency access to and egress from the project site	B.Traffic

[1] Copies of NOP comment letters and minutes of the Public Scoping Meeting held June 16, 2004, and copies of the *Oak Street to Ninth Avenue Waterfront Project Summary Report – Small Group Interviews & Public Meetings*, May 2005, are available for review at the City of Oakland Community and Economic Development Agency.

	TOPIC RAISED	RELEVANT EIR SECTION FOR DISCUSSION
	(train obstruction)	
21.	Emergency and fire service access	B.Traffic; L.Public Services
22.	Impact on CMP transit levels of service	B.Traffic
23.	Impacts on AC transit services	B.Traffic
24.	Impacts on Metropolitan Transportation System	B.Traffic
25.	Parking provision (residential and park use)	B.Traffic
26.	Pedestrian safety within and to/from the project	B.Traffic
27.	Site access to/from I-880	B.Traffic
28.	Site and area-wide access during construction	B.Traffic
29.	Traffic impacts	B.Traffic
30.	Traffic mitigation consistency with Alameda County Congestion Management Plan (CMP) Capital Improvement Program (CIP)	B.Traffic
31.	Air quality impacts near I-880.	C.Air Quality
32.	Construction dust impacts on estuary waters and nearby buildings	C.Air Quality
33.	Transportation Demand Measures (TDM) as mitigation	C.Air Quality
34.	Creek protection	D.Hydrology/Water Quality
35.	Effects of high water table	D.Hydrology/Water Quality
36.	Stormwater management and flood control	D.Hydrology/Water Quality
37.	Liquefaction effects	D.Hydrology/Water Quality; F.Geology/Soils
38.	Impacts of bay fill and fill removal	D.Hydrology/Water Quality; F.Geology/Soils; H.Hazardous Materials
39.	Effects of increased contaminated runoff of chemicals into estuary	D.Hydrology/Water Quality; Hazardous Materials
40.	Impacts from change in marina operations	D.Hydrology/Water Quality; I.Biological Resources
41.	Impacts of increased marina/ferry use	D.Hydrology/Water Quality; I.Biological Resources
42.	Effects of changes to wharf pilings to estuary waters and marine life	D.Hydrology/Water Quality; I.Biological Resources; H.Hazardous Materials
43.	Archaeological resources impacts	E.Cultural Resources
44.	Landmarking of Ninth Avenue Terminal	E.Cultural Resources
45.	Preservation and reuse of the Ninth Avenue Terminal	A.Land Use; E.Cultural Resources; V.Alternatives
46.	Seismic issues (site not on bedrock)	F.Geology/Soils
47.	Site topography	F.Geology/Soils
48.	Erosion and sediment control	F.Geology/Soils; D.Hydrology/Water Quality
49.	Construction noise impacts	G.Noise
50.	Noise impact from public open spaces to residential uses	G.Noise
51.	Noise impacts (operational) adjacent to I-880	G.Noise
52.	Site remediation	H.Hazardous Materials
53.	Effects of nighttime street lighting on marine life	I.Biological Resources
54.	Impacts on wetlands and other natural resources	I.Biological Resources
55.	Tree removal	I.Biological Resources
56.	Displacement of existing businesses	J.Population/Housing/Employment
57.	Effects of new retail on existing shopping districts	J.Population/Housing/Employment

	TOPIC RAISED	RELEVANT EIR SECTION FOR DISCUSSION
58.	Mixed-income and affordable housing	J.Population/Housing/Employment
59.	Social and economic impacts resulting in physical impacts	J.Population/Housing/Employment
60.	Aesthetics impacts	K.Aesthetics
61.	Shading of public access areas and Estuary Park	K.Aesthetics/Shadows
62.	Solar access	K.Aesthetics/Shadows
63.	Impact on existing significant views	K.Aesthetics/Views
64.	View corridors within the site	K.Aesthetics/Views
65.	View impacts from inland areas, streets(I-880 and Embarcadero) and other public areas	K.Aesthetics/Views
66.	Views of the site from the water and of the water	K.Aesthetics/Views
67.	Visibility of parks and open spaces	K.Aesthetics/Views
68.	Fire safety	L.Public Services
69.	Impacts on public schools	L.Public Services
70.	Capacity of public utilities	M.Utilities
Suggested Alternatives (or Components of Possible Alternatives		
71.	Full and/or partial reuse of Terminal	Ch.V. Alternatives
72.	Low building heights around Fifth Avenue Point	Ch.V. Alternatives
73.	Mixed use, live-work, residential-commercial	Ch.V. Alternatives
74.	Reconfigure Embarcadero close to waterfront / locate residential east (north) of Embarcadero	Ch.V. Alternatives
75.	Segregate open space and residential	Ch.V. Alternatives
76.	Open pavilion of 1950s section of Terminal	Ch.V. Alternatives
77.	Open space minimum: 60 percent	Ch.V. Alternatives
78.	Car-sharing "pods"	C.Air Quality
79.	33 percent residential use; 50 percent light industrial live-work	
80.	Build pedestrian and bike bridge to Channel Park (from JLAC), separate from Embarcadero	
81.	Commercial-office development scenario	
82.	No-office use scenario	
83.	Open space and hotel on one of the peninsula (between Brooklyn and Clinton Basins, or between Clinton Basin and Lake Merritt Channel)	
84.	Festival area on entire area west of 5th Avenue, or one of the peninsulas (between Brooklyn and Clinton Basins, or between Clinton Basin and Lake Merritt Channel)	
85.	High speed rail terminal	
86.	Highrises on the Embarcadero, separated by view corridors	
87.	Hotel use in one of the proposed residential towers	
88.	Housing in slender high rise structures along the Embarcadero	
89.	Maximum building height: 8 stories	
90.	Ninth Avenue overhead (overpass)	
91.	Underground I-880	
92.	Widen Merritt Channel Bridge and sidewalk	

TOPIC RAISED	RELEVANT EIR SECTION FOR DISCUSSION
Suggested Reuses of the Ninth Avenue Terminal	
93. Art Center / Gallery	Ch.V. Alternatives
94. Museum (maritime)	Ch.V. Alternatives
95. Retail / Restaurants	Ch.V. Alternatives
96. Exhibition / Festival hall / Public meeting space	Ch.V. Alternatives
97. Live-work	
98. Movie production businesses displaced from Army Base	
99. Marine trade uses	
100. School facilities	
101. Performing arts theatre	

APPENDIX C

Transportation Technical Documentation

TRIP GENERATION ESTIMATE

Project Parcels

For the purposes of this traffic study, the project area has been subdivided into 14 parcels, which serve as the basis for the discussion of project phasing and project trip generation; see **Table C-1** provides the breakdown of the project by parcel.

TABLE C-1
OAK TO NINTH PROJECT PARCELIZATION

Parcel	Acres	Dwelling Units	Commercial Space (gsf)
A	2.88	375	10,000
B	1.53	160	6,000
C	1.48	160	6,000
D	1.45	160	6,000
E	1.20	86	8,000
F	1.51	164	5,000
G	2.73	280	42,000
H	2.05	335	35,000
J	1.87	292	12,000
K	2.25	310	17,000
L	1.40	144	15,000
M	2.31	334	5,000
N	2.73	300	15,000
9th Avenue Terminal	--	--	18,000
Marina	--	--	170 slips
Totals	***26.42***	***3,100***	***200,000***

SOURCE: Oakland Harbor Partners

Project Phasing

Given the project size, it is anticipated that the construction would be divided into several phases. Based on the construction schedule, only parcels A, F, and G are likely to be constructed by 2010. However, this analysis presents a conservative view of the 2010 traffic conditions by assuming that the interim project includes the first five parcels (A, B, C, F, and G) that could be developed. The construction of the remaining parcels, including the marina would likely occur prior to 2025. The project phasing is shown in **Table C-2**.

Net New Project Trip Generation

Base project trip generation (without credits given for existing trip generation and trip internalization) is described in Section IV.B of the EIR.

TABLE C-2
OAK TO NINTH PROJECT PHASING

Parcel	Acres	Dwelling Units	Commercial Space (s.f.)
Interim Phase			
A	2.88	375	10,000
B	1.53	160	6,000
C	1.48	160	6,000
F	1.51	164	5,000
G	2.73	280	42,000
Interim Phase Total	***10.13***	***1,139***	***69,000***
Cumulative Phase			
D	1.45	160	6,000
E	1.20	86	8,000
H	2.05	335	35,000
J	1.87	292	12,000
K	2.25	310	17,000
L	1.40	144	15,000
M	2.31	334	5,000
N	2.73	300	15,000
9th Avenue Terminal	--	--	18,000
Marina	--	--	170 slips
Cumulative Phase Total	***16.29***	***1,961***	***131,000***
Project Buildout Total	***26.42***	***3,100***	***200,000***

SOURCE: Oakland Harbor Partners

Existing Trip Reduction

As described in Section IV.B of the EIR, there are existing uses on the project site that would be removed as the project is developed. As documented in a September 7, 2004 memorandum prepared by Hausrath Economic Group (HEG), approximately 231 employees work on the portion of the project site to be developed. Because these trips are currently accounted for in the traffic counts collected for the project study, it is appropriate to reduce the project trips to account for these existing trips (see **Table C-3** for trip generation estimates for the existing site uses).

TABLE C-3
EXISTING USES VEHICLE TRIP GENERATION

		Daily		AM Peak		PM Peak	
Employment Category	**Employees**	**Rate**	**Trips**	**Rate**	**Trips**	**Rate**	**Trips**
Manufacturing	76	2.13	162	0.40	30	0.36	27
Other / Light Industrial	92	3.02	278	0.44	41	0.42	39
Retail / Shopping Center	35	42.94	1,503	0.34	12	1.25	44
Service / General Office	28	3.32	93	0.48	13	0.46	13
Total	**231**		**2,036**		**96**		**123**

SOURCE: Fehr & Peers Transportation Consultants; and Hausrath Economic Group

Interim Project Trip Generation

As shown in **Table C-4**, the Interim phase trip generation is estimated to be 9,120 daily trips, with 440 AM peak hour trips (46 entering and 394 exiting) and 899 PM peak hour trips (553 entering and 346 exiting).

Project Buildout Trip Generation

As shown in **Table C-5**, project buildout trip generation is estimated to be 27,111 daily trips, 1,438 AM peak hour trips (302 entering and 1,136 exiting), and 2,592 PM peak hour trips (1,558 entering and 1,034 exiting).

Table C-4 - Project Trip Generation - Phase 1 (Interim) Project										
				Trips						
					AM			PM		
Land Use	Parcel	Source	units	Daily	In	Out	Total	In	Out	Total
Residential Condos	A	7th Edition ITE (LU Code 230)	375 d.u.	1,974	25	123	149	119	59	178
Residential Condos	B	7th Edition ITE (LU Code 230)	160 d.u.	957	13	62	75	59	29	88
Residential Condos	C	7th Edition ITE (LU Code 230)	160 d.u.	957	13	62	75	59	29	88
Residential Condos	F	7th Edition ITE (LU Code 230)	164 d.u.	977	13	64	77	60	30	90
Residential Condos	G	7th Edition ITE (LU Code 230)	280 d.u.	1,540	20	98	118	94	46	140
Total Residential			**1,139**	**6,406**	**84**	**410**	**493**	**392**	**193**	**584**
Total General Commercial			**69 ksf**	**5,336**	**43**	**28**	**71**	**235**	**255**	**490**
Marina		7th Edition ITE (Marina - 420)	0 berths	0	0	0	0	0	0	0
SUBTOTAL				11,741	127	437	564	627	448	1,075
INTERNALIZATION (5%)		*Assumed 5 percent reduction for internalization*		*587*	*6*	*22*	*28*	*31*	*22*	*54*
		Existing Trips Associated with Site		*2,036*	*75*	*21*	*96*	*43*	*79*	*122*
TOTAL				**9,118**	**46**	**394**	**440**	**552**	**346**	**899**

Table C-5 - Project Trip Generation - Project Build Out

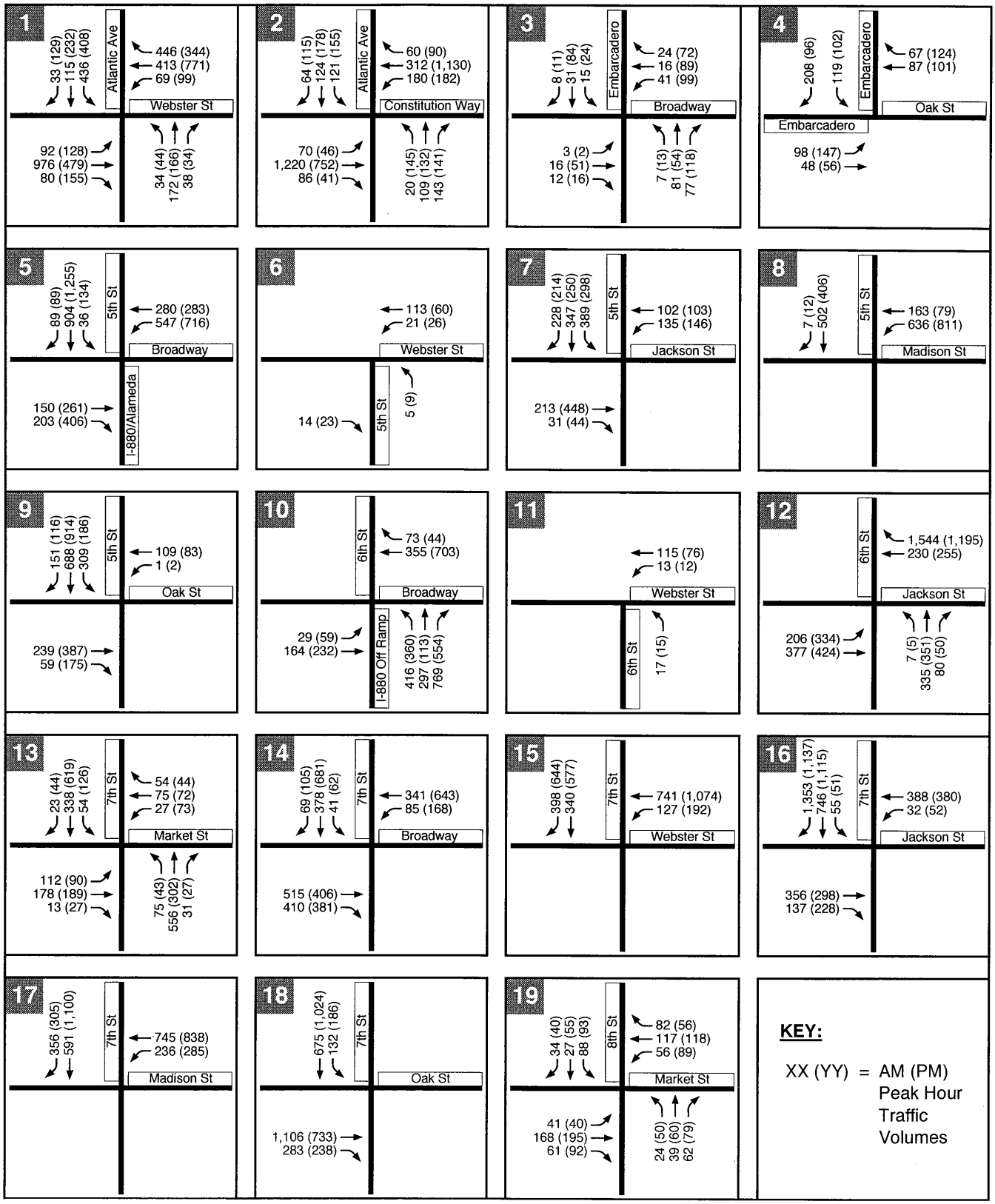
Land Use	Parcel	Source	units	Trips						
					AM			PM		
				Daily	In	Out	Total	In	Out	Total
Residential Condos	A	7th Edition ITE (LU Code 230)	375 d.u.	1,974	25	123	149	119	59	178
Residential Condos	B	7th Edition ITE (LU Code 230)	160 d.u.	957	13	62	75	59	29	88
Residential Condos	C	7th Edition ITE (LU Code 230)	160 d.u.	957	13	62	75	59	29	88
Residential Condos	D	7th Edition ITE (LU Code 230)	160 d.u.	957	13	62	75	59	29	88
Residential Condos	E	7th Edition ITE (LU Code 230)	86 d.u.	565	8	38	46	36	18	53
Residential Condos	F	7th Edition ITE (LU Code 230)	164 d.u.	977	13	64	77	60	30	90
Residential Condos	G	7th Edition ITE (LU Code 230)	280 d.u.	1,540	20	98	118	94	46	140
Residential Condos	H	7th Edition ITE (LU Code 230)	335 d.u.	1,794	23	113	136	109	53	162
Residential Condos	J	7th Edition ITE (LU Code 230)	292 d.u.	1,596	21	101	122	97	48	145
Residential Condos	K	7th Edition ITE (LU Code 230)	310 d.u.	1,679	22	106	128	102	50	152
Residential Condos	L	7th Edition ITE (LU Code 230)	144 d.u.	875	12	57	69	54	27	81
Residential Condos	M	7th Edition ITE (LU Code 230)	334 d.u.	1,789	23	112	135	108	53	162
Residential Condos	N	7th Edition ITE (LU Code 230)	300 d.u.	1,633	21	103	124	99	49	148
Residential Condos	9th Ave Terminal	7th Edition ITE (LU Code 230)	0 d.u.	0	0	0	0	0	0	0
Total Residential			**3,100**	**17,294**	**226**	**1,103**	**1,328**	**1,056**	**520**	**1,575**
General Commercial		7th Edition ITE (Shopping Center - 820)	170 ksf	9,588	107	68	175	427	462	889
General Commercial	H	7th Edition ITE (Grocery Store - 850)	30 ksf	3,067	59	38	98	184	177	360
Total General Commercial			**200 ksf**	**12,656**	**166**	**106**	**273**	**610**	**639**	**1,249**
Marina		7th Edition ITE (Marina - 420)	170 berths	732	4	9	14	19	13	32
SUBTOTAL				30,681	397	1,218	1,615	1,685	1,171	2,857
INTERNALIZATION (5%)		*Assumed 5 percent reduction for internalization*		*1,534*	*20*	*61*	*81*	*84*	*59*	*143*
		Existing Trips Associated with Site		*2,036*	*75*	*21*	*96*	*43*	*79*	*122*
TOTAL				**27,111**	**302**	**1,136**	**1,438**	**1,558**	**1,034**	**2,592**

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

The existing AM and PM peak-hour traffic volumes are shown on **Figures C-1a, C-1b, and C-1c**; lane configurations are shown on **Figures C-2a, C-2b, and C-2c**.

The 2010 No Project intersection traffic forecasts are shown on **Figures C-3a, C-3b, and C-3c**; the project trip assignment for the Interim scenario is shown on **Figures C-4a, C-4b, and C-4c**, while **Figures C-5a, C-5b, and C-5c** provide the 2010 With Project intersection traffic volumes.

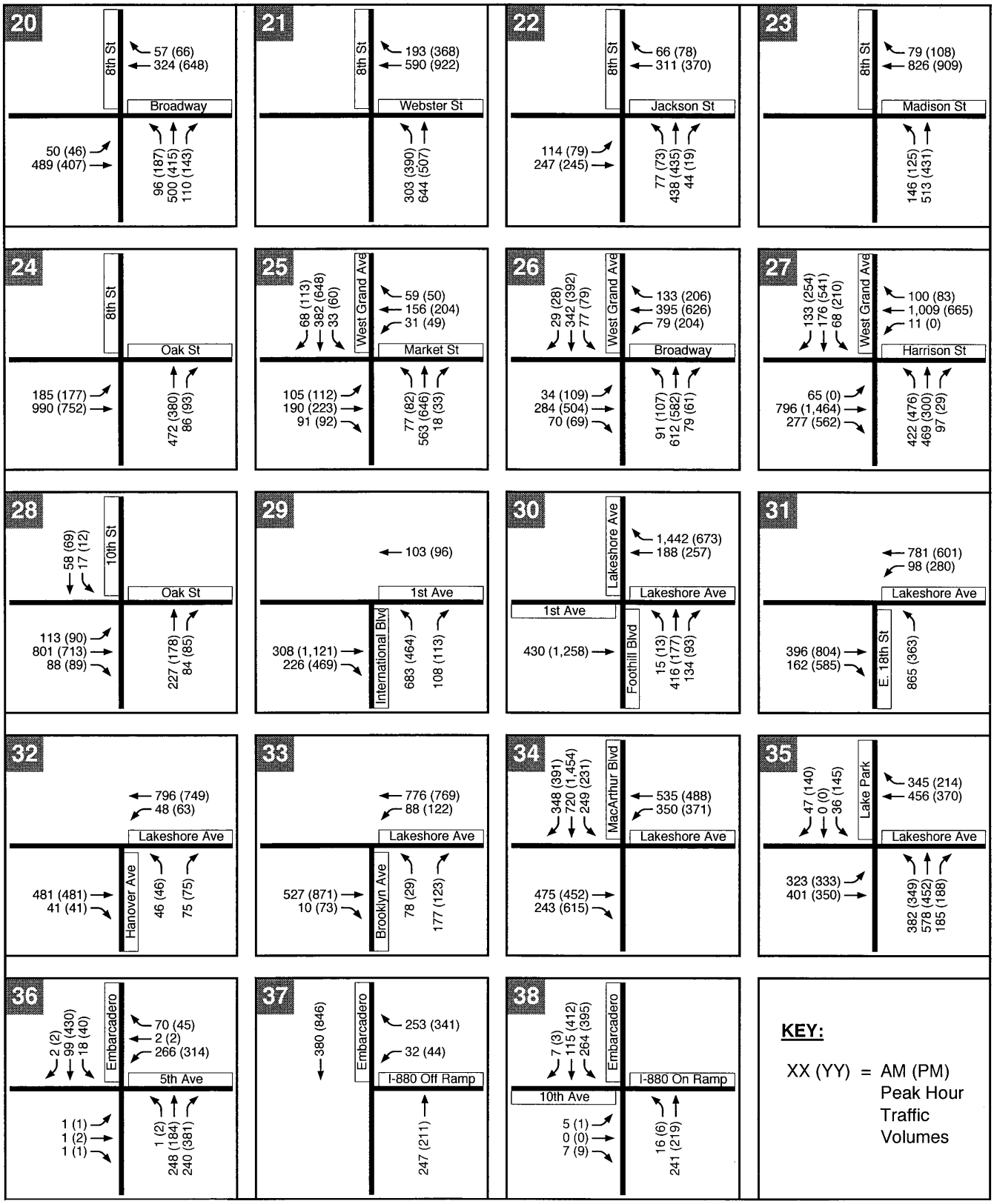
The 2025 No Project intersection traffic forecasts are shown on **Figures C-6a, C-6b, and C-6c**; the project trip assignment for the Buildout scenario is shown on **Figures C-7a, C-7b, and C-7c**, while **Figures C-8a, C-8b, and C-8c** provide the 2025 With Project intersection traffic volumes.



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

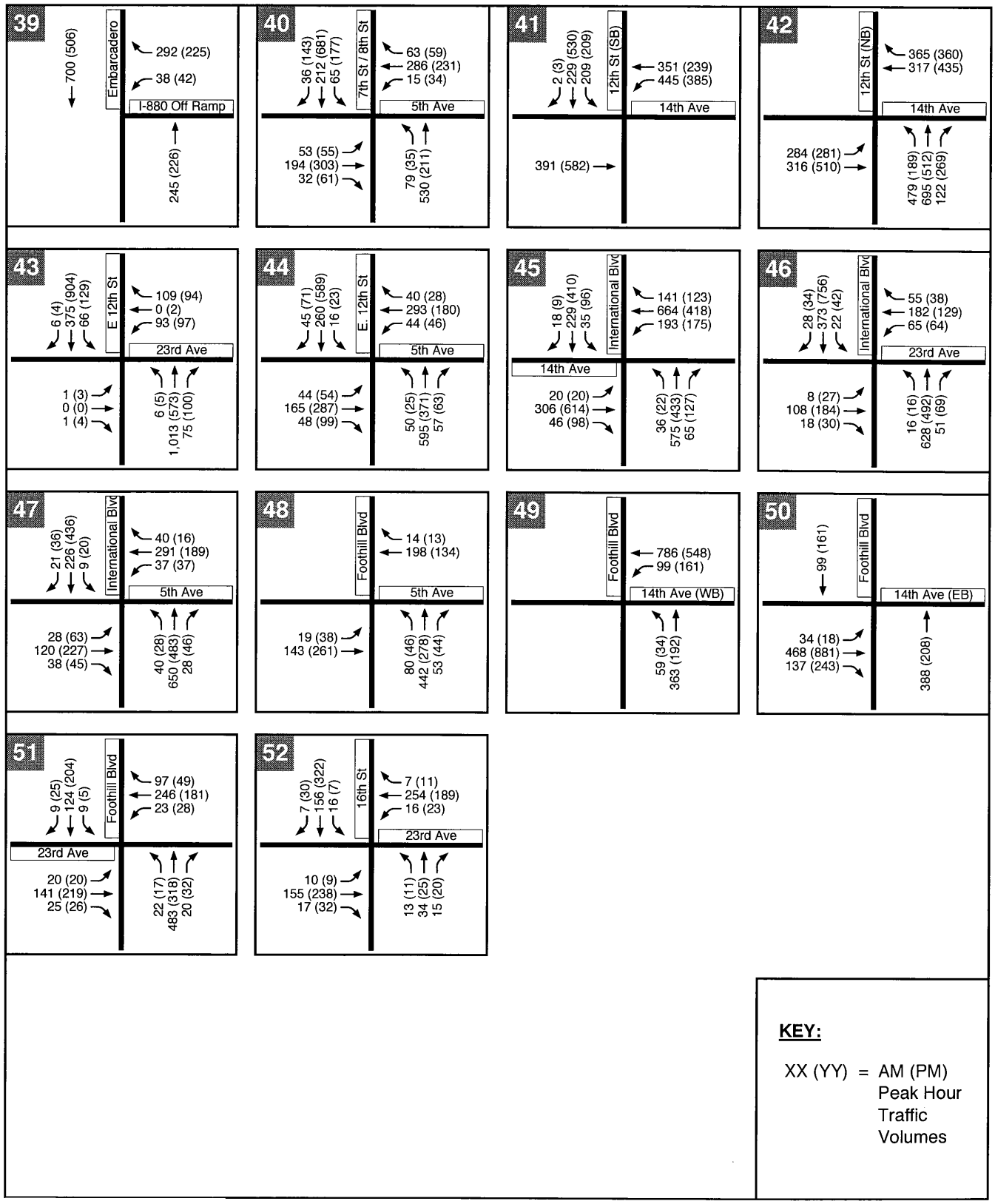
Figure C-1a
Existing Conditions Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

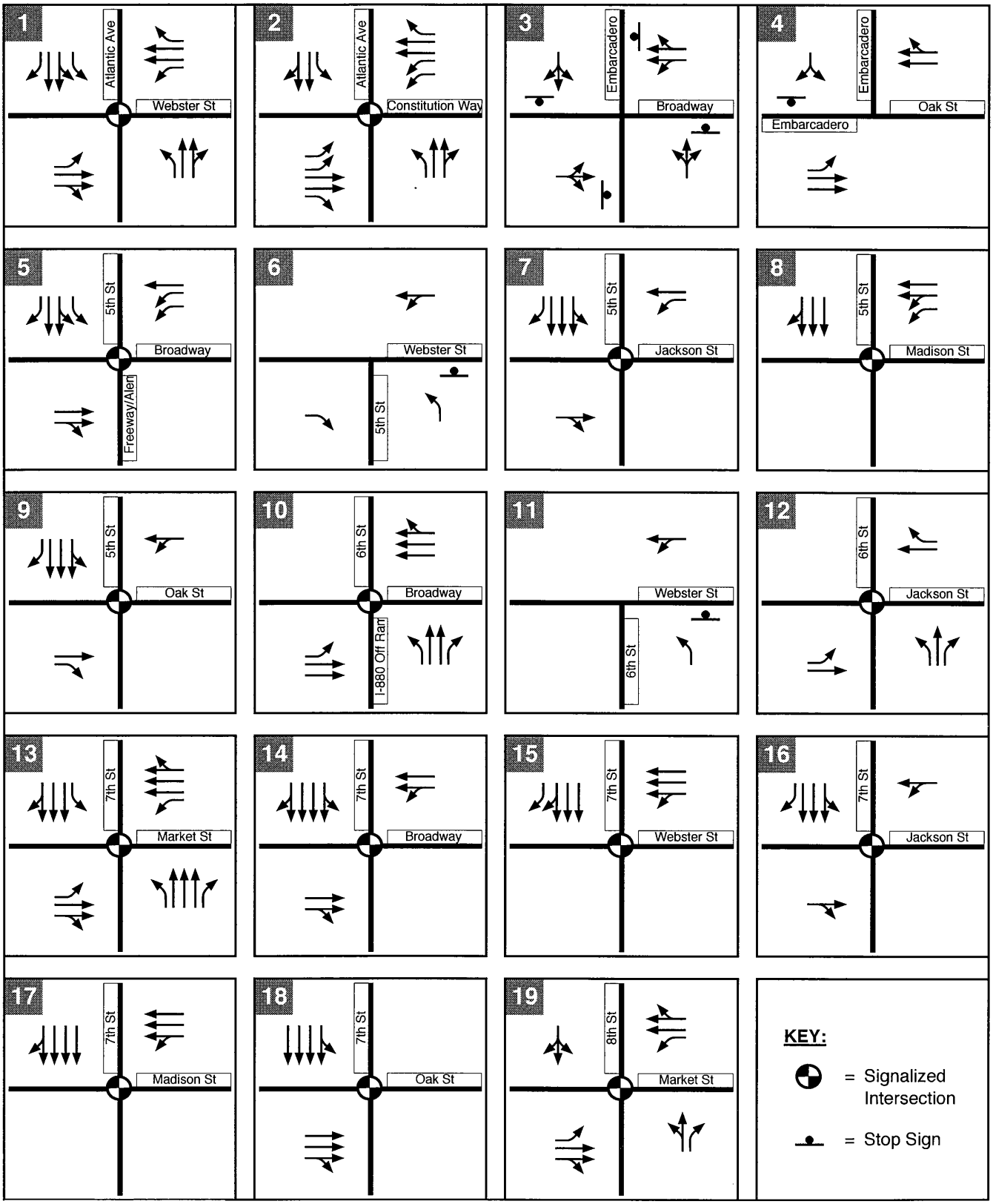
Figure C-1b
Existing Conditions Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

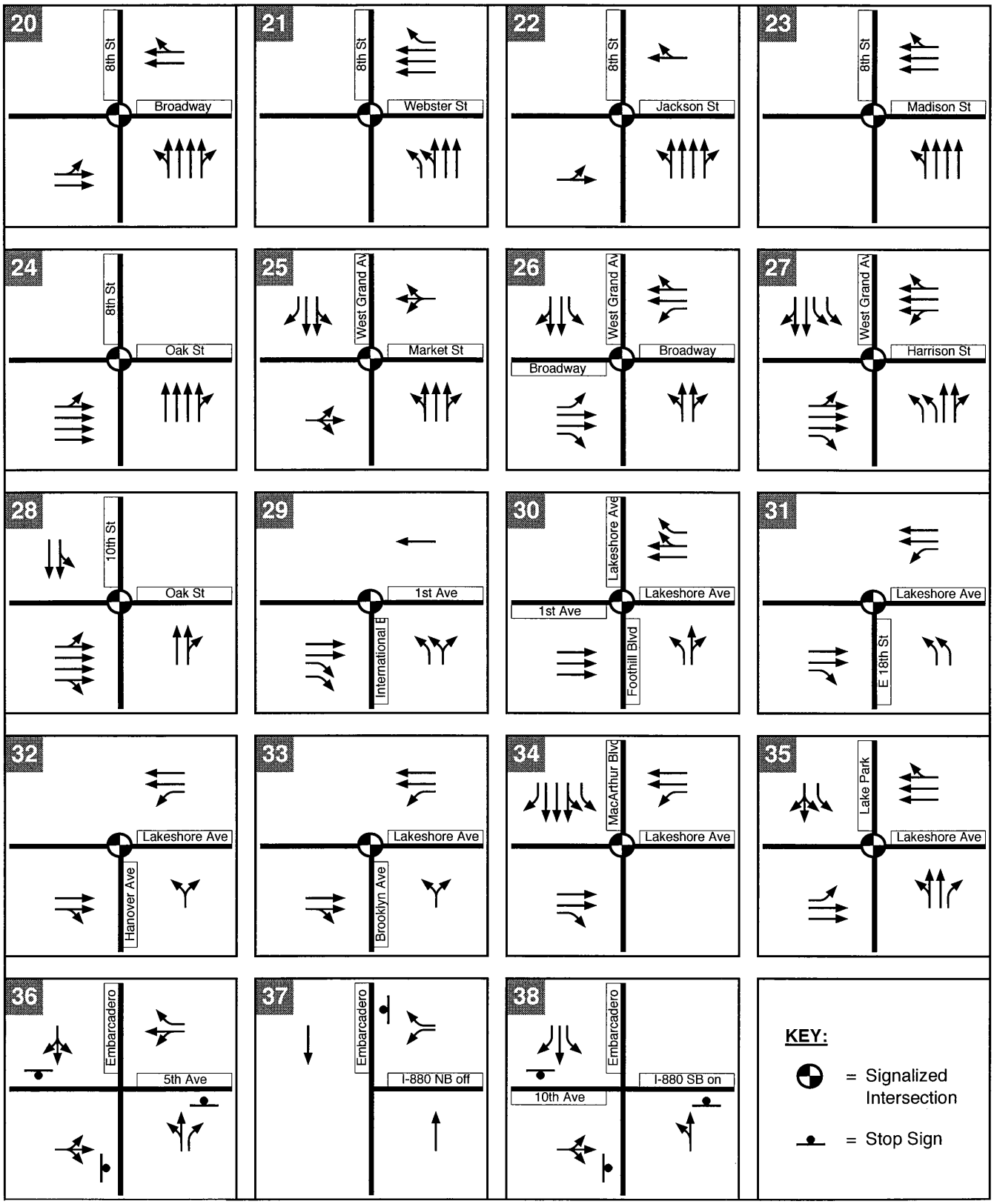
Figure C-1c
Existing Conditions Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

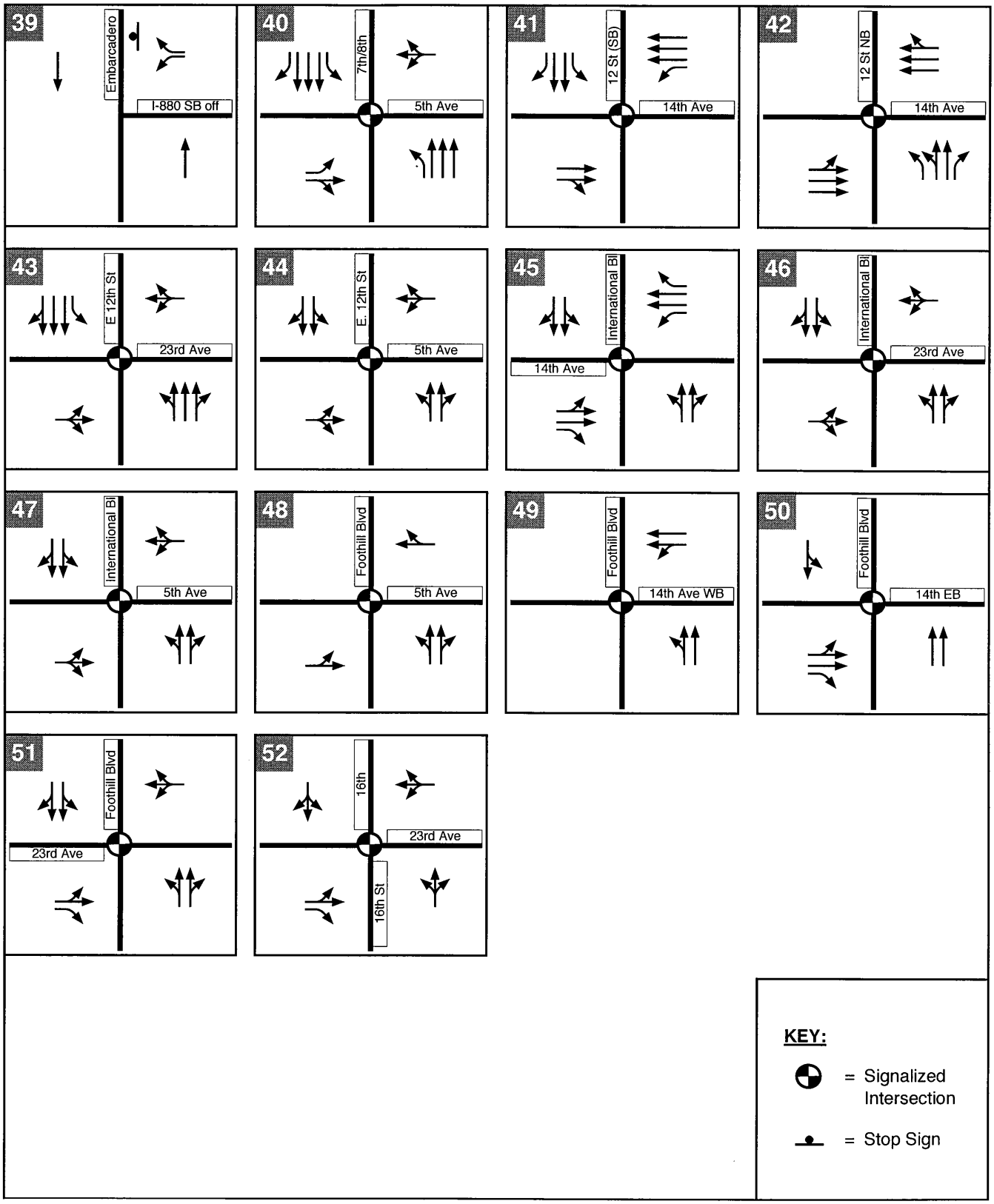
Figure C-2a
Existing Conditions Lane Geometries



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

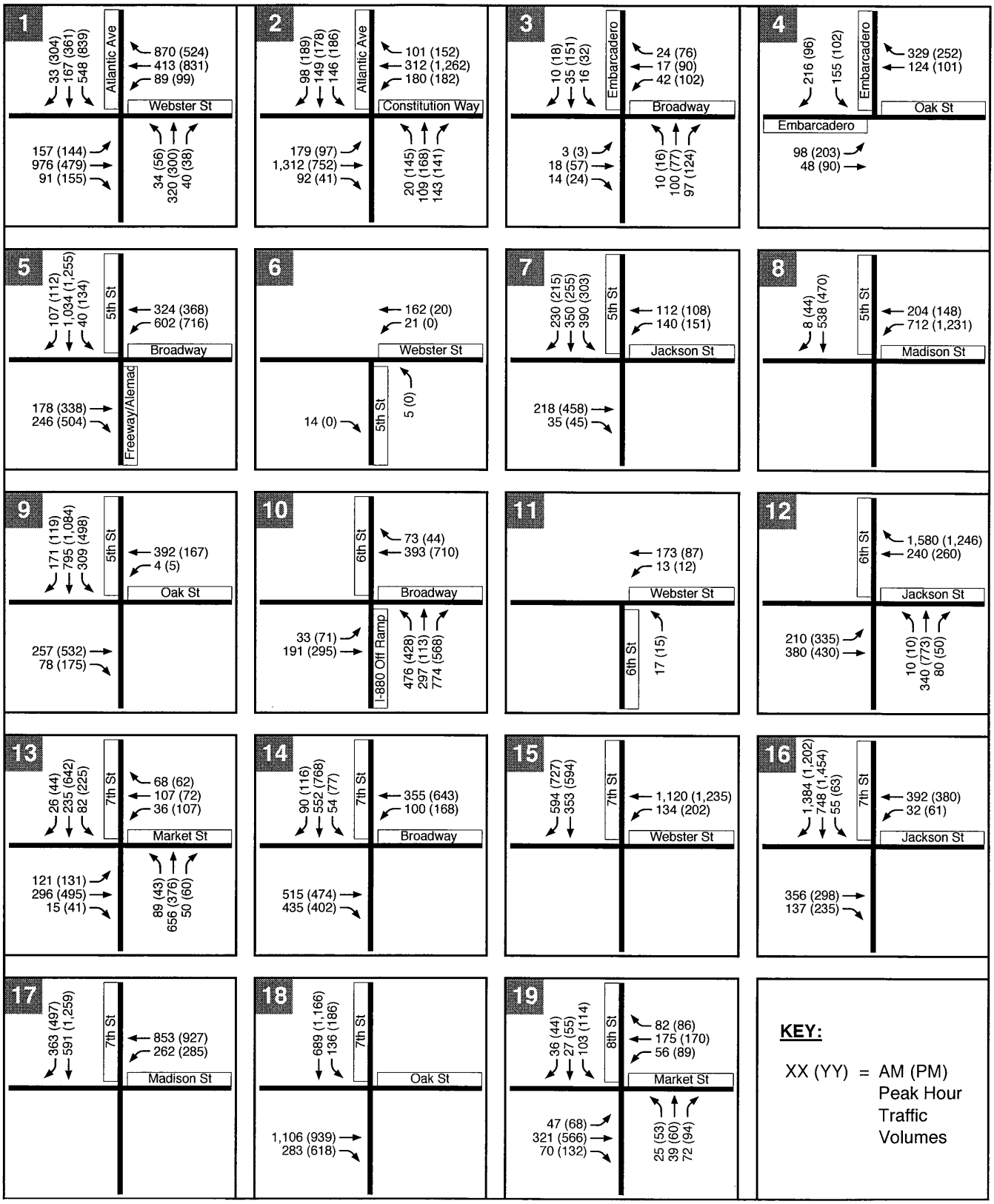
Figure C-2b
Existing Conditions Lane Geometries



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

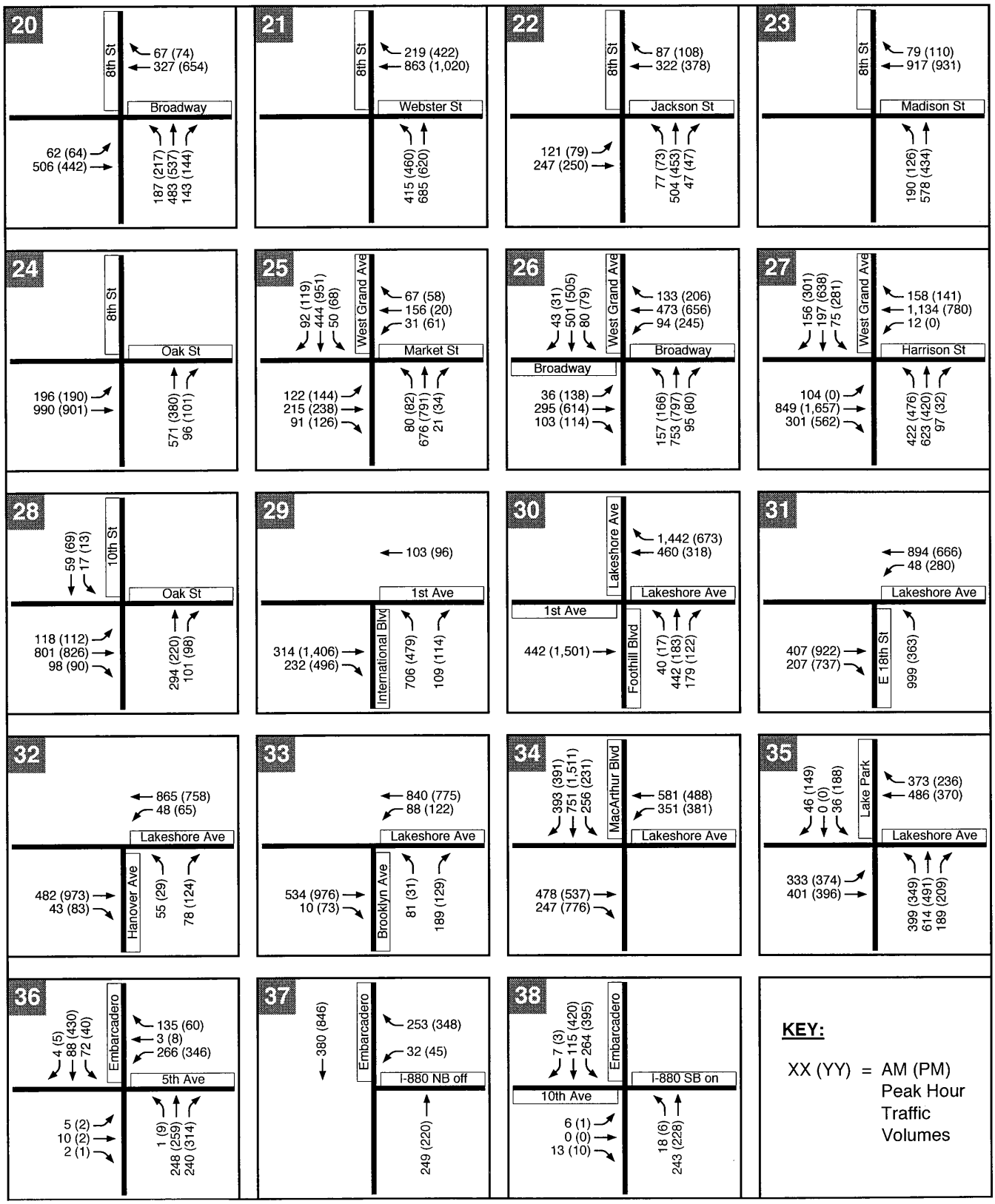
Figure C-2c
Existing Conditions Lane Geometries



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

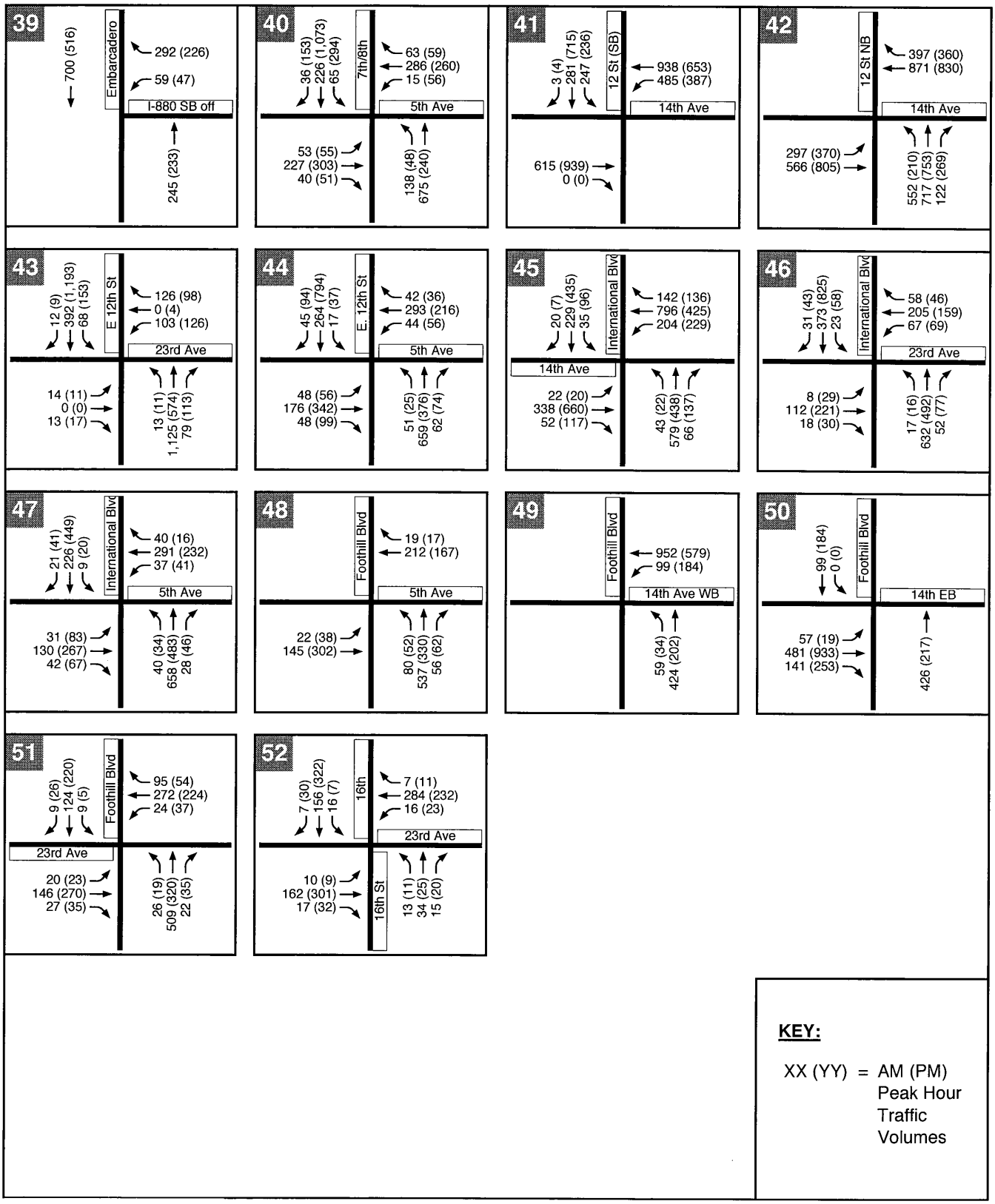
Figure C-3a
Year 2010 No Project Conditions
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

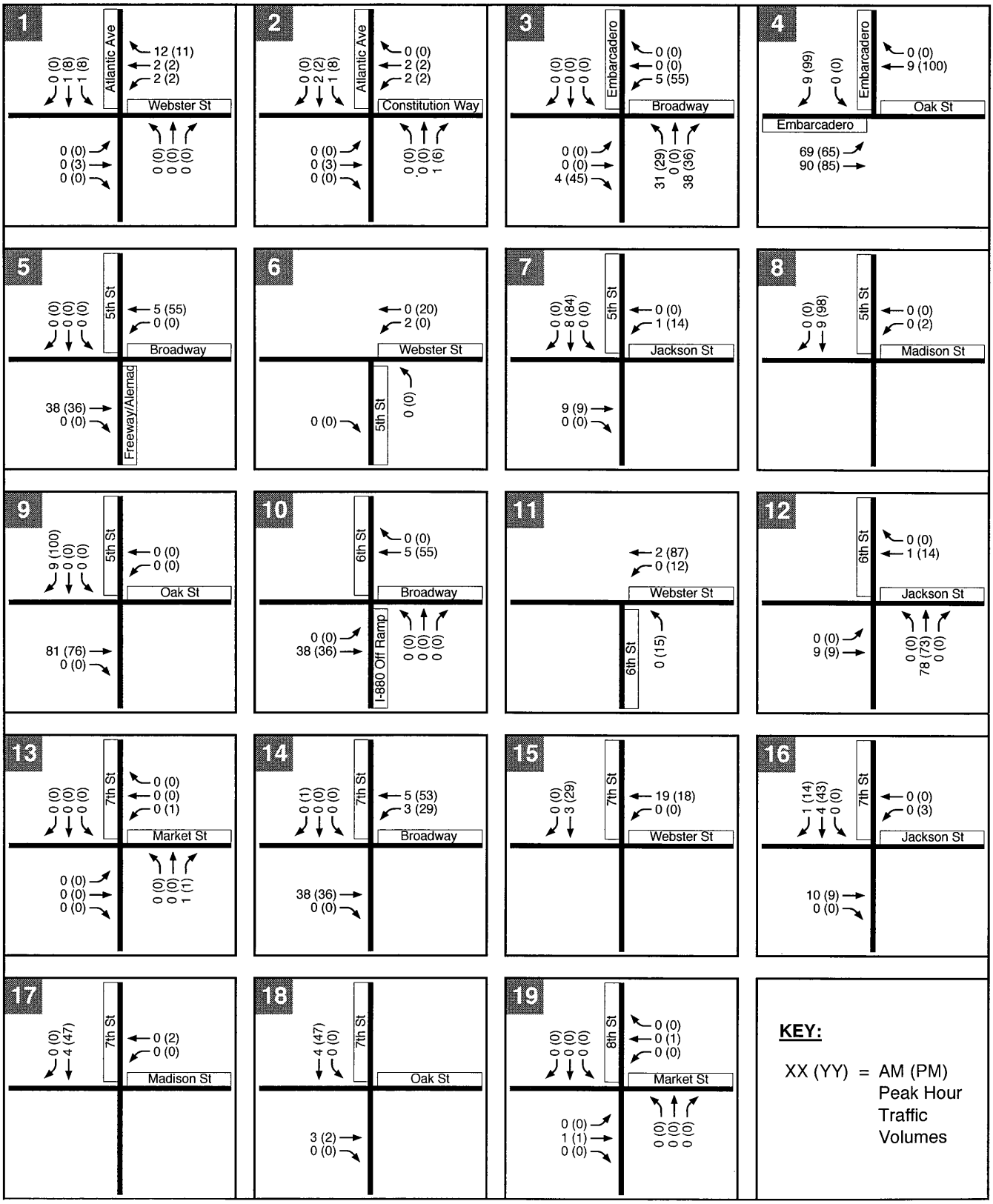
Figure C-3b
Year 2010 No Project Conditions
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

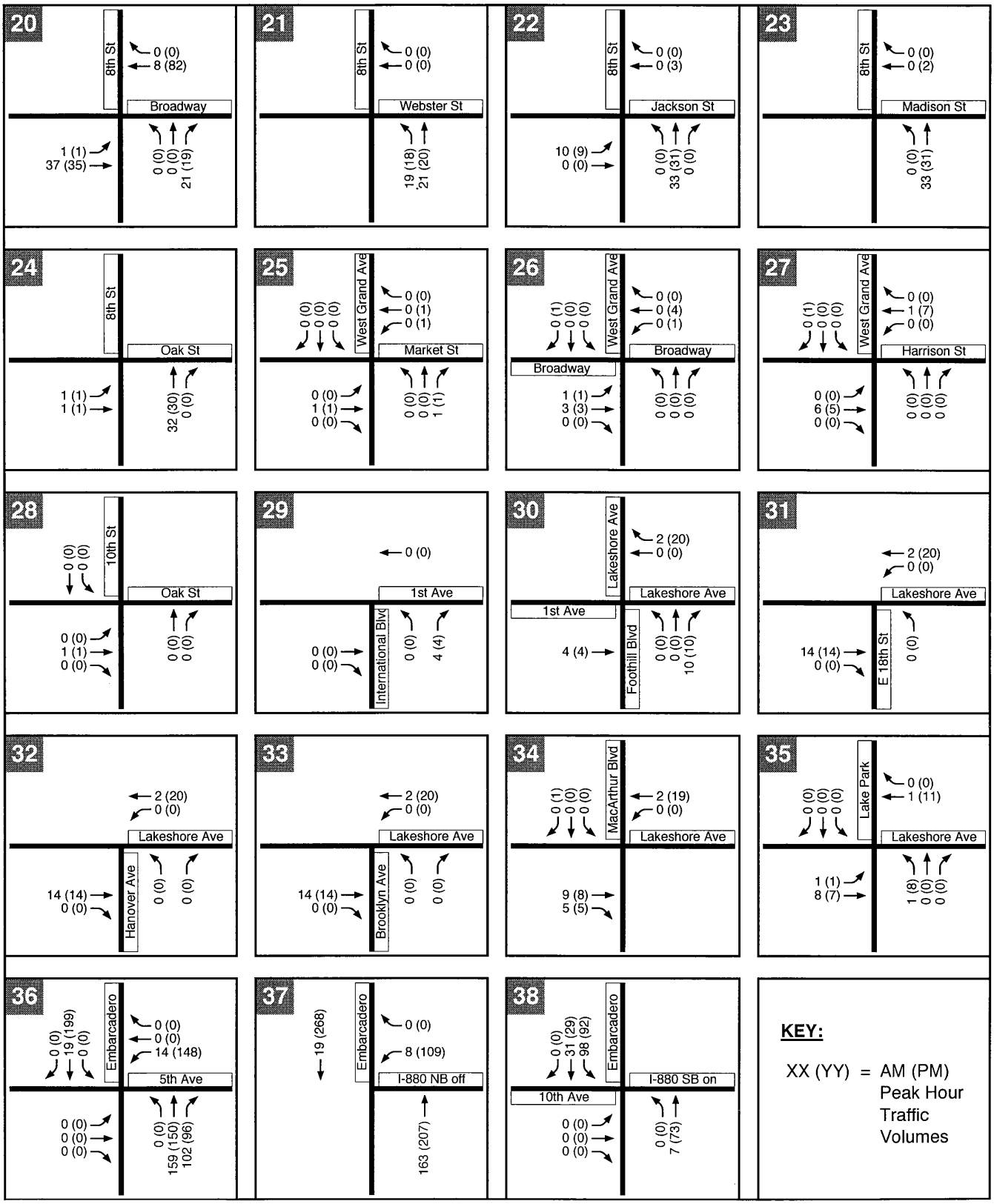
Figure C-3c
Year 2010 No Project Conditions
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

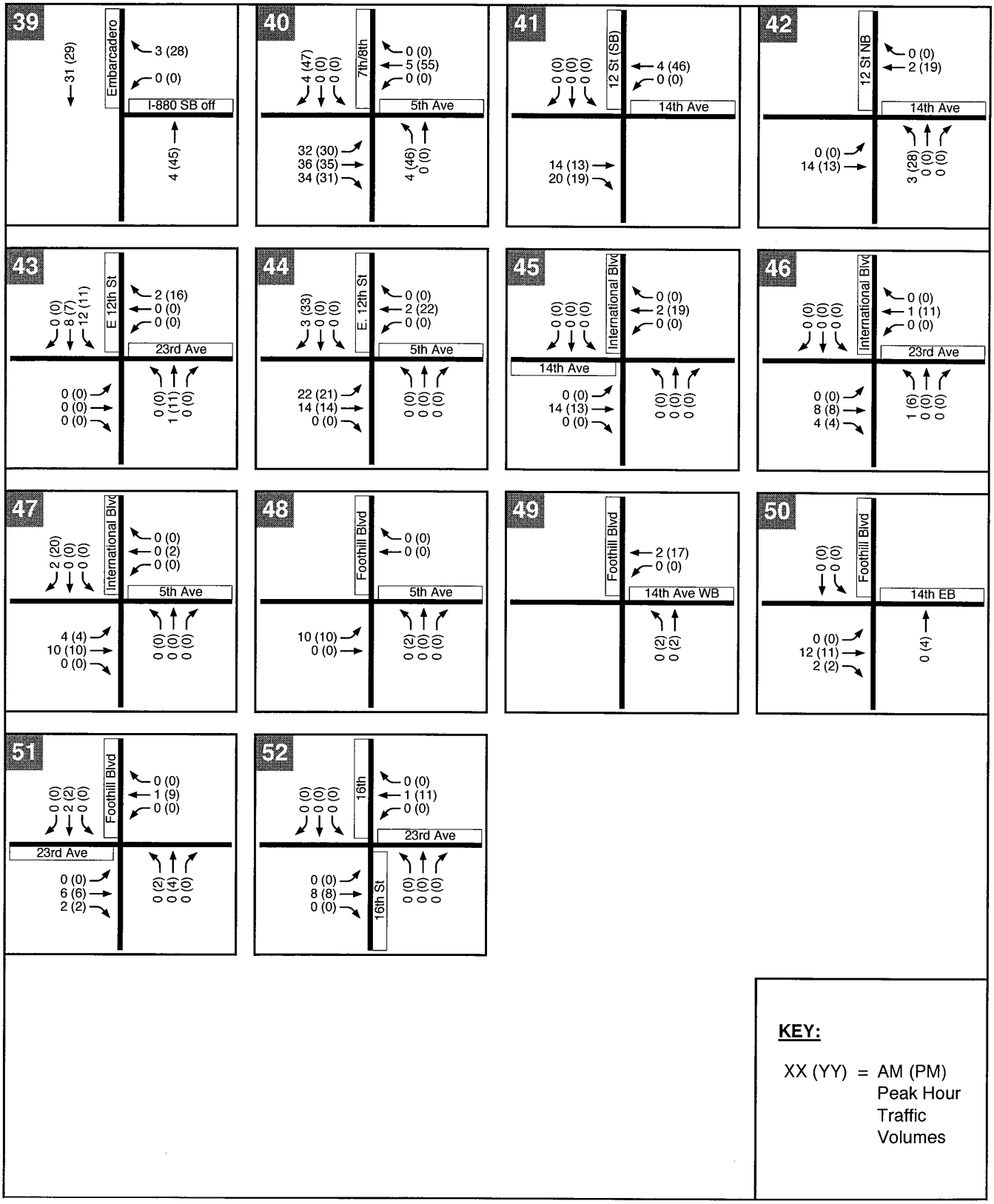
Figure C-4a
Interim Project Trip Assignment
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

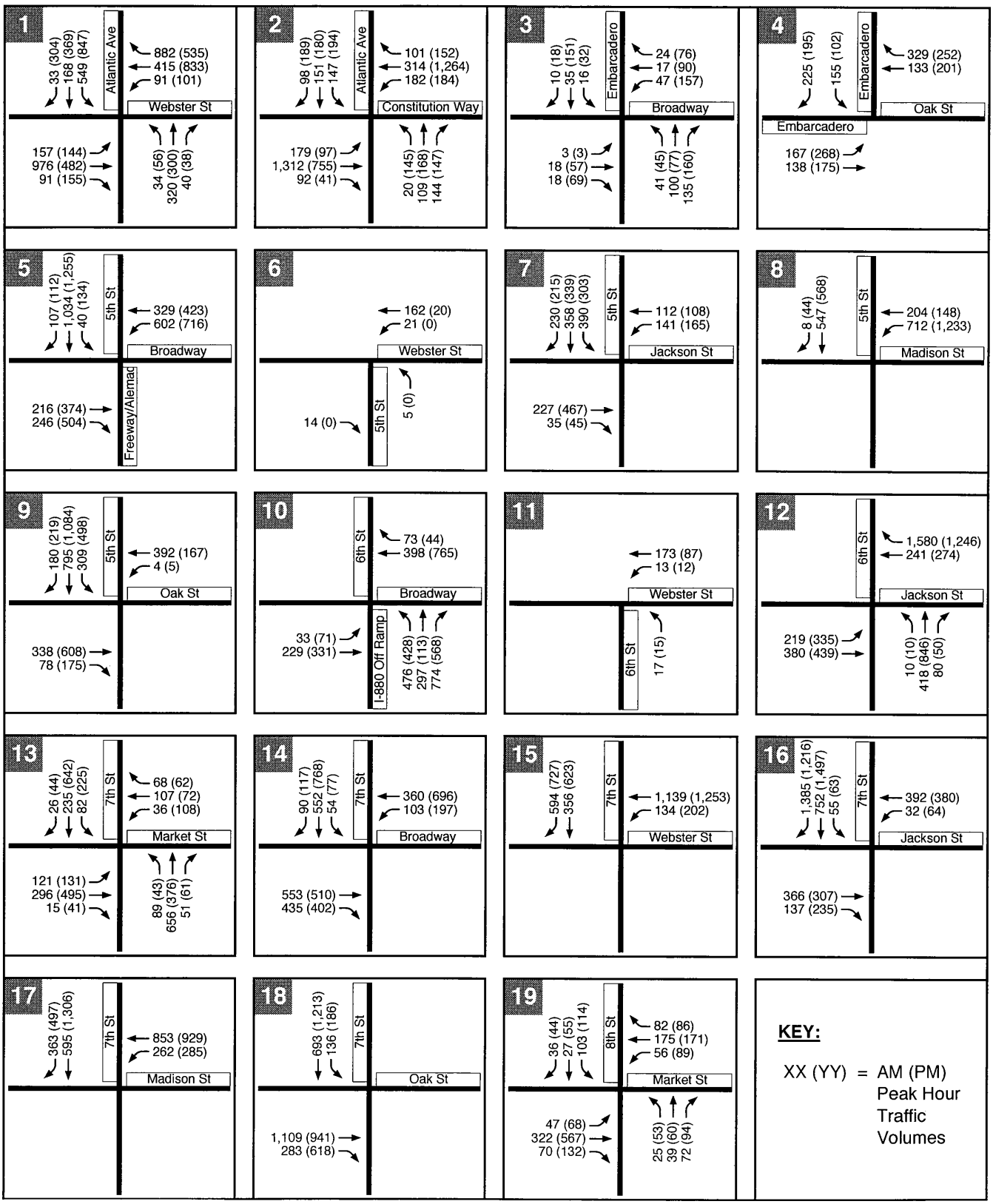
Figure C-4b
Interim Project Trip Assignment
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

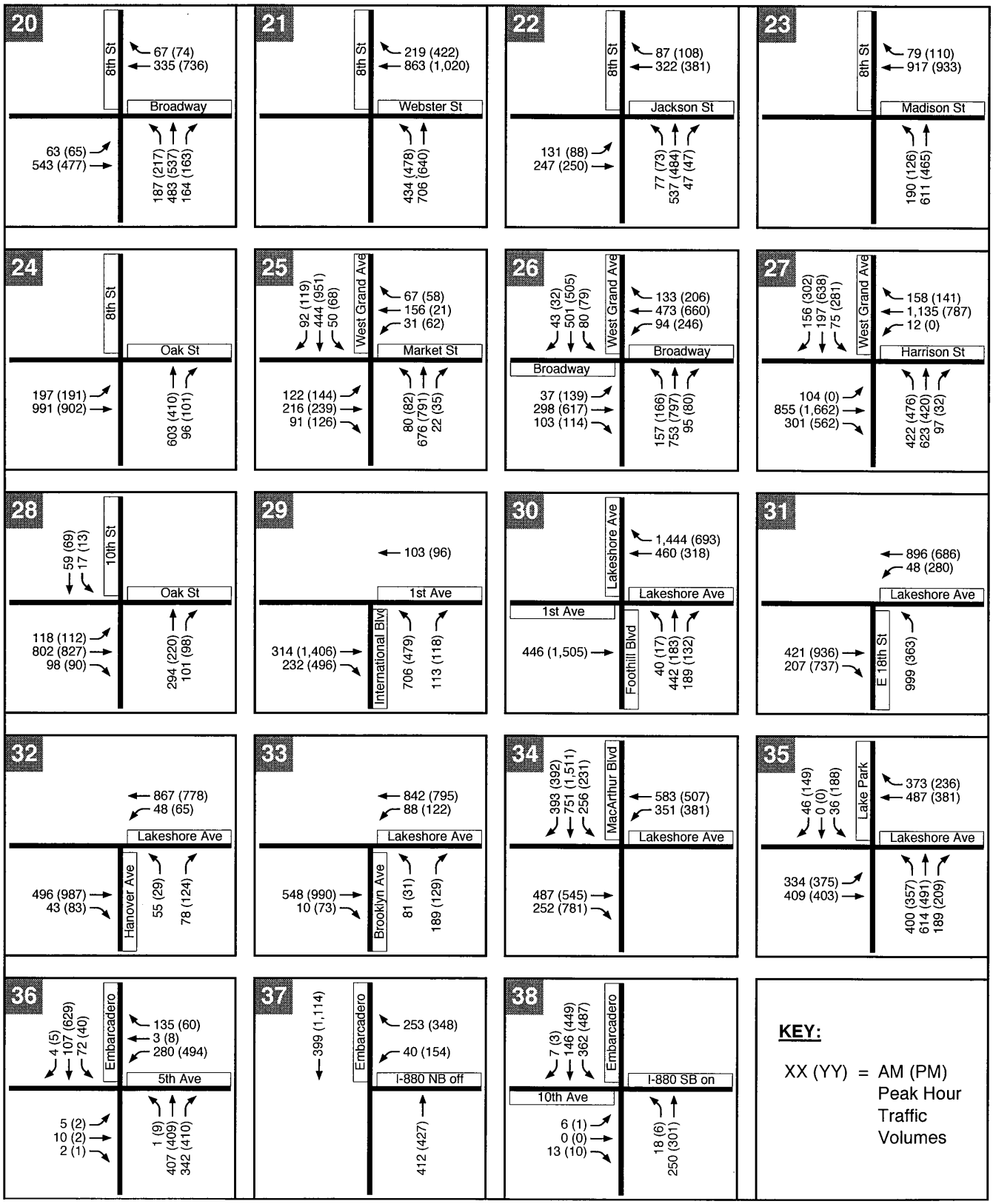
Figure C-4c
Interim Project Trip Assignment
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

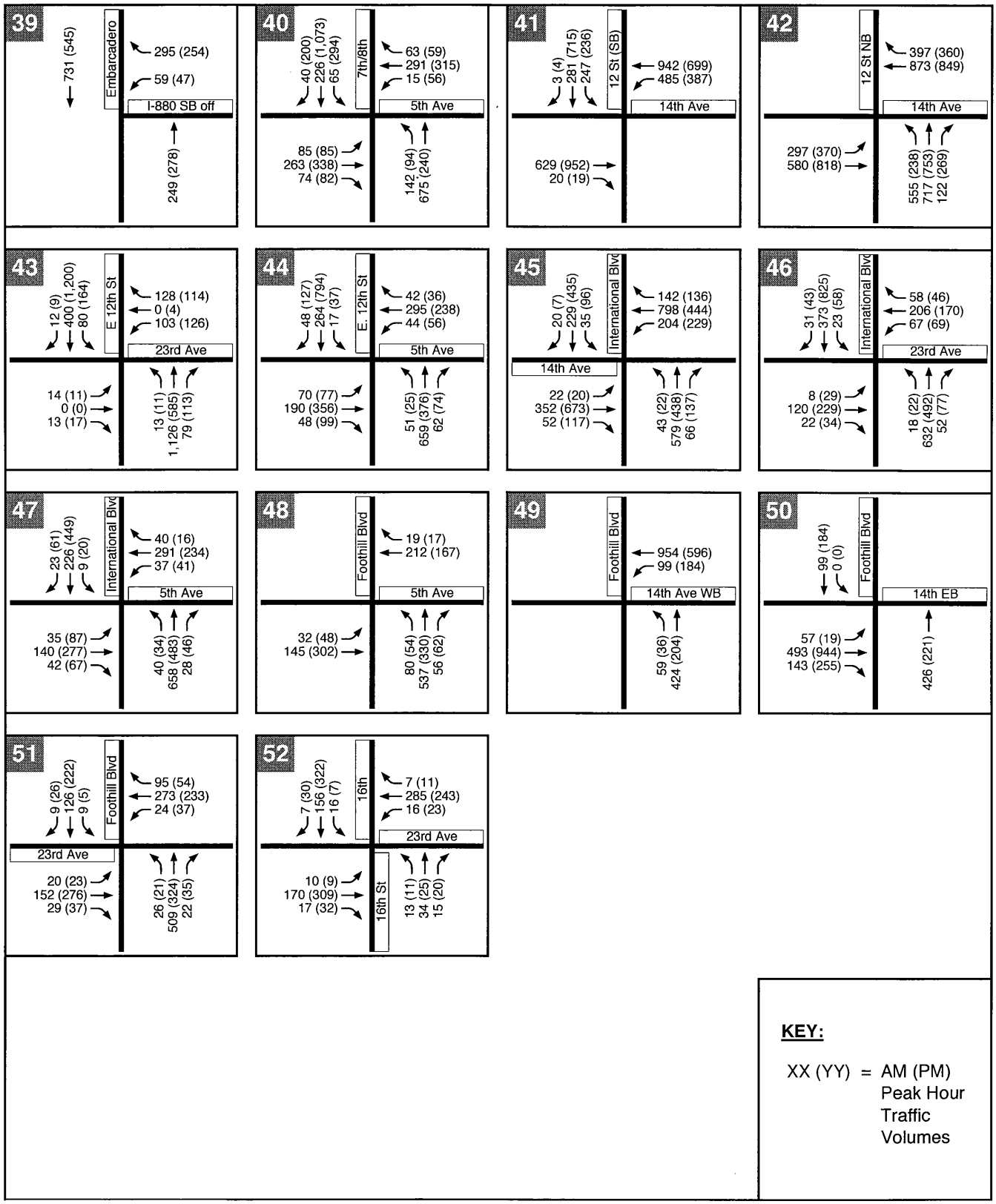
Figure C-5a
Year 2010 Plus Interim Conditions
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

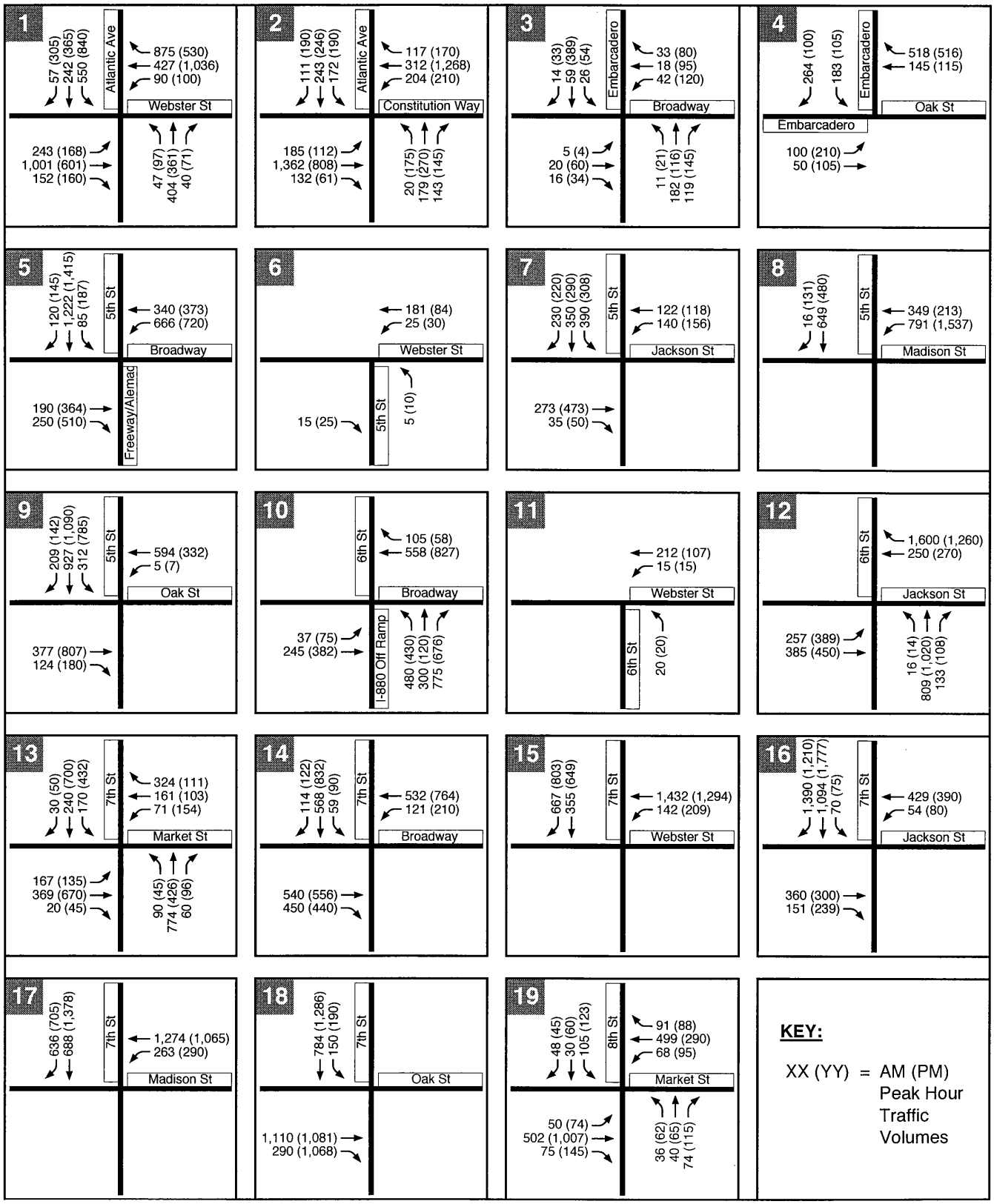
Figure C-5b
Year 2010 Plus Interim Conditions
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

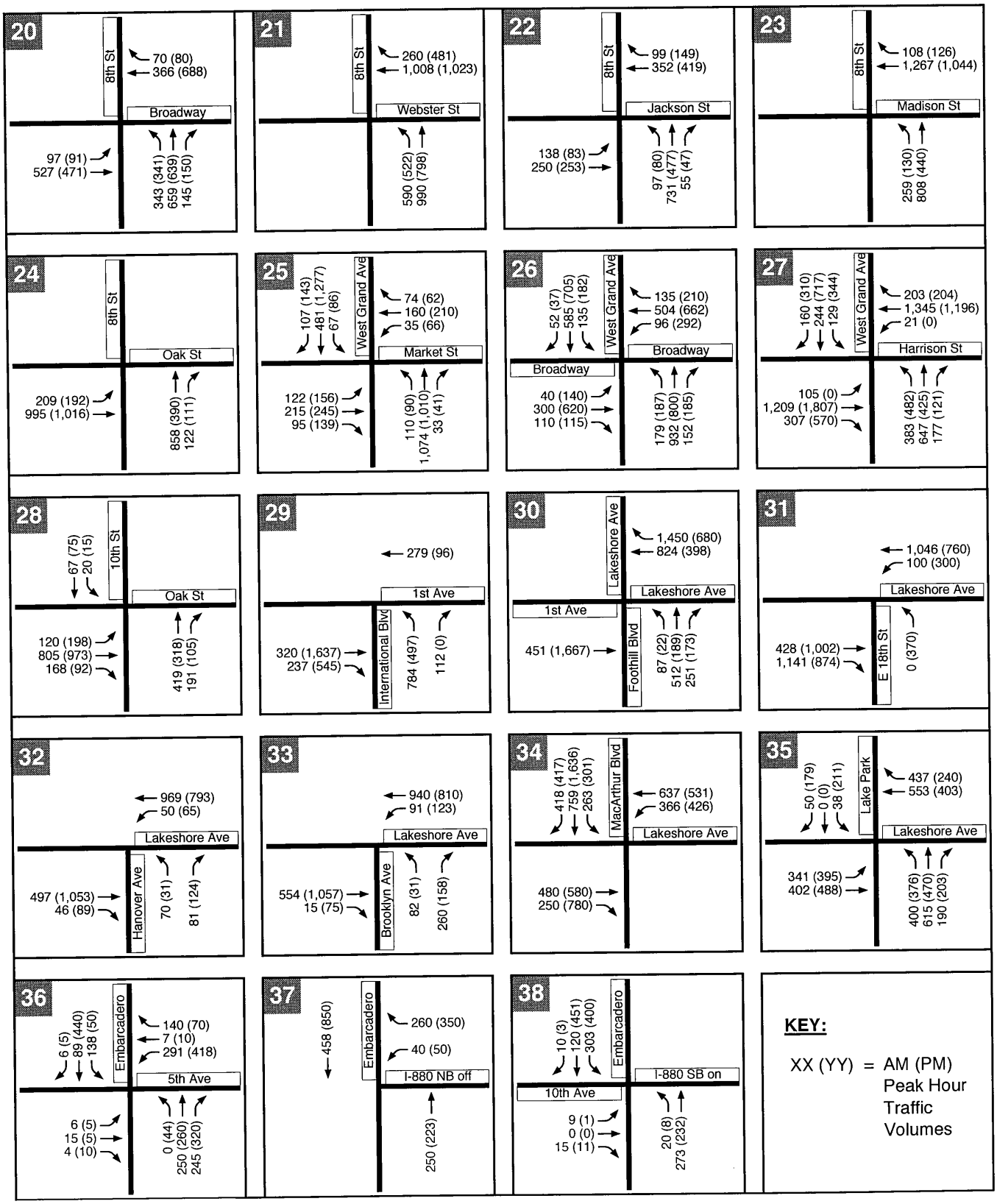
Figure C-5c
Year 2010 Plus Interim Conditions
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

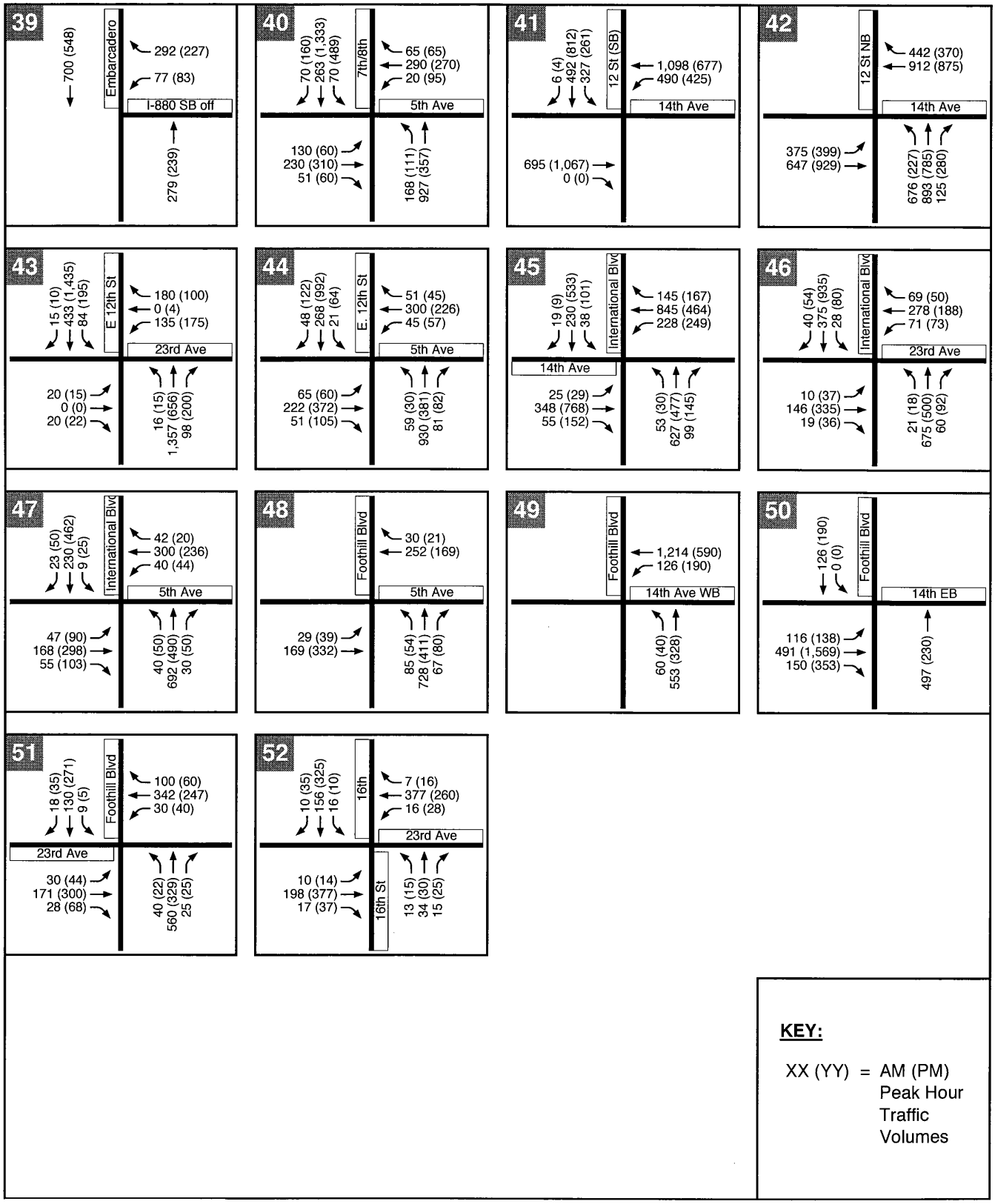
Figure C-6a
Year 2025 No Project Conditions
Peak Hour Volumes



Oak to Ninth Avenue . 202622

SOURCE: Fehr & Peers

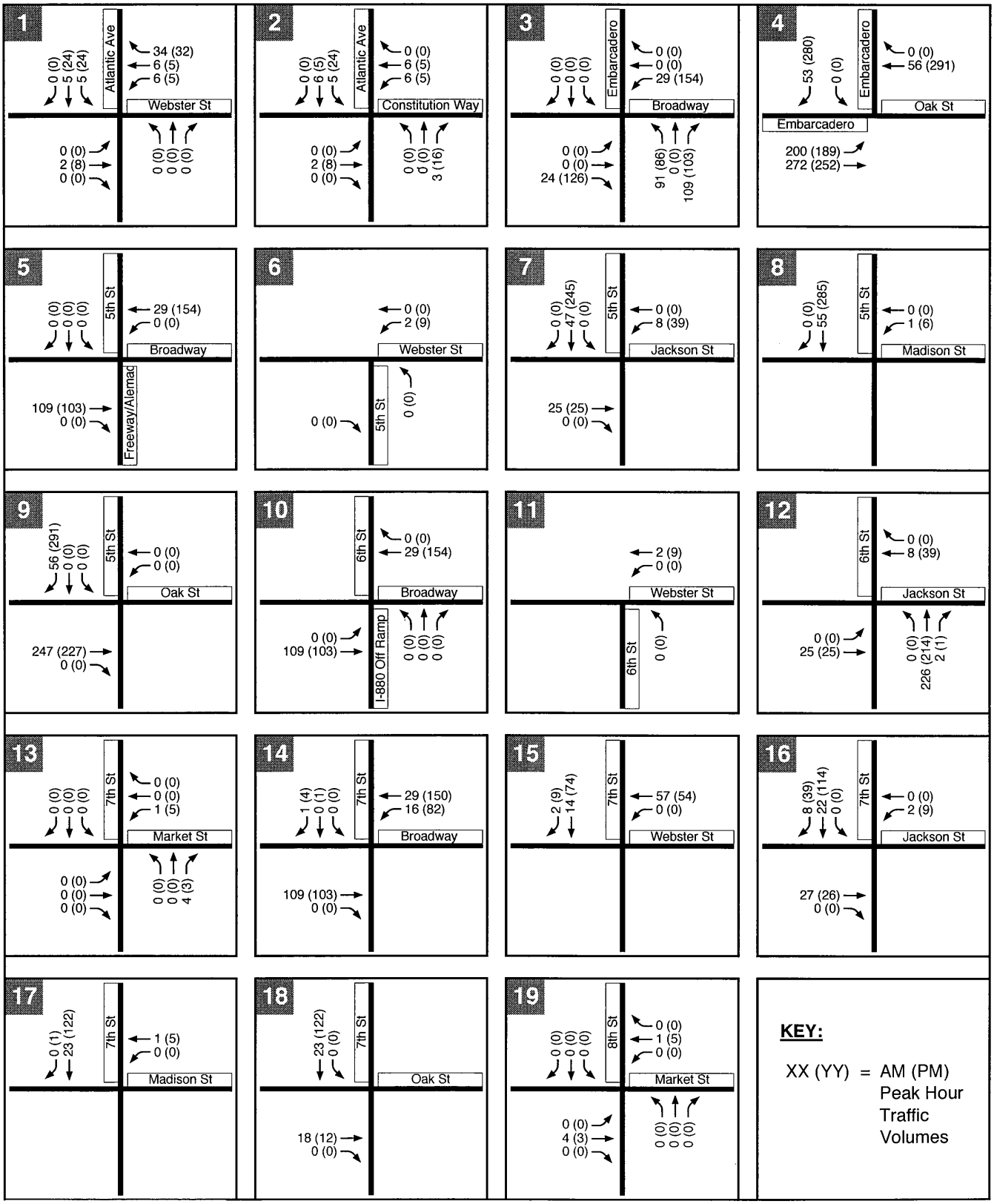
Figure C-6b
Year 2025 No Project Conditions
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

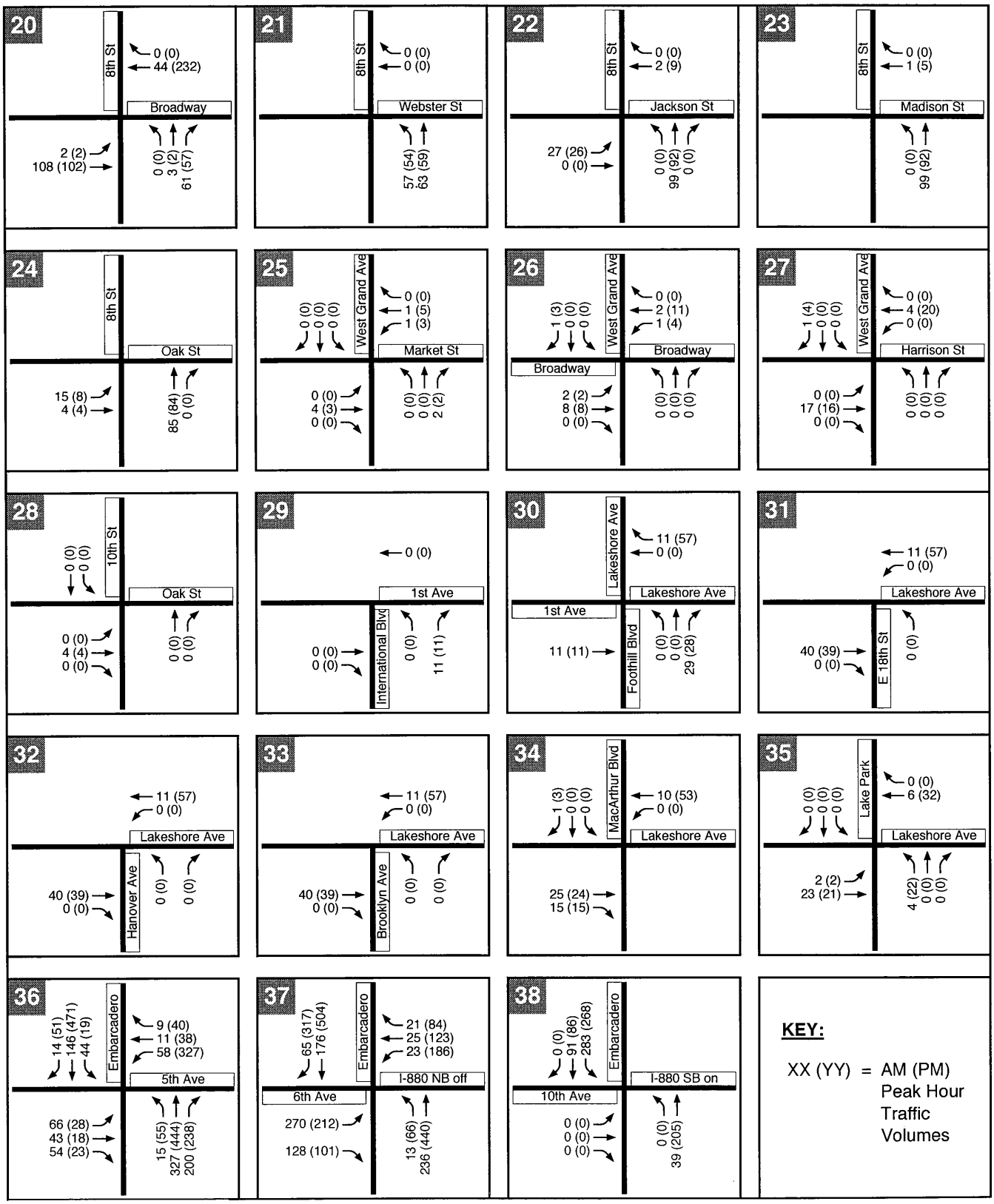
Figure C-6c
Year 2025 No Project Conditions
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

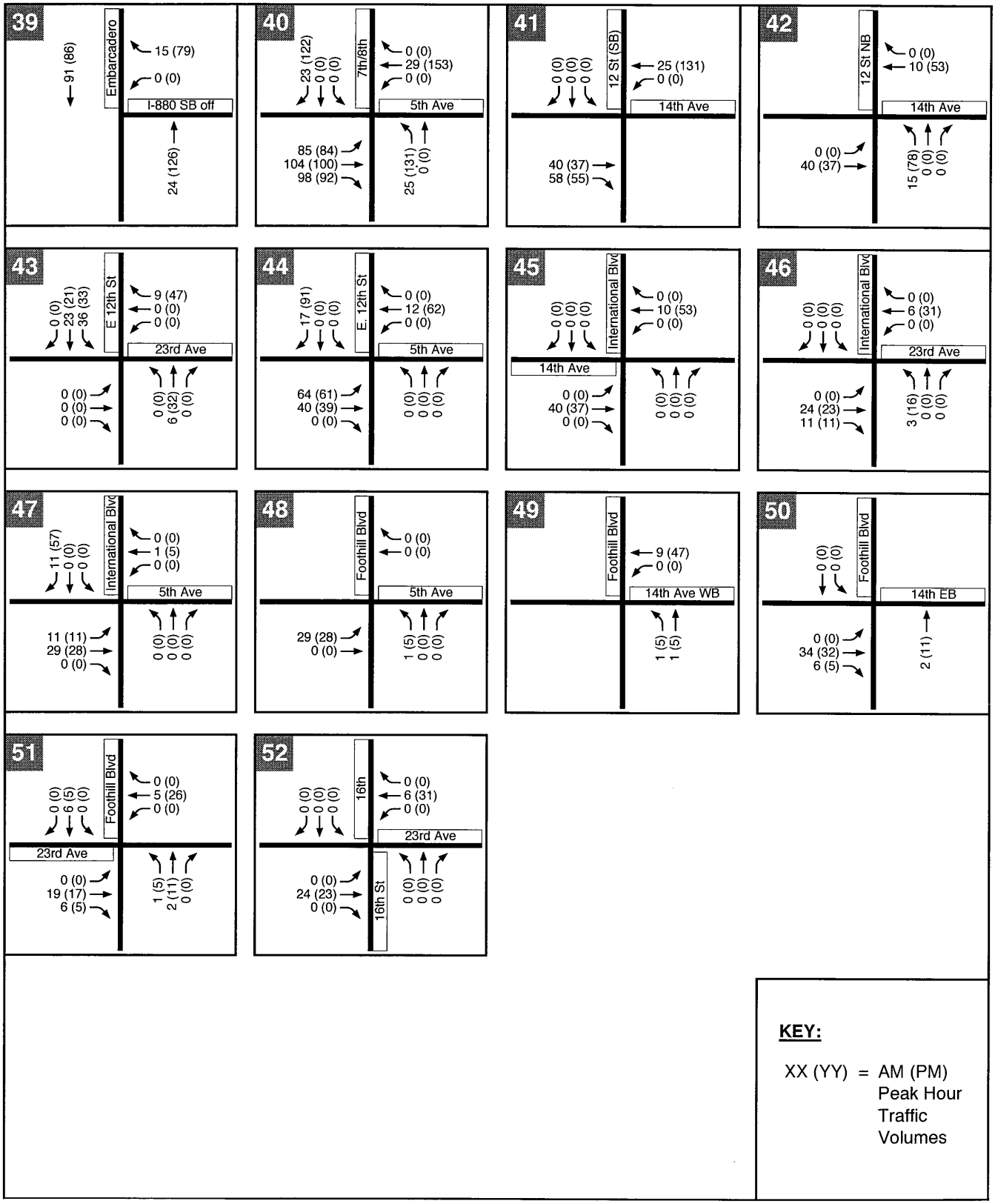
Figure C-7a
Buildout Project Trip Assignment
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

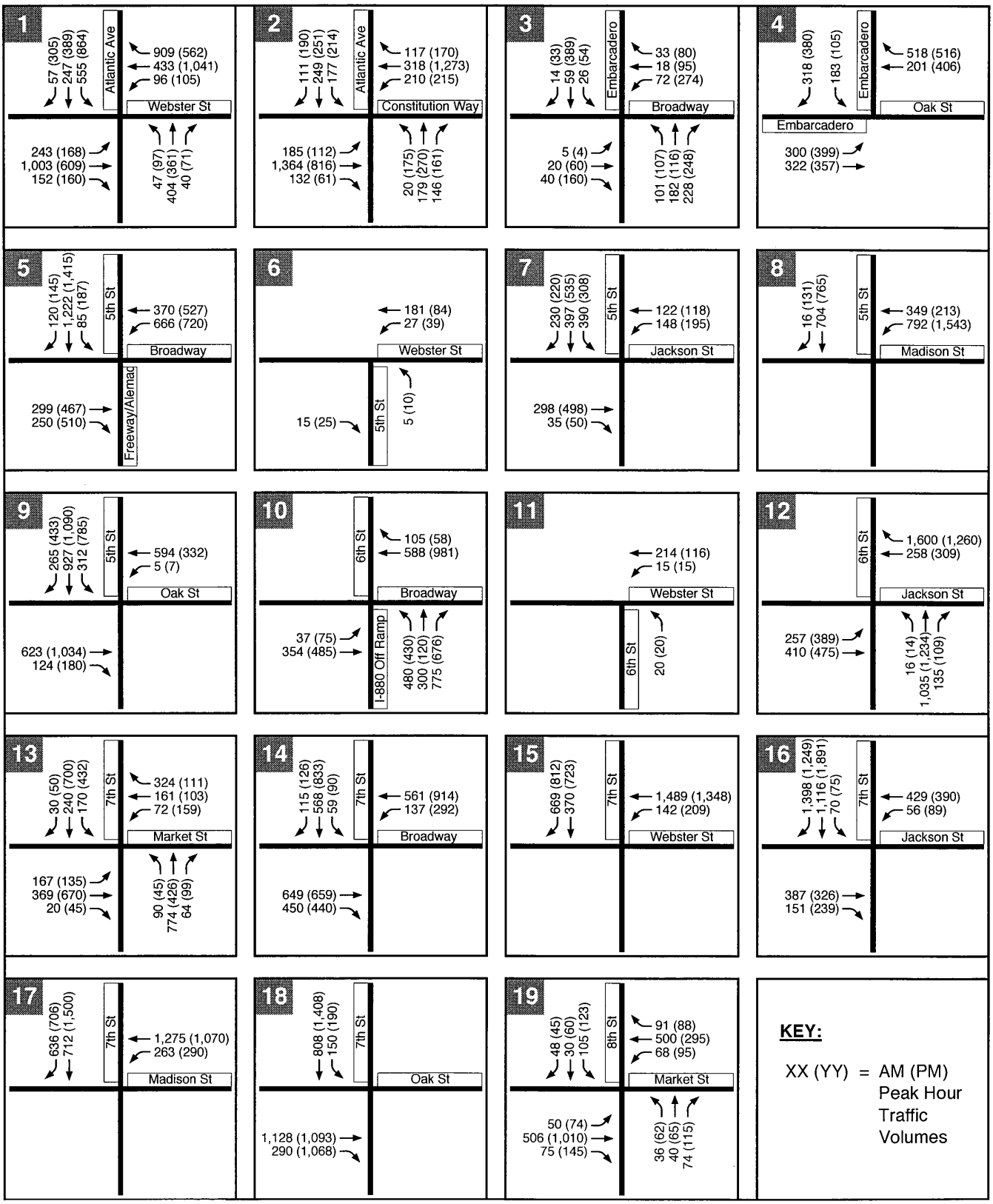
Figure C-7b
Buildout Project Trip Assignment
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

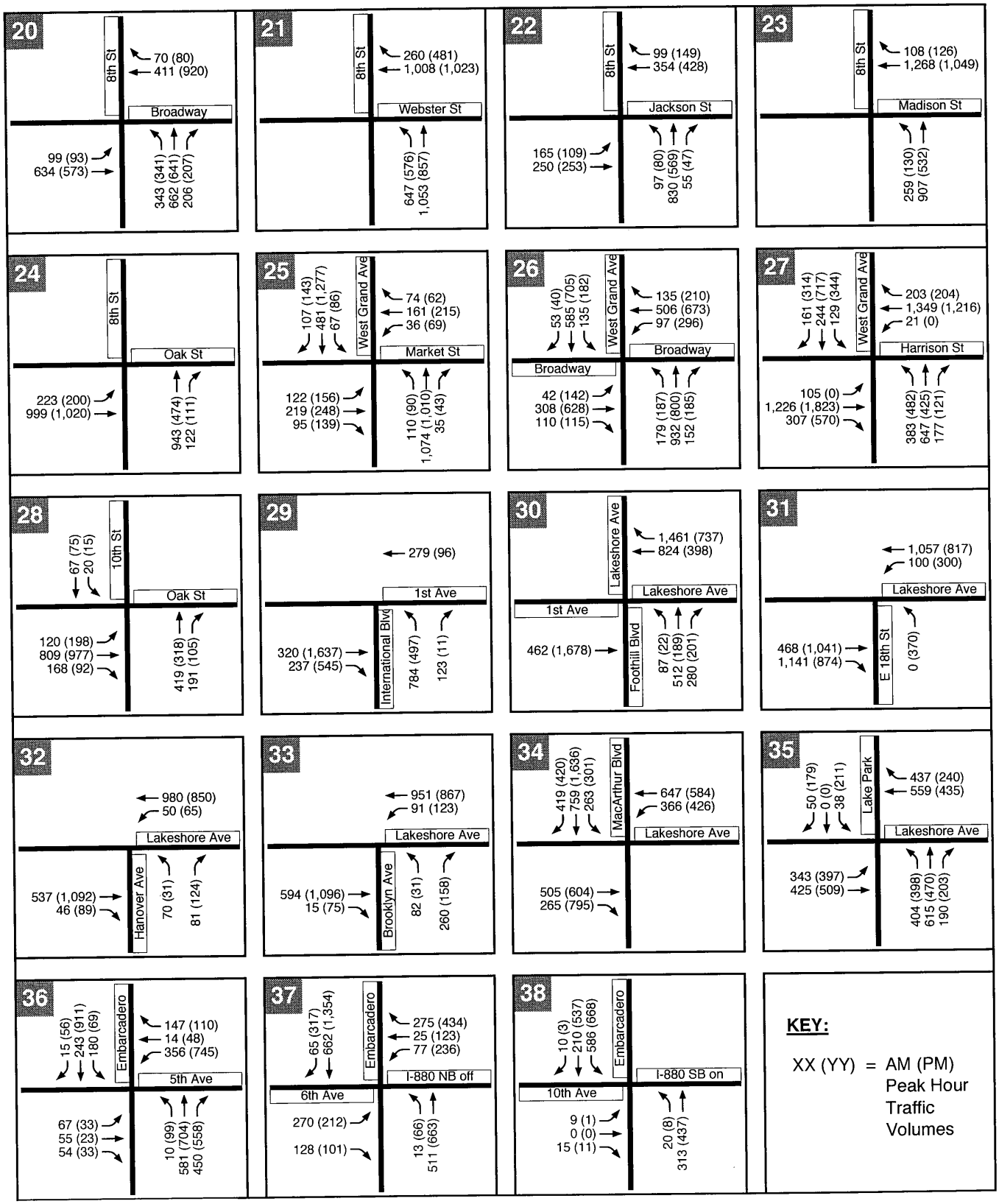
Figure C-7c
Buildout Project Trip Assignment
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

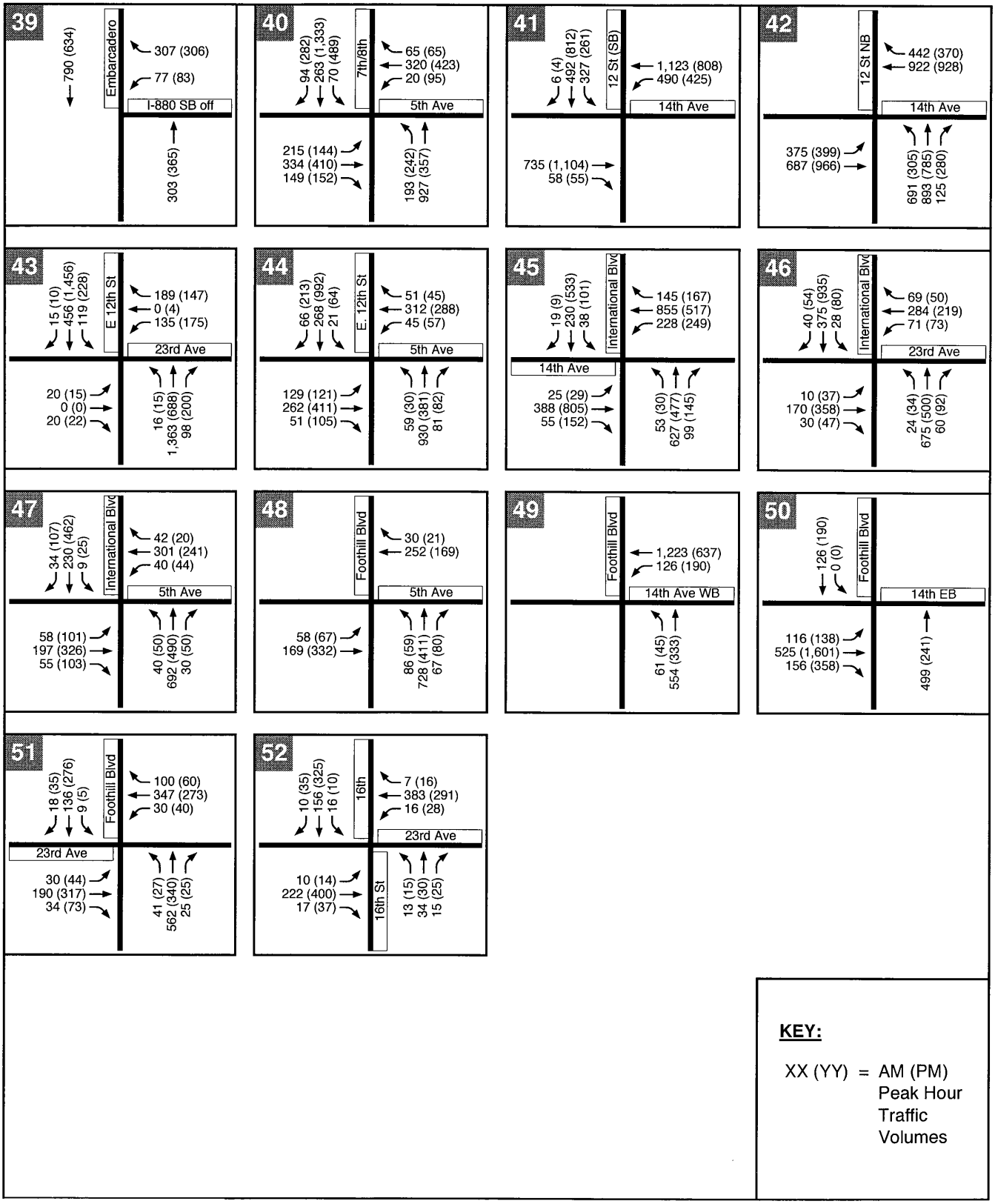
Figure C-8a
Year 2025 Plus Project Conditions
Peak Hour Volumes



Oak to Ninth Avenue . 202622

SOURCE: Fehr & Peers

Figure C-8b
Year 2025 Plus Project Conditions
Peak Hour Volumes



SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

Figure C-8c
Year 2025 Plus Project Conditions
Peak Hour Volumes

SHARED PARKING CONSIDERATIONS

As described in Section IV.B, the sum of the parking demand generated by individual project components does not take into account possible shared use of onsite parking spaces because of the overlap of parking demand between the residential and commercial properties. For example, a person living in one of the residential units might walk to a restaurant that is located within the project site rather than drive. Because of this interaction between the various uses, the parking demand should reflect some reduction, which is reflected in a shared-use discount. Because the potential overlap between the uses cannot be definitively identified at this time (because the types of commercial uses have not been defined), so several shared-use reductions were analyzed ranging from 5 percent to 25 percent.

For purposes of this analysis, this shared use reduction was applied to the retail spaces (general commercial and grocery store) because the number of retail spaces would be the limiting factor and the parking demand for the residential uses are not likely to be sensitive to the presence or absence of adjacent commercial uses. The number of parking spaces required by the retail uses is expected to be heavily dependent on the location of adjacent residential uses. In addition, resident parking is likely to be reserved and cannot be shared by multiple users.

Table C-6 documents the anticipated reduction in the total parking demand based on the application of a shared-use reduction to the retail spaces. As shown in the tables, the anticipated parking demand may be reduced by 32 to 161 spaces. With even the most aggressive reduction, the parking demand still exceeds 5,000 spaces.

TABLE C-6
SHARED PARKING REDUCTION APPLIED TO RETAIL SPACES

Land Use	Size	Unit	Demand Rate	Spaces
General Commercial	170	KSF	3.02	513
Grocery Store	30	KSF	4.36	131
5% Shared Parking Reduction				(32)
10% Shared Parking Reduction				(64)
25% Shared Parking Reduction				(161)

Queuing at Intersections Along The Embarcadero

On the basis of a micro-simulation analysis, with an additional through lane on The Embarcadero, and the other lane configurations presented previously, the queuing (backups) along The Embarcadero would be minimized. A review of the estimated queues at the intersections indicated that backups would be minimal along The Embarcadero, with some occasional "spill-back" from one adjacent intersection to another. As shown in **Table C-7**, the average queuing during the PM peak hour is less than the storage length at all of the intersections along Embarcadero in front of the project. The maximum queue at several locations exceeds the available storage area intermittently.

At several locations, there would be intermittent periods during the PM peak hour when queues from one intersection could "spill-back" to adjacent intersections. This queuing would occur in the southbound direction along Embarcadero at 4th, 6th, and 10th Avenues. To minimize queuing along Embarcadero, it is recommended that the project install signal interconnects and coordinate the traffic signals at 5th Avenue, 6th Avenue, 8th Avenue, and 10th Avenue.

TABLE C-7
QUEUE LENGTHS – PM PEAK HOUR

Intersection	Approach	Storage Length (feet)	Average Queue (feet)	Exceeds Storage	Max Queue (feet)	Exceeds Storage
4th Avenue / Embarcadero	SB	400	100	-	450	Yes
5th Avenue / Embarcadero	NB	500	200	-	500	
	SB	300	300	-	300	
	WB	1,000	400	-	1,000	
6th Avenue / I-880 NB Off-Ramp / Embarcadero	NB	300	100	-	250	-
	SB	500	450	-	600	Yes
7th Avenue/Embarcadero						
8th Avenue / Embarcadero	NB	700	50	-	200	
	SB	300	200	-	300	
9th Avenue / Embarcadero	SB	700	50	-	150	-
10th Avenue / Embarcadero	SB	200	200		250	Yes

SOURCE: Fehr & Peers Transportation Consultants; and Hausrath Economic Group

Alameda County Congestion Management Agency Roadway Analysis

The Alameda County Congestion Management Agency (ACCMA) oversees the Alameda County Congestion Management Program (CMP). Two different systems are used for the purposes of the CMP, i.e., the designated CMP roadway network (used to monitor performances in relation to established level of service [LOS] standards), and the broader Metropolitan Transportation System (MTS), a regionally designated system that includes both freeways and transit (used in the CMA's land-use analysis program). The LOS standard for the CMP (for monitoring purposes) is LOS E, except for those road segments that operated at LOS F in the initial year (1991) of the CMP, for which LOS F is the standard.[1] The CMA conducts a LOS monitoring study every two years (the last study was done in September 2004). As described in Section IV.B of this EIR, the 2004 surveys concluded that 15 freeway segments within Alameda County operated at LOS F during the PM peak hours, with six of those segments in the City of Oakland.

Local agencies are responsible for analysis of the impacts of land-use decisions (i.e., all General Plan amendments, and large-scale projects requiring an EIR and exceeding the 100 PM peak-hour vehicle trip threshold) on the MTS. Land-use analyses use the travel demand forecasting model developed by the ACCMA (as described in Section IV.B of this EIR, and below). Local agencies also are responsible for formulating appropriate mitigation measures commensurate with the magnitude of the expected impacts. If the level of service standards are not met, the local agency must prepare and adopt a deficiency plan that can be implemented to achieve the level of service standards on the deficient road segment, or to improve the level of service of the system and contribute to significant air quality improvements. During the process of developing the deficiency plan, the local agency will need to consider whether it is possible to make physical improvements to the deficient segment. It may not be possible to do so for a number of reasons, including cost, availability of real estate, public opposition or air quality plan conflicts. However, in developing the deficiency plan, both local and system alternatives must be considered and described.

Operations of the MTS freeway and surface street segments were assessed using a volume-to-capacity (v/c) ratio methodology. For freeway segments, a per-lane capacity of 2,000 vehicles per hour (vph) was used, consistent with the 2003 and 2004 *Congestion Management Program* documents. For surface streets, a per-lane capacity of 800 vehicles per hour was used. Roadway segments with a v/c ratio greater than 1.00 signify LOS F. **Tables C-8** through **C-15** present the results of the evaluation.

[1] A road segment that operated at LOS F during the 1991 CMP baseline year was "grandfathered" from CMP requirements for preparation of a deficiency plan.

TABLE C-8
CONGESTION MANAGEMENT PROGRAM EVAULATION - 2010 AM NORTHBOUND/EASTBOUND

Link Location	Segment Limits		# Lanes	No Project Volume	Project Volume	% Project	With Project Volume	% Increase	V/C Ratio - No Project	V/C Ratio - With Project	No Project LOS	With Project LOS	Change in V/C >3%	Change in LOS
State Highways														
I-880														
Between	Dix Landing	SR 262/Mission	4	2231	0	0.00	2231	0.00%	0.28	0.28	A	A	No	no change
Between	SR 262/Mission	Stevenson	4	2606	0	0.04	2606	0.00%	0.33	0.33	A	A	No	no change
Between	Stevenson	Decoto	4	3225	0	0.04	3225	0.00%	0.40	0.40	B	B	No	no change
Between	Decoto	Alv-Niles	4	3998	1	0.19	3999	0.03%	0.50	0.50	B	B	No	no change
Between	Alv-Niles	Tennyson	4	6229	1	0.30	6230	0.02%	0.78	0.78	D	D	No	no change
Between	Tennyson	SR 92	4	5961	2	0.42	5963	0.03%	0.75	0.75	C	C	No	no change
Between	SR 92	A Street	4	5866	3	0.72	5869	0.05%	0.73	0.73	C	C	No	no change
Between	A Street	I-238	4	6697	2		6699	0.03%	0.84	0.84	D	D	No	no change
Between	I-238	Hegenberger	4	7351	4		7355	0.05%	0.92	0.92	E	E	No	no change
Between	Hegenberger	High/42nd Street	4	6881	7		6888	0.10%	0.86	0.86	D	D	No	no change
Between	High/42nd Street	PROJECT	4	7933	12		7945	0.15%	0.99	0.99	E	E	No	no change
Between	PROJECT	I-980	5	8015	79		8094	0.99%	0.80	0.81	D	D	No	no change
Between	I-980	I-880/Toll Plaza	3	4239	39		4278	0.92%	0.71	0.71	C	C	No	no change
I-980														
Between	SR 24 @ 580	I-880	4	2759	27	6.11	2786	0.98%	0.34	0.35	A	B	No	change
SR24														
Between	I-580 Ramps	Fish Ranch	4	2273	11	2.52	2284	0.48%	0.28	0.29	A	A	No	no change
I-580														
Between	I-238	Grove	5	5860	4	0.90	5864	0.07%	0.59	0.59	C	C	No	no change
Between	Grove	I-680	4	6167	3	0.72	6170	0.05%	0.77	0.77	D	D	No	no change
Between	I-680	Santa Rita	4	5350	2	0.45	5352	0.04%	0.67	0.67	C	C	No	no change
Between	Santa Rita	Portola	4	4493	1	0.19	4494	0.02%	0.56	0.56	B	B	No	no change
Between	Portola	1st Avenue	4	4098	1	0.15	4099	0.02%	0.51	0.51	B	B	No	no change
Between	1st Avenue	I-205 (SJ Co)	4	1795	0	0.04	1795	0.00%	0.22	0.22	A	A	No	no change
Between	Portola	Tassajara	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Tassajara	I-680	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	I-680	Center	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Center	I-580/238	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	I-80	Harrison	4	6828	6	1.36	6834	0.09%	0.85	0.85	D	D	No	no change
Between	Harrison	SR 13	4	5798	2	0.42	5800	0.03%	0.72	0.73	C	C	No	no change
Between	SR 13	MacArthur	4	8488	0	0.00	8488	0.00%	1.06	1.06	F	F	No	no change
Between	MacArthur	I-580/238	4	6720	0	0.00	6720	0.00%	0.84	0.84	D	D	No	no change
Between	SR 13	Fruitvale	4	5798	1	0.23	5799	0.02%	0.72	0.72	C	C	No	no change
Between	Fruitvale	Harrison	4	5807	2	0.38	5809	0.03%	0.73	0.73	C	C	No	no change
Between	Harrison	SR 24	4	4459	0	0.00	4459	0.00%	0.56	0.56	B	B	No	no change
Between	SR 24	I-80/580	5	6828	6	1.36	6834	0.09%	0.68	0.68	C	C	No	no change
Between	Central	I-80 Jct	2	3578	5	1.12	3583	0.14%	0.89	0.90	D	D	No	no change
Arterials														
Martin Luther King Jr. Way														
Between	SR 24	Adeline	3	1630	4	0.81	1634	0.25%	0.68	0.68	C	C	No	no change
San Pablo Avenue														
Between	Carlson	Washington	2	740	0	0.00	740	0.00%	0.46	0.46	B	B	No	no change
Between	Washington	Marin	2	144	0	0.00	144	0.00%	0.09	0.09	A	A	No	no change
Between	Marin	Gilman	2	463	0	0.00	463	0.00%	0.29	0.29	A	A	No	no change
Between	Gilman	University	2	807	2	0.54	809	0.25%	0.50	0.51	B	B	No	no change
Between	University	Allston	2	1258	0	0.00	1258	0.00%	0.79	0.79	D	D	No	no change
Between	Allston	Ashby	2	1336	1	0.15	1337	0.07%	0.84	0.84	D	D	No	no change
Between	Ashby	Stanford	2	816	0	0.07	816	0.00%	0.51	0.51	B	B	No	no change
Between	Stanford	53rd	2	1038	0	0.07	1038	0.00%	0.65	0.65	C	C	No	no change
Between	53rd	Park	2	1137	1	0.23	1138	0.09%	0.71	0.71	C	C	No	no change
Between	Park	35th	2	1604	2	0.41	1606	0.12%	1.00	1.00	F	F	No	no change
MTC MTS Arterials														
Castro Street														
Between	Embarcadero	7th Street	2	0	0	0.00	0	#DIV/0!	0.00	0.00	A	A	No	no change
Between	7th Street	14th Street	3	97	0	0.00	97	0.00%	0.04	0.04	A	A	No	no change
Between	14th Street	San Pablo Avenue	3	67	3	0.69	70	4.48%	0.03	0.03	A	A	No	no change
Grand Avenue														
Between	Moraga Ave	I-580	2	957	3	0.67	960	0.31%	0.60	0.60	C	C	No	no change
Between	I-580	Harrison	2	853	1	0.19	854	0.12%	0.53	0.53	B	B	No	no change
Between	Harrison	Broadway	2	905	0		905	0.00%	0.57	0.57	B	B	No	no change
Between	Broadway	Telegraph	2	1060	0	0.00	1060	0.00%	0.66	0.66	C	C	No	no change
Between	Telegraph	I-980	2	712	0	0.04	712	0.00%	0.45	0.45	B	B	No	no change
Between	I-980	Adeline	2	212	0	0.04	212	0.00%	0.13	0.13	A	A	No	no change
Between	Adeline	I-880	2	358	0	0.00	358	0.00%	0.22	0.22	A	A	No	no change
Broadway														
Between	Embarcadero	7th Street	2	608	38		646	6.25%	0.38	0.40	B	B	No	no change
Between	7th Street	14th Street	2	36	58		94	161.11%	0.02	0.06	A	A	Yes	no change
Between	14th Street	West Grand	2	73	3		76	4.11%	0.05	0.05	A	A	No	no change
Between	West Grand	MacArthur	2	67	0	0.04	67	0.00%	0.04	0.04	A	A	No	no change
Between	MacArthur	51st Street	2	504	0	0.08	504	0.00%	0.32	0.32	A	A	No	no change
Between	51st Street	SR 24	2	497	0	0.00	497	0.00%	0.31	0.31	A	A	No	no change
Brush Street														
Between	Embarcadero	7th Street	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	7th Street	14th Street	3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	14th Street	San Pablo Avenue	3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Telegraph Avenue														
Between	14th Street	West Grand	2	80	0	0.00	80	0.00%	0.05	0.05	A	A	No	no change
Between	West Grand	MacArthur	2	120	0	0.00	120	0.00%	0.08	0.08	A	A	No	no change
Between	MacArthur	51st Street	2	148	0	0.00	148	0.00%	0.09	0.09	A	A	No	no change
Between	51st Street	Ashby	2	1860	5	1.09	1865	0.27%	1.16	1.17	F	F	No	no change
Between	Ashby	Bancroft Way	2	1601	4	1.01	1605	0.25%	1.00	1.00	F	F	No	no change

1. The Congestion Management Agency applies different segment definitions for segments of I-580 between I-238 and Tassajara Road
2. Brush Street and Castro Street are one-way streets
3. Segment limits were taken from the 2004 LOS Monitoring Report *(Alameda County CMA) except for the se* gment of I-880 closest to the project which was divided in two.

Fehr & Peers, 2005.

TABLE C-9
CONGESTION MANAGEMENT PROGRAM EVAULATION - 2010 AM SOUTHBOUND/WESTBOUNC

Link Location	Segment Limits		# Lanes	No Project Volume	Project Volume	% Project	With Project Volume	% Increase	V/C Ratio - No Project	V/C Ratio - With Project	No Project LOS	With Project LOS	Change in V/C >3%	Change in LOS
State Highways														
I-880														
Between	Dix Landing	SR 262/Mission	4	8918	1	0.23	8919	0.01%	1.11	1.11	F	F	No	no change
Between	SR 262/Mission	Stevenson	4	6917	2	0.45	6919	0.03%	0.86	0.86	D	D	No	no change
Between	Stevenson	Decoto	4	6564	3	0.67	6567	0.05%	0.82	0.82	D	D	No	no change
Between	Decoto	Alv-Niles	4	6580	4	1.01	6584	0.06%	0.82	0.82	D	D	No	no change
Between	Alv-Niles	Tennyson	4	7417	7	1.57	7424	0.09%	0.93	0.93	E	E	No	no change
Between	Tennyson	SR 92	4	6810	8	1.75	6818	0.12%	0.85	0.85	D	D	No	no change
Between	SR 92	A Street	4	8543	13	3.06	8556	0.15%	1.07	1.07	F	F	No	no change
Between	A Street	I-238	4	6802	16		6818	0.24%	0.85	0.85	D	D	No	no change
Between	I-238	Hegenberger	4	7894	35		7929	0.44%	0.99	0.99	E	E	No	no change
Between	Hegenberger	High/42nd Street	4	6879	63		6942	0.92%	0.86	0.87	D	D	No	no change
Between	High/42nd Street	PROJECT	4	6453	99		6552	1.53%	0.81	0.82	D	D	No	no change
Between	PROJECT	I-980	5	5526	10		5536	0.18%	0.55	0.55	B	B	No	no change
Between	I-980	I-880/Toll Plaza	3	3211	5		3216	0.16%	0.54	0.54	B	B	No	no change
I-980														
Between	SR 24 @ 580	I-880	4	6478	21	4.735	6499	0.32%	0.81	0.81	D	D	No	no change
SR24														
Between	I-580 Ramps	Fish Ranch	4	8356	7	1.66	8363	0.08%	1.04	1.05	F	F	No	no change
I-580														
Between	I-238	Grove	5	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Grove	I-680	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	I-680	Santa Rita	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Santa Rita	Portola	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Portola	1st Avenue	4	7262	3	0.80	7265	0.04%	0.91	0.91	E	E	No	no change
Between	1st Avenue	I-205 (SJ Co)	4	6427	3	0.80	6430	0.05%	0.80	0.80	D	D	No	no change
Between	Portola	Tassajara	4	9455	3	0.80	9458	0.03%	1.18	1.18	F	F	No	no change
Between	Tassajara	I-680	4	8482	4	0.92	8486	0.05%	1.06	1.06	F	F	No	no change
Between	I-680	Center	4	8406	5	1.10	8411	0.06%	1.05	1.05	F	F	No	no change
Between	Center	I-580/238	4	9675	6	1.37	9681	0.06%	1.21	1.21	F	F	No	no change
Between	I-80	Harrison	4	9281	2	0.41	9283	0.02%	1.16	1.16	F	F	No	no change
Between	Harrison	SR 13	4	8093	5	1.13	8098	0.06%	1.01	1.01	F	F	No	no change
Between	SR 13	MacArthur	4	7917	2	0.49	7919	0.03%	0.99	0.99	E	E	No	no change
Between	MacArthur	I-580/238	4	6870	1	0.23	6871	0.01%	0.86	0.86	D	D	No	no change
Between	SR 13	Fruitvale	4	8093	5	1.13	8098	0.06%	1.01	1.01	F	F	No	no change
Between	Fruitvale	Harrison	4	8729	4	1.01	8733	0.05%	1.09	1.09	F	F	No	no change
Between	Harrison	SR 24	4	8243	0	0.00	8243	0.00%	1.03	1.03	F	F	No	no change
Between	SR 24	I-80/580	5	9281	2	0.41	9283	0.02%	0.93	0.93	E	E	No	no change
Between	Central	I-80 Jct	2	4756	2	0.45	4758	0.04%	1.19	1.19	F	F	No	no change
Arterials														
Martin Luther King Jr. Way														
Between	SR 24	Adeline	3	1397	3	0.60	1400	0.21%	0.58	0.58	B	B	No	no change
San Pablo Avenue														
Between	Carlson	Washington	2	1860	0	0.00	1860	0.00%	1.16	1.16	F	F	No	no change
Between	Washington	Marin	2	839	0	0.00	839	0.00%	0.52	0.52	B	B	No	no change
Between	Marin	Gilman	2	1531	0	0.00	1531	0.00%	0.96	0.96	E	E	No	no change
Between	Gilman	University	2	1954	0	0.04	1954	0.00%	1.22	1.22	F	F	No	no change
Between	University	Allston	2	2008	0	0.04	2008	0.00%	1.26	1.26	F	F	No	no change
Between	Allston	Ashby	2	1726	0	0.04	1726	0.00%	1.08	1.08	F	F	No	no change
Between	Ashby	Stanford	2	1313	1	0.12	1314	0.08%	0.82	0.82	D	D	No	no change
Between	Stanford	53rd	2	1415	1	0.15	1416	0.07%	0.88	0.89	D	D	No	no change
Between	53rd	Park	2	1259	1	0.15	1260	0.08%	0.79	0.79	D	D	No	no change
Between	Park	35th	2	1351	1	0.19	1352	0.07%	0.84	0.85	D	D	No	no change
MTC MTS Arterials														
Castro Street														
Between	Embarcadero	7th Street	2	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	7th Street	14th Street	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	14th Street	San Pablo Avenue	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Grand Avenue														
Between	Moraga Ave	I-580	2	929	3	0.60	932	0.32%	0.58	0.58	B	B	No	no change
Between	I-580	Harrison	2	1912	1	0.30	1913	0.05%	1.20	1.20	F	F	No	no change
Between	Harrison	Broadway	2	1214	0		1214	0.00%	0.76	0.76	D	D	No	no change
Between	Broadway	Telegraph	2	913	0	0.00	913	0.00%	0.57	0.57	B	B	No	no change
Between	Telegraph	I-980	2	797	0	0.04	797	0.00%	0.50	0.50	B	B	No	no change
Between	I-980	Adeline	2	450	2	0.53	452	0.44%	0.28	0.28	A	A	No	no change
Between	Adeline	I-880	2	509	3	0.63	512	0.59%	0.32	0.32	A	A	No	no change
Broadway														
Between	Embarcadero	7th Street	2	188	5		193	2.66%	0.12	0.12	A	A	No	no change
Between	7th Street	14th Street	2	124	8		132	6.45%	0.08	0.08	A	A	No	no change
Between	14th Street	West Grand	2	441	0		441	0.00%	0.28	0.28	A	A	No	no change
Between	West Grand	MacArthur	2	324	0	0.00	324	0.00%	0.20	0.20	A	A	No	no change
Between	MacArthur	51st Street	2	1454	1	0.15	1455	0.07%	0.91	0.91	E	E	No	no change
Between	51st Street	SR 24	2	1046	0	0.04	1046	0.00%	0.65	0.65	C	C	No	no change
Brush Street														
Between	Embarcadero	7th Street	2	60	0	0.00	60	0.00%	0.04	0.04	A	A	No	no change
Between	7th Street	14th Street	3	132	0	0.00	132	0.00%	0.06	0.06	A	A	No	no change
Between	14th Street	San Pablo Avenue	3	87	1	0.19	88	1.15%	0.04	0.04	A	A	No	no change
Telegraph Avenue														
Between	14th Street	West Grand	2	190	0	0.00	190	0.00%	0.12	0.12	A	A	No	no change
Between	West Grand	MacArthur	2	118	0	0.00	118	0.00%	0.07	0.07	A	A	No	no change
Between	MacArthur	51st Street	2	780	0	0.00	780	0.00%	0.49	0.49	B	B	No	no change
Between	51st Street	Ashby	2	736	1	0.19	737	0.14%	0.46	0.46	B	B	No	no change
Between	Ashby	Bancroft Way	2	688	0	0.04	688	0.00%	0.43	0.43	B	B	No	no change

1. The Congestion Management Agency applies different segment definitions for segments of I-580 between I-238 and Tassajara Road
2. Brush Street and Castro Street are one-way streets
3. Segment limits were taken from the 2004 LOS Monitoring Report *(Alameda County CMA) except for the se* gment of I-880 closest to the project which was divided in two.

Fehr & Peers, 2005.

TABLE C-10
CONGESTION MANAGEMENT PROGRAM EVAULATION - 2010 PM NORTHBOUND/EASTBOUND

Link Location	Segment Limits		# Lanes	No Project Volume	Project Volume	% Project	With Project Volume	% Increase	V/C Ratio - No Project	V/C Ratio - With Project	No Project LOS	With Project LOS	Change in V/C >3%	Change in LOS
State Highways														
I-880														
Between	Dix Landing	SR 262/Mission	4	7272	1	0.13	7273	0.01%	0.91	0.91	E	E	No	no change
Between	SR 262/Mission	Stevenson	4	6437	2	0.26	6439	0.03%	0.80	0.80	D	D	No	no change
Between	Stevenson	Decoto	4	6964	5	0.52	6969	0.07%	0.87	0.87	D	D	No	no change
Between	Decoto	Alv-Niles	4	6961	7	0.73	6968	0.10%	0.87	0.87	D	D	No	no change
Between	Alv-Niles	Tennyson	4	7003	10	1.07	7013	0.14%	0.88	0.88	D	D	No	no change
Between	Tennyson	SR 92	4	6984	11	1.24	6995	0.16%	0.87	0.87	D	D	No	no change
Between	SR 92	A Street	4	7163	19	2.10	7182	0.27%	0.90	0.90	D	D	No	no change
Between	A Street	I-238	4	8534	21		8555	0.25%	1.07	1.07	F	F	No	no change
Between	I-238	Hegenberger	4	7668	48		7716	0.63%	0.96	0.96	E	E	No	no change
Between	Hegenberger	High/42nd Street	4	6890	86		6976	1.25%	0.86	0.87	D	D	No	no change
Between	High/42nd Street	PROJECT	4	6875	134		7009	1.95%	0.86	0.88	D	D	No	no change
Between	PROJECT	I-980	5	7838	77		7915	0.98%	0.78	0.79	D	D	No	no change
Between	I-980	I-880/Toll Plaza	3	4460	39		4499	0.87%	0.74	0.75	C	C	No	no change
I-980														
Between	SR 24 @ 580	I-880	4	6150	32	3.42	6182	0.52%	0.77	0.77	D	D	No	no change
SR24														
Between	I-580 Ramps	Fish Ranch	4	7861	15	1.62	7876	0.19%	0.98	0.98	E	E	No	no change
I-580														
Between	I-238	Grove	5	10077	10	1.10	10087	0.10%	1.01	1.01	F	F	No	no change
Between	Grove	I-680	4	9992	9	0.95	10001	0.09%	1.25	1.25	F	F	No	no change
Between	I-680	Santa Rita	4	9884	6	0.69	9890	0.06%	1.24	1.24	F	F	No	no change
Between	Santa Rita	Portola	4	9450	5	0.59	9455	0.05%	1.18	1.18	F	F	No	no change
Between	Portola	1st Avenue	4	7577	5	0.56	7582	0.07%	0.95	0.95	E	E	No	no change
Between	1st Avenue	I-205 (SJ Co)	4	6470	5	0.56	6475	0.08%	0.81	0.81	D	D	No	no change
Between	Portola	Tassajara	4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Tassajara	I-680	4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	I-680	Center	4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Center	I-580/238	4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	I-80	Harrison	4	10240	13	1.37	10253	0.13%	1.28	1.28	F	F	No	no change
Between	Harrison	SR 13	4	8353	13	1.36	8366	0.16%	1.04	1.05	F	F	No	no change
Between	SR 13	MacArthur	4	8951	9	1.00	8960	0.10%	1.12	1.12	F	F	No	no change
Between	MacArthur	I-580/238	4	7848	7	0.81	7855	0.09%	0.98	0.98	E	E	No	no change
Between	SR 13	Fruitvale	4	8353	12	1.31	8365	0.14%	1.04	1.05	F	F	No	no change
Between	Fruitvale	Harrison	4	9098	13	1.36	9111	0.14%	1.14	1.14	F	F	No	no change
Between	Harrison	SR 24	4	8892	0	0.00	8892	0.00%	1.11	1.11	F	F	No	no change
Between	SR 24	I-80/580	5	10240	13	1.37	10253	0.13%	1.02	1.03	F	F	No	no change
Between	Central	I-80 Jct	2	5576	6	0.70	5582	0.11%	1.39	1.40	F	F	No	no change
Arterials														
Martin Luther King Jr. Way														
Between	SR 24	Adeline	3	1471	5	0.51	1476	0.34%	0.61	0.62	C	C	No	no change
San Pablo Avenue														
Between	Carlson	Washington	2	1922	0	0.03	1922	0.00%	1.20	1.20	F	F	No	no change
Between	Washington	Marin	2	944	0	0.00	944	0.00%	0.59	0.59	C	C	No	no change
Between	Marin	Gilman	2	1483	0	0.03	1483	0.00%	0.93	0.93	E	E	No	no change
Between	Gilman	University	2	1996	0	0.05	1996	0.00%	1.25	1.25	F	F	No	no change
Between	University	Allston	2	2104	0	0.05	2104	0.00%	1.32	1.32	F	F	No	no change
Between	Allston	Ashby	2	1941	1	0.13	1942	0.05%	1.21	1.21	F	F	No	no change
Between	Ashby	Stanford	2	1449	1	0.16	1450	0.07%	0.91	0.91	E	E	No	no change
Between	Stanford	53rd	2	1532	1	0.16	1533	0.07%	0.96	0.96	E	E	No	no change
Between	53rd	Park	2	1385	1	0.16	1386	0.07%	0.87	0.87	D	D	No	no change
Between	Park	35th	2	1676	2	0.26	1678	0.12%	1.05	1.05	F	F	No	no change
MTC MTS Arterials														
Castro Street														
Between	Embarcadero	7th Street	2	0	0	0.00	0	#DIV/0!	0.00	0.00	A	A	No	no change
Between	7th Street	14th Street	3	101	0	0.00	101	0.00%	0.04	0.04	A	A	No	no change
Between	14th Street	San Pablo Avenue	3	193	3	0.32	196	1.55%	0.08	0.08	A	A	No	no change
Grand Avenue														
Between	Moraga Ave	I-580	2	809	5	0.52	814	0.62%	0.51	0.51	B	B	No	no change
Between	I-580	Harrison	2	2050	2	0.26	2052	0.10%	1.28	1.28	F	F	No	no change
Between	Harrison	Broadway	2	1460	3		1463	0.21%	0.91	0.91	E	E	No	no change
Between	Broadway	Telegraph	2	1034	0	0.00	1034	0.00%	0.65	0.65	C	C	No	no change
Between	Telegraph	I-980	2	1097	1	0.08	1098	0.09%	0.69	0.69	C	C	No	no change
Between	I-980	Adeline	2	721	1	0.11	722	0.14%	0.45	0.45	B	B	No	no change
Between	Adeline	I-880	2	1190	0	0.05	1190	0.00%	0.74	0.74	C	C	No	no change
Broadway														
Between	Embarcadero	7th Street	2	814	37		851	4.55%	0.51	0.53	B	B	No	no change
Between	7th Street	14th Street	2	73	57		130	78.08%	0.05	0.08	A	A	No	no change
Between	14th Street	West Grand	2	337	3		340	0.89%	0.21	0.21	A	A	No	no change
Between	West Grand	MacArthur	2	466	0	0.03	466	0.00%	0.29	0.29	A	A	No	no change
Between	MacArthur	51st Street	2	1609	1	0.13	1610	0.06%	1.01	1.01	F	F	No	no change
Between	51st Street	SR 24	2	1112	0	0.03	1112	0.00%	0.70	0.70	C	C	No	no change
Brush Street														
Between	Embarcadero	7th Street	2	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	7th Street	14th Street	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	14th Street	San Pablo Avenue	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Telegraph Avenue														
Between	14th Street	West Grand	2	300	0	0.00	300	0.00%	0.19	0.19	A	A	No	no change
Between	West Grand	MacArthur	2	149	0	0.00	149	0.00%	0.09	0.09	A	A	No	no change
Between	MacArthur	51st Street	2	603	0	0.03	603	0.00%	0.38	0.38	B	B	No	no change
Between	51st Street	Ashby	2	1528	4	0.42	1532	0.26%	0.96	0.96	E	E	No	no change
Between	Ashby	Bancroft Way	2	1405	3	0.34	1408	0.21%	0.88	0.88	D	D	No	no change

1. The Congestion Management Agency applies different segment definitions for segments of I-580 between I-238 and Tassajara Road
2. Brush Street and Castro Street are one-way streets
3. Segment limits were taken from the 2004 LOS Monitoring Report *(Alameda County CMA) except for the segment* of I-880 closest to the project which was divided in two.

Fehr & Peers, 2005.

TABLE C-11
CONGESTION MANAGEMENT PROGRAM EVAULATION - 2010 PM SOUTHBOUND/WESTBOUND

Link Location	Segment Limits		# Lanes	No Project Volume	Project Volume	% Project	With Project Volume	% Increase	V/C Ratio - No Project	V/C Ratio - With Project	No Project LOS	With Project LOS	Change in V/C >3%	Change in LOS
State Highways														
I-880														
Between	Dix Landing	SR 262/Mission	4	6269	0	0.05	6269	0.00%	0.78	0.78	D	D	No	no change
Between	SR 262/Mission	Stevenson	4	4966	1	0.13	4967	0.02%	0.62	0.62	C	C	No	no change
Between	Stevenson	Decoto	4	5541	2	0.21	5543	0.04%	0.69	0.69	C	C	No	no change
Between	Decoto	Alv-Niles	4	5871	3	0.34	5874	0.05%	0.73	0.73	C	C	No	no change
Between	Alv-Niles	Tennyson	4	7701	4	0.45	7705	0.05%	0.96	0.96	E	E	No	no change
Between	Tennyson	SR 92	4	6584	5	0.50	6589	0.08%	0.82	0.82	D	D	No	no change
Between	SR 92	A Street	4	7831	9	0.99	7840	0.11%	0.98	0.98	E	E	No	no change
Between	A Street	I-238	4	9117	15		9132	0.16%	1.14	1.14	F	F	No	no change
Between	I-238	Hegenberger	4	8989	35		9024	0.39%	1.12	1.13	F	E	No	change
Between	Hegenberger	High/42nd Street	4	8082	62		8144	0.77%	1.01	1.02	F	F	No	no change
Between	High/42nd Street	PROJECT	4	8778	96		8874	1.09%	1.10	1.11	F	F	No	no change
Between	PROJECT	I-980	5	7647	107		7754	1.40%	0.76	0.78	D	D	No	no change
Between	I-980	I-880/Toll Plaza	3	5100	54		5154	1.06%	0.85	0.86	D	D	No	no change
I-980														
Between	SR 24 @ 580	I-880	4	3423	57	6.18	3480	1.67%	0.43	0.44	B	B	No	no change
SR24														
Between	I-580 Ramps	Fish Ranch	4	3852	15	1.61	3867	0.39%	0.48	0.48	B	B	No	no change
I-580														
Between	I-238	Grove	5	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Grove	I-680	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	I-680	Santa Rita	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Santa Rita	Portola	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Portola	1st Avenue	4	4319	1	0.08	4320	0.02%	0.54	0.54	B	B	No	no change
Between	1st Avenue	I-205 (SJ Co)	4	1823	0	0.03	1823	0.00%	0.23	0.23	A	A	No	no change
Between	Portola	Tassajara	4	5268	1	0.13	5269	0.02%	0.66	0.66	C	C	No	no change
Between	Tassajara	I-680	4	6312	2	0.24	6314	0.03%	0.79	0.79	D	D	No	no change
Between	I-680	Center	4	5936	5	0.52	5941	0.08%	0.74	0.74	C	C	No	no change
Between	Center	I-580/238	4	5989	6	0.65	5995	0.10%	0.75	0.75	C	C	No	no change
Between	I-80	Harrison	4	7941	3	0.33	7944	0.04%	0.99	0.99	E	E	No	no change
Between	Harrison	SR 13	4	6232	7	0.73	6239	0.11%	0.78	0.78	D	D	No	no change
Between	SR 13	MacArthur	4	8226	2	0.18	8228	0.02%	1.03	1.03	F	F	No	no change
Between	MacArthur	I-580/238	4	6495	0	0.05	6495	0.00%	0.81	0.81	D	D	No	no change
Between	SR 13	Fruitvale	4	6232	6	0.70	6238	0.10%	0.78	0.78	D	D	No	no change
Between	Fruitvale	Harrison	4	6419	7	0.73	6426	0.11%	0.80	0.80	D	D	No	no change
Between	Harrison	SR 24	4	5676	0	0.00	5676	0.00%	0.71	0.71	C	C	No	no change
Between	SR 24	I-80/580	5	7941	3	0.34	7944	0.04%	0.79	0.79	D	D	No	no change
Between	Central	I-80 Jct	2	4547	7	0.78	4554	0.15%	1.14	1.14	F	F	No	no change
Arterials														
Martin Luther King Jr. Way														
Between	SR 24	Adeline	3	2139	16	1.69	2155	0.75%	0.89	0.90	D	D	No	no change
San Pablo Avenue														
Between	Carlson	Washington	2	1233	0	0.00	1233	0.00%	0.77	0.77	D	D	No	no change
Between	Washington	Marin	2	416	0	0.03	416	0.00%	0.26	0.26	A	A	No	no change
Between	Marin	Gilman	2	1223	0	0.05	1223	0.00%	0.76	0.76	D	D	No	no change
Between	Gilman	University	2	1819	1	0.16	1820	0.05%	1.14	1.14	F	F	No	no change
Between	University	Allston	2	2008	1	0.16	2009	0.05%	1.26	1.26	F	F	No	no change
Between	Allston	Ashby	2	2310	3	0.31	2313	0.13%	1.44	1.45	F	F	No	no change
Between	Ashby	Stanford	2	1450	3	0.34	1453	0.21%	0.91	0.91	E	E	No	no change
Between	Stanford	53rd	2	1631	4	0.41	1635	0.25%	1.02	1.02	F	F	No	no change
Between	53rd	Park	2	1643	4	0.41	1647	0.24%	1.03	1.03	F	F	No	no change
Between	Park	35th	2	2011	5	0.52	2016	0.25%	1.26	1.26	F	F	No	no change
MTC MTS Arterials														
Castro Street														
Between	Embarcadero	7th Street	2	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	7th Street	14th Street	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	14th Street	San Pablo Avenue	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Grand Avenue														
Between	Moraga Ave	I-580	2	955	5	0.57	960	0.52%	0.60	0.60	C	C	No	no change
Between	I-580	Harrison	2	1168	2	0.21	1170	0.17%	0.73	0.73	C	C	No	no change
Between	Harrison	Broadway	2	892	2		894	0.22%	0.56	0.56	B	B	No	no change
Between	Broadway	Telegraph	2	1402	0	0.00	1402	0.00%	0.88	0.88	D	D	No	no change
Between	Telegraph	I-980	2	937	0	0.03	937	0.00%	0.59	0.59	C	C	No	no change
Between	I-980	Adeline	2	523	1	0.11	524	0.19%	0.33	0.33	A	A	No	no change
Between	Adeline	I-880	2	735	1	0.16	736	0.14%	0.46	0.46	B	B	No	no change
Broadway														
Between	Embarcadero	7th Street	2	248	51		299	20.56%	0.16	0.19	A	A	No	no change
Between	7th Street	14th Street	2	436	79		515	18.12%	0.27	0.32	A	A	Yes	no change
Between	14th Street	West Grand	2	247	4		251	1.62%	0.15	0.16	A	A	No	no change
Between	West Grand	MacArthur	2	149	1	0.11	150	0.67%	0.09	0.09	A	A	No	no change
Between	MacArthur	51st Street	2	602	1	0.13	603	0.17%	0.38	0.38	B	B	No	no change
Between	51st Street	SR 24	2	361	0	0.00	361	0.00%	0.23	0.23	A	A	No	no change
Brush Street														
Between	Embarcadero	7th Street	2	26	0	0.00	26	0.00%	0.02	0.02	A	A	No	no change
Between	7th Street	14th Street	3	152	0	0.00	152	0.00%	0.06	0.06	A	A	No	no change
Between	14th Street	San Pablo Avenue	3	55	1	0.13	56	1.82%	0.02	0.02	A	A	No	no change
Telegraph Avenue														
Between	14th Street	West Grand	2	155	1	0.08	156	0.65%	0.10	0.10	A	A	No	no change
Between	West Grand	MacArthur	2	182	0	0.03	182	0.00%	0.11	0.11	A	A	No	no change
Between	MacArthur	51st Street	2	577	0	0.03	577	0.00%	0.36	0.36	B	B	No	no change
Between	51st Street	Ashby	2	1799	1	0.11	1800	0.06%	1.12	1.13	F	F	No	no change
Between	Ashby	Bancroft Way	2	1809	0	0.05	1809	0.00%	1.13	1.13	F	F	No	no change

1. The Congestion Management Agency applies different segment definitions for segments of I-580 between I-238 and Tassajara Road
2. Brush Street and Castro Street are one-way streets
3. Segment limits were taken from the 2004 LOS Monitoring Report *(Alameda County CMA) except for the segment* of I-880 closest to the project which was divided in two.

Fehr & Peers, 2005.

TABLE C-12
CONGESTION MANAGEMENT PROGRAM EVAULATION - 2025 AM NORTHBOUND/EASTBOUNE

Link Location	Segment Limits		# Lanes	No Project Volume	Project Volume	% Project	With Project Volume	% Increase	V/C Ratio - No Project	V/C Ratio - With Project	No Project LOS	With Project LOS	Change in V/C >3%	Change in LOS
State Highways														
I-880														
Between	Dix Landing	SR 262/Mission	4	2066	0	0.00	2066	0.00%	0.26	0.26	A	A	No	no change
Between	SR 262/Mission	Stevenson	4	2132	1	0.04	2133	0.05%	0.27	0.27	A	A	No	no change
Between	Stevenson	Decoto	4	3133	1	0.04	3134	0.03%	0.39	0.39	B	B	No	no change
Between	Decoto	Alv-Niles	4	4338	3	0.19	4341	0.07%	0.54	0.54	B	B	No	no change
Between	Alv-Niles	Tennyson	4	6212	5	0.30	6217	0.08%	0.78	0.78	D	D	No	no change
Between	Tennyson	SR 92	4	5921	7	0.42	5928	0.12%	0.74	0.74	C	C	No	no change
Between	SR 92	A Street	4	5876	13	0.72	5889	0.22%	0.73	0.74	C	C	No	no change
Between	A Street	I-238	4	9134	12		9146	0.13%	1.14	1.14	F	F	No	no change
Between	I-238	Hegenberger	4	7922	28		7950	0.35%	0.99	0.99	E	E	No	no change
Between	Hegenberger	High/42nd Street	4	7042	49		7091	0.70%	0.88	0.89	D	D	No	no change
Between	High/42nd Street	PROJECT	4	8207	77		8284	0.94%	1.03	1.04	F	F	No	no change
Between	PROJECT	I-980	5	8975	228		9203	2.54%	0.90	0.92	D	E	No	change
Between	I-980	I-880/Toll Plaza	3	4882	114		4996	2.34%	0.81	0.83	D	D	No	no change
I-980														
Between	SR 24 @ 580	I-880	4	2861	107	6.11	2968	3.74%	0.36	0.37	B	B	No	no change
SR24														
Between	I-580 Ramps	Fish Ranch	4	2069	44	2.52	2113	2.13%	0.26	0.26	A	A	No	no change
I-580														
Between	I-238	Grove	5	4786	16	0.90	4802	0.33%	0.48	0.48	B	B	No	no change
Between	Grove	I-680	4	5903	13	0.72	5916	0.22%	0.74	0.74	C	C	No	no change
Between	I-680	Santa Rita	4	5964	8	0.45	5972	0.13%	0.75	0.75	C	C	No	no change
Between	Santa Rita	Portola	4	5767	3	0.19	5770	0.05%	0.72	0.72	C	C	No	no change
Between	Portola	1st Avenue	4	4559	3	0.15	4562	0.07%	0.57	0.57	B	B	No	no change
Between	1st Avenue	I-205 (SJ Co)	4	1823	1	0.04	1824	0.05%	0.23	0.23	A	A	No	no change
Between	Portola	Tassajara	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Tassajara	I-680	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	I-680	Center	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Center	I-580/238	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	I-80	Harrison	4	5824	24	1.36	5848	0.41%	0.73	0.73	C	C	No	no change
Between	Harrison	SR 13	4	5715	7	0.42	5722	0.12%	0.71	0.72	C	C	No	no change
Between	SR 13	MacArthur	4	8607	0	0.00	8607	0.00%	1.08	1.08	F	F	No	no change
Between	MacArthur	I-580/238	4	7179	0	0.00	7179	0.00%	0.90	0.90	D	D	No	no change
Between	SR 13	Fruitvale	4	5715	4	0.23	5719	0.07%	0.71	0.71	C	C	No	no change
Between	Fruitvale	Harrison	4	5656	7	0.38	5663	0.12%	0.71	0.71	C	C	No	no change
Between	Harrison	SR 24	4	4048	0	0.00	4048	0.00%	0.51	0.51	B	B	No	no change
Between	SR 24	I-80/580	5	5824	24	1.36	5848	0.41%	0.58	0.58	B	B	No	no change
Between	Central	I-80 Jct	2	4233	20	1.12	4253	0.47%	1.06	1.06	F	F	No	no change
Arterials														
Martin Luther King Jr. Way														
Between	SR 24	Adeline	3	1630	14	0.81	1644	0.86%	0.68	0.69	C	C	No	no change
San Pablo Avenue														
Between	Carlson	Washington	2	872	0	0.00	872	0.00%	0.55	0.55	B	B	No	no change
Between	Washington	Marin	2	180	0	0.00	180	0.00%	0.11	0.11	A	A	No	no change
Between	Marin	Gilman	2	641	0	0.00	641	0.00%	0.40	0.40	B	B	No	no change
Between	Gilman	University	2	1133	9	0.54	1142	0.79%	0.71	0.71	C	C	No	no change
Between	University	Allston	2	1405	0	0.00	1405	0.00%	0.88	0.88	D	D	No	no change
Between	Allston	Ashby	2	1574	3	0.15	1577	0.19%	0.98	0.99	E	E	No	no change
Between	Ashby	Stanford	2	1064	1	0.07	1065	0.09%	0.67	0.67	C	C	No	no change
Between	Stanford	53rd	2	1260	1	0.07	1261	0.08%	0.79	0.79	D	D	No	no change
Between	53rd	Park	2	1350	4	0.23	1354	0.30%	0.84	0.85	D	D	No	no change
Between	Park	35th	2	1801	7	0.41	1808	0.39%	1.13	1.13	F	F	No	no change
MTC MTS Arterials														
Castro Street														
Between	Embarcadero	7th Street	2	0	0	0.00	0	#DIV/0!	0.00	0.00	A	A	No	no change
Between	7th Street	14th Street	3	135	0	0.00	135	0.00%	0.06	0.06	A	A	No	no change
Between	14th Street	San Pablo Avenue	3	84	12	0.69	96	14.29%	0.04	0.04	A	A	No	no change
Grand Avenue														
Between	Moraga Ave	I-580	2	1013	12	0.67	1025	1.18%	0.63	0.64	C	C	No	no change
Between	I-580	Harrison	2	881	3	0.19	884	0.34%	0.55	0.55	B	B	No	no change
Between	Harrison	Broadway	2	808	0		808	0.00%	0.51	0.51	B	B	No	no change
Between	Broadway	Telegraph	2	1145	0	0.00	1145	0.00%	0.72	0.72	C	C	No	no change
Between	Telegraph	I-980	2	744	1	0.04	745	0.13%	0.47	0.47	B	B	No	no change
Between	I-980	Adeline	2	260	1	0.04	261	0.38%	0.16	0.16	A	A	No	no change
Between	Adeline	I-880	2	402	0	0.00	402	0.00%	0.25	0.25	A	A	No	no change
Broadway														
Between	Embarcadero	7th Street	2	500	109		609	21.80%	0.31	0.38	A	B	Yes	change
Between	7th Street	14th Street	2	46	169		215	367.39%	0.03	0.13	A	A	Yes	no change
Between	14th Street	West Grand	2	53	8		61	15.09%	0.03	0.04	A	A	No	no change
Between	West Grand	MacArthur	2	63	1	0.04	64	1.59%	0.04	0.04	A	A	No	no change
Between	MacArthur	51st Street	2	462	1	0.08	463	0.22%	0.29	0.29	A	A	No	no change
Between	51st Street	SR 24	2	492	0	0.00	492	0.00%	0.31	0.31	A	A	No	no change
Brush Street														
Between	Embarcadero	7th Street	2	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	7th Street	14th Street	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	14th Street	San Pablo Avenue	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Telegraph Avenue														
Between	14th Street	West Grand	2	156	0	0.00	156	0.00%	0.10	0.10	A	A	No	no change
Between	West Grand	MacArthur	2	147	0	0.00	147	0.00%	0.09	0.09	A	A	No	no change
Between	MacArthur	51st Street	2	175	0	0.00	175	0.00%	0.11	0.11	A	A	No	no change
Between	51st Street	Ashby	2	1926	19	1.09	1945	0.99%	1.20	1.22	F	F	No	no change
Between	Ashby	Bancroft Way	2	1627	18	1.01	1645	1.11%	1.02	1.03	F	F	No	no change

1. The Congestion Management Agency applies different segment definitions for segments of I-580 between I-238 and Tassajara Road
2. Brush Street and Castro Street are one-way streets
3. Segment limits were taken from the 2004 LOS Monitoring Report *(Alameda County CMA) except for the se* gment of I-880 closest to the project which was divided in two.

Fehr & Peers, 2005.

TABLE C-13
CONGESTION MANAGEMENT PROGRAM EVAULATION - 2025 AM SOUTHBOUND/WESTBOUND

Link Location	Segment Limits		# Lanes	No Project Volume	Project Volume	% Project	With Project Volume	% Increase	V/C Ratio - No Project	V/C Ratio - With Project	No Project LOS	With Project LOS	Change in V/C >3%	Change in LOS
State Highways														
I-880														
Between	Dix Landing	SR 262/Mission	4	9239	4	0.23	9243	0.04%	1.15	1.16	F	F	No	no change
Between	SR 262/Mission	Stevenson	4	7803	8	0.45	7811	0.10%	0.98	0.98	E	E	No	no change
Between	Stevenson	Decoto	4	6803	12	0.67	6815	0.18%	0.85	0.85	D	D	No	no change
Between	Decoto	Alv-Niles	4	7081	18	1.01	7099	0.25%	0.89	0.89	D	D	No	no change
Between	Alv-Niles	Tennyson	4	7776	27	1.57	7803	0.35%	0.97	0.98	E	E	No	no change
Between	Tennyson	SR 92	4	6958	31	1.75	6989	0.45%	0.87	0.87	D	D	No	no change
Between	SR 92	A Street	4	8234	54	3.06	8288	0.66%	1.03	1.04	F	F	No	no change
Between	A Street	I-238	4	9174	46		9220	0.50%	1.15	1.15	F	F	No	no change
Between	I-238	Hegenberger	4	7881	103		7984	1.31%	0.99	1.00	E	E	No	no change
Between	Hegenberger	High/42nd Street	4	6904	182		7086	2.64%	0.86	0.89	D	D	No	no change
Between	High/42nd Street	PROJECT	4	6445	285		6730	4.42%	0.81	0.84	D	D	No	no change
Between	PROJECT	I-980	5	5354	62		5416	1.16%	0.54	0.54	B	B	No	no change
Between	I-980	I-880/Toll Plaza	3	2438	31		2469	1.27%	0.41	0.41	B	B	No	no change
I-980														
Between	SR 24 @ 580	I-880	4	6907	83	4.735	6990	1.20%	0.86	0.87	D	D	No	no change
SR24														
Between	I-580 Ramps	Fish Ranch	4	8740	29	1.66	8769	0.33%	1.09	1.10	F	F	No	no change
I-580														
Between	I-238	Grove	5	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Grove	I-680	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	I-680	Santa Rita	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Santa Rita	Portola	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Portola	1st Avenue	4	7315	14	0.80	7329	0.19%	0.91	0.92	E	E	No	no change
Between	1st Avenue	I-205 (SJ Co)	4	6366	14	0.80	6380	0.22%	0.80	0.80	D	D	No	no change
Between	Portola	Tassajara	4	9192	14	0.80	9206	0.15%	1.15	1.15	F	F	No	no change
Between	Tassajara	I-680	4	8695	16	0.92	8711	0.18%	1.09	1.09	F	F	No	no change
Between	I-680	Center	4	9274	19	1.10	9293	0.20%	1.16	1.16	F	F	No	no change
Between	Center	I-580/238	4	10537	24	1.37	10561	0.23%	1.32	1.32	F	F	No	no change
Between	I-80	Harrison	4	9932	7	0.41	9939	0.07%	1.24	1.24	F	F	No	no change
Between	Harrison	SR 13	4	8520	20	1.13	8540	0.23%	1.07	1.07	F	F	No	no change
Between	SR 13	MacArthur	4	8444	9	0.49	8453	0.11%	1.06	1.06	F	F	No	no change
Between	MacArthur	I-580/238	4	7493	4	0.23	7497	0.05%	0.94	0.94	E	E	No	no change
Between	SR 13	Fruitvale	4	8520	20	1.13	8540	0.23%	1.07	1.07	F	F	No	no change
Between	Fruitvale	Harrison	4	9081	18	1.01	9099	0.20%	1.14	1.14	F	F	No	no change
Between	Harrison	SR 24	4	8632	0	0.00	8632	0.00%	1.08	1.08	F	F	No	no change
Between	SR 24	I-80/580	5	9932	7	0.41	9939	0.07%	0.99	0.99	E	E	No	no change
Between	Central	I-80 Jct	2	4255	8	0.45	4263	0.19%	1.06	1.07	F	F	No	no change
Arterials														
Martin Luther King Jr. Way														
Between	SR 24	Adeline	3	1548	11	0.60	1559	0.71%	0.65	0.65	C	C	No	no change
San Pablo Avenue														
Between	Carlson	Washington	2	1911	0	0.00	1911	0.00%	1.19	1.19	F	F	No	no change
Between	Washington	Marin	2	877	0	0.00	877	0.00%	0.55	0.55	B	B	No	no change
Between	Marin	Gilman	2	1550	0	0.00	1550	0.00%	0.97	0.97	E	E	No	no change
Between	Gilman	University	2	1969	1	0.04	1970	0.05%	1.23	1.23	F	F	No	no change
Between	University	Allston	2	1976	1	0.04	1977	0.05%	1.24	1.24	F	F	No	no change
Between	Allston	Ashby	2	1733	1	0.04	1734	0.06%	1.08	1.08	F	F	No	no change
Between	Ashby	Stanford	2	1444	2	0.12	1446	0.14%	0.90	0.90	D	D	No	no change
Between	Stanford	53rd	2	1609	3	0.15	1612	0.19%	1.01	1.01	F	F	No	no change
Between	53rd	Park	2	1458	3	0.15	1461	0.21%	0.91	0.91	E	E	No	no change
Between	Park	35th	2	1541	3	0.19	1544	0.19%	0.96	0.97	E	E	No	no change
MTC MTS Arterials														
Castro Street														
Between	Embarcadero	7th Street	2	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	7th Street	14th Street	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	14th Street	San Pablo Avenue	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Grand Avenue														
Between	Moraga Ave	I-580	2	963	11	0.60	974	1.14%	0.60	0.61	C	C	No	no change
Between	I-580	Harrison	2	2041	5	0.30	2046	0.24%	1.28	1.28	F	F	No	no change
Between	Harrison	Broadway	2	1511	1		1512	0.07%	0.94	0.95	E	E	No	no change
Between	Broadway	Telegraph	2	1131	0	0.00	1131	0.00%	0.71	0.71	C	C	No	no change
Between	Telegraph	I-980	2	1145	1	0.04	1146	0.09%	0.72	0.72	C	C	No	no change
Between	I-980	Adeline	2	787	9	0.53	796	1.14%	0.49	0.50	B	B	No	no change
Between	Adeline	I-880	2	917	11	0.63	928	1.20%	0.57	0.58	B	B	No	no change
Broadway														
Between	Embarcadero	7th Street	2	204	29		233	14.22%	0.13	0.15	A	A	No	no change
Between	7th Street	14th Street	2	158	44		202	27.85%	0.10	0.13	A	A	No	no change
Between	14th Street	West Grand	2	453	3		456	0.66%	0.28	0.29	A	A	No	no change
Between	West Grand	MacArthur	2	376	0	0.00	376	0.00%	0.24	0.24	A	A	No	no change
Between	MacArthur	51st Street	2	1800	3	0.15	1803	0.17%	1.13	1.13	F	F	No	no change
Between	51st Street	SR 24	2	1324	1	0.04	1325	0.08%	0.83	0.83	D	D	No	no change
Brush Street														
Between	Embarcadero	7th Street	2	84	0	0.00	84	0.00%	0.05	0.05	A	A	No	no change
Between	7th Street	14th Street	3	146	0	0.00	146	0.00%	0.06	0.06	A	A	No	no change
Between	14th Street	San Pablo Avenue	3	205	3	0.19	208	1.46%	0.09	0.09	A	A	No	no change
Telegraph Avenue														
Between	14th Street	West Grand	2	201	0	0.00	201	0.00%	0.13	0.13	A	A	No	no change
Between	West Grand	MacArthur	2	181	0	0.00	181	0.00%	0.11	0.11	A	A	No	no change
Between	MacArthur	51st Street	2	1047	0	0.00	1047	0.00%	0.65	0.65	C	C	No	no change
Between	51st Street	Ashby	2	865	3	0.19	868	0.35%	0.54	0.54	B	B	No	no change
Between	Ashby	Bancroft Way	2	739	1	0.04	740	0.14%	0.46	0.46	B	B	No	no change

1. The Congestion Management Agency applies different segment definitions for segments of I-580 between I-238 and Tassajara Road
2. Brush Street and Castro Street are one-way streets
3. Segment limits were taken from the 2004 LOS Monitoring Report *(Alameda County CMA) except for the se* gment of I-880 closest to the project which was divided in two.

Fehr & Peers, 2005.

TABLE C-14
CONGESTION MANAGEMENT PROGRAM EVAULATION - 2025 PM NORTHBOUND/EASTBOUND

Link Location	Segment Links		# Lanes	No Project Volume	Project Volume	% Project	With Project Volume	% Increase	V/C Ratio - No Project	V/C Ratio - With Project	No Project LOS	With Project LOS	Change in V/C >3%	Change in LOS
State Highways														
I-880														
Between	Dix Landing	SR 262/Mission	4	7440	3	0.13	7443	0.04%	0.93	0.93	E	E	No	no change
Between	SR 262/Mission	Stevenson	4	5210	7	0.26	5217	0.13%	0.65	0.65	C	C	No	no change
Between	Stevenson	Decoto	4	7083	14	0.52	7097	0.20%	0.89	0.89	D	D	No	no change
Between	Decoto	Alv-Niles	4	7256	19	0.73	7275	0.26%	0.91	0.91	E	E	No	no change
Between	Alv-Niles	Tennyson	4	7067	28	1.07	7095	0.40%	0.88	0.89	D	D	No	no change
Between	Tennyson	SR 92	4	7003	33	1.24	7036	0.47%	0.88	0.88	D	D	No	no change
Between	SR 92	A Street	4	6844	56	2.10	6900	0.82%	0.86	0.86	D	D	No	no change
Between	A Street	I-238	4	8910	60		8970	0.67%	1.11	1.12	F	F	No	no change
Between	I-238	Hegenberger	4	7872	135		8007	1.71%	0.98	1.00	E	E	No	no change
Between	Hegenberger	High/42nd Street	4	7113	240		7353	3.37%	0.89	0.92	D	E	No	change
Between	High/42nd Street	PROJECT	4	7176	374		7550	5.21%	0.90	0.94	D	E	Yes	change
Between	PROJECT	I-980	5	8481	230		8711	2.71%	0.85	0.87	D	D	No	no change
Between	I-980	I-880/Toll Plaza	3	4441	115		4556	2.59%	0.74	0.76	C	D	No	change
I-980														
Between	SR 24 @ 580	I-880	4	6770	90	3.42	6860	1.33%	0.85	0.86	D	D	No	no change
SR24														
Between	I-580 Ramps	Fish Ranch	4	8355	43	1.62	8398	0.51%	1.04	1.05	F	F	No	no change
I-580														
Between	I-238	Grove	5	9891	29	1.10	9920	0.29%	0.99	0.99	E	E	No	no change
Between	Grove	I-680	4	10566	25	0.95	10591	0.24%	1.32	1.32	F	F	No	no change
Between	I-680	Santa Rita	4	10585	18	0.69	10603	0.17%	1.32	1.33	F	F	No	no change
Between	Santa Rita	Portola	4	9508	15	0.59	9523	0.16%	1.19	1.19	F	F	No	no change
Between	Portola	1st Avenue	4	7817	15	0.56	7832	0.19%	0.98	0.98	E	E	No	no change
Between	1st Avenue	I-205 (SJ Co)	4	6667	15	0.56	6682	0.22%	0.83	0.84	D	D	No	no change
Between	Portola	Tassajara	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Tassajara	I-680	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	I-680	Center	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Center	I-580/238	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	I-80	Harrison	4	10712	36	1.37	10748	0.34%	1.34	1.34	F	F	No	no change
Between	Harrison	SR 13	4	8683	36	1.36	8719	0.41%	1.09	1.09	F	F	No	no change
Between	SR 13	MacArthur	4	9242	26	1.00	9268	0.28%	1.16	1.16	F	F	No	no change
Between	MacArthur	I-580/238	4	8320	21	0.81	8341	0.25%	1.04	1.04	F	F	No	no change
Between	SR 13	Fruitvale	4	8683	35	1.31	8718	0.40%	1.09	1.09	F	F	No	no change
Between	Fruitvale	Harrison	4	9420	36	1.36	9456	0.38%	1.18	1.18	F	F	No	no change
Between	Harrison	SR 24	4	8203	0	0.00	8203	0.00%	1.03	1.03	F	F	No	no change
Between	SR 24	I-80/580	5	10712	36	1.37	10748	0.34%	1.07	1.07	F	F	No	no change
Between	Central	I-80 Jct	2	5805	19	0.70	5824	0.33%	1.45	1.46	F	F	No	no change
Arterials														
Martin Luther King Jr. Way														
Between	SR 24	Adeline	3	1558	13	0.51	1571	0.83%	0.65	0.65	C	C	No	no change
San Pablo Avenue														
Between	Carlson	Washington	2	2154	1	0.03	2155	0.05%	1.35	1.35	F	F	No	no change
Between	Washington	Marin	2	1058	0	0.00	1058	0.00%	0.66	0.66	C	C	No	no change
Between	Marin	Gilman	2	1594	1	0.03	1595	0.06%	1.00	1.00	F	F	No	no change
Between	Gilman	University	2	2117	1	0.05	2118	0.05%	1.32	1.32	F	F	No	no change
Between	University	Allston	2	2215	1	0.05	2216	0.05%	1.38	1.39	F	F	No	no change
Between	Allston	Ashby	2	2025	3	0.13	2028	0.15%	1.27	1.27	F	F	No	no change
Between	Ashby	Stanford	2	1615	4	0.16	1619	0.25%	1.01	1.01	F	F	No	no change
Between	Stanford	53rd	2	1693	4	0.16	1697	0.24%	1.06	1.06	F	F	No	no change
Between	53rd	Park	2	1520	4	0.16	1524	0.26%	0.95	0.95	E	E	No	no change
Between	Park	35th	2	1740	7	0.26	1747	0.40%	1.09	1.09	F	F	No	no change
MTC MTS Arterials														
Castro Street														
Between	Embarcadero	7th Street	2	0	0	0.00	0	#DIV/0!	0.00	0.00	A	A	No	no change
Between	7th Street	14th Street	3	130	0	0.00	130	0.00%	0.05	0.05	A	A	No	no change
Between	14th Street	San Pablo Avenue	3	332	8	0.32	340	2.41%	0.14	0.14	A	A	No	no change
Grand Avenue														
Between	Moraga Ave	I-580	2	901	14	0.52	915	1.55%	0.56	0.57	B	B	No	no change
Between	I-580	Harrison	2	2129	7	0.26	2136	0.33%	1.33	1.34	F	F	No	no change
Between	Harrison	Broadway	2	1670	9		1679	0.54%	1.04	1.05	F	F	No	no change
Between	Broadway	Telegraph	2	1365	0	0.00	1365	0.00%	0.85	0.85	D	D	No	no change
Between	Telegraph	I-980	2	1378	2	0.08	1380	0.15%	0.86	0.86	D	D	No	no change
Between	I-980	Adeline	2	1002	3	0.11	1005	0.30%	0.63	0.63	C	C	No	no change
Between	Adeline	I-880	2	1859	1	0.05	1860	0.05%	1.16	1.16	F	F	No	no change
Broadway														
Between	Embarcadero	7th Street	2	780	110		890	14.10%	0.49	0.56	B	B	Yes	no change
Between	7th Street	14th Street	2	86	171		257	198.84%	0.05	0.16	A	A	Yes	no change
Between	14th Street	West Grand	2	256	8		264	3.13%	0.16	0.17	A	A	No	no change
Between	West Grand	MacArthur	2	465	1	0.03	466	0.22%	0.29	0.29	A	A	No	no change
Between	MacArthur	51st Street	2	1906	3	0.13	1909	0.16%	1.19	1.19	F	F	No	no change
Between	51st Street	SR 24	2	1193	1	0.03	1194	0.08%	0.75	0.75	C	C	No	no change
Brush Street														
Between	Embarcadero	7th Street	2	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	7th Street	14th Street	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	14th Street	San Pablo Avenue	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Telegraph Avenue														
Between	14th Street	West Grand	2	284	0	0.00	284	0.00%	0.18	0.18	A	A	No	no change
Between	West Grand	MacArthur	2	183	0	0.00	183	0.00%	0.11	0.11	A	A	No	no change
Between	MacArthur	51st Street	2	742	1	0.03	743	0.13%	0.46	0.46	B	B	No	no change
Between	51st Street	Ashby	2	1550	11	0.42	1561	0.71%	0.97	0.98	E	E	No	no change
Between	Ashby	Bancroft Way	2	1445	9	0.34	1454	0.62%	0.90	0.91	D	E	No	change

1. The Congestion Management Agency applies different segment definitions for segments of I-580 between I-238 and Tassajara Road
2. Brush Street and Castro Street are one-way streets
3. Segment limits were taken from the 2004 LOS Monitoring Report *(Alameda County CMA) except for the se* gment of I-880 closest to the project which was divided in two.

Fehr & Peers, 2005.

TABLE C-15
CONGESTION MANAGEMENT PROGRAM EVAULATION - 2025 PM SOUTHBOUND/WESTBOUND

Link Location	Segment Links		# Lanes	No Project Volume	Project Volume	% Project	With Project Volume	% Increase	V/C Ratio - No Project	V/C Ratio - With Project	No Project LOS	With Project LOS	Change in V/C >3%	Change in LOS
State Highways														
I-880														
Between	Dix Landing	SR 262/Mission	4	6537	1	0.05	6538	0.02%	0.82	0.82	D	D	No	no change
Between	SR 262/Mission	Stevenson	4	6624	3	0.13	6627	0.05%	0.83	0.83	D	D	No	no change
Between	Stevenson	Decoto	4	5644	6	0.21	5650	0.11%	0.71	0.71	C	C	No	no change
Between	Decoto	Alv-Niles	4	6041	9	0.34	6050	0.15%	0.76	0.76	D	D	No	no change
Between	Alv-Niles	Tennyson	4	7550	12	0.45	7562	0.16%	0.94	0.95	E	E	No	no change
Between	Tennyson	SR 92	4	6455	13	0.50	6468	0.20%	0.81	0.81	D	D	No	no change
Between	SR 92	A Street	4	7753	26	0.99	7779	0.34%	0.97	0.97	E	E	No	no change
Between	A Street	I-238	4	8768	46		8814	0.52%	1.10	1.10	F	F	No	no change
Between	I-238	Hegenberger	4	9368	104		9472	1.11%	1.17	1.18	F	E	No	change
Between	Hegenberger	High/42nd Street	4	8200	184		8384	2.24%	1.03	1.05	F	F	No	no change
Between	High/42nd Street	PROJECT	4	8913	287		9200	3.22%	1.11	1.15	F	F	Yes	no change
Between	PROJECT	I-980	5	7871	300		8171	3.81%	0.79	0.82	D	D	No	no change
Between	I-980	I-880/Toll Plaza	3	5280	150		5430	2.84%	0.88	0.91	D	E	No	change
I-980														
Between	SR 24 @ 580	I-880	4	3609	163	6.18	3772	4.52%	0.45	0.47	B	B	No	no change
SR24														
Between	I-580 Ramps	Fish Ranch	4	4189	43	1.61	4232	1.03%	0.52	0.53	B	B	No	no change
I-580														
Between	I-238	Grove	5	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Grove	I-680	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	I-680	Santa Rita	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Santa Rita	Portola	4	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	Portola	1st Avenue	4	4530	2	0.08	4532	0.04%	0.57	0.57	B	B	No	no change
Between	1st Avenue	I-205 (SJ Co)	4	1832	1	0.03	1833	0.05%	0.23	0.23	A	A	No	no change
Between	Portola	Tassajara	4	6427	3	0.13	6430	0.05%	0.80	0.80	D	D	No	no change
Between	Tassajara	I-680	4	6986	6	0.24	6992	0.09%	0.87	0.87	D	D	No	no change
Between	I-680	Center	4	6264	14	0.52	6278	0.22%	0.78	0.78	D	D	No	no change
Between	Center	I-580/238	4	5967	17	0.65	5984	0.28%	0.75	0.75	C	C	No	no change
Between	I-80	Harrison	4	8317	9	0.33	8326	0.11%	1.04	1.04	F	F	No	no change
Between	Harrison	SR 13	4	6638	19	0.73	6657	0.29%	0.83	0.83	D	D	No	no change
Between	SR 13	MacArthur	4	8381	5	0.18	8386	0.06%	1.05	1.05	F	F	No	no change
Between	MacArthur	I-580/238	4	6923	1	0.05	6924	0.01%	0.87	0.87	D	D	No	no change
Between	SR 13	Fruitvale	4	6638	19	0.70	6657	0.29%	0.83	0.83	D	D	No	no change
Between	Fruitvale	Harrison	4	6841	19	0.73	6860	0.28%	0.86	0.86	D	D	No	no change
Between	Harrison	SR 24	4	6004	0	0.00	6004	0.00%	0.75	0.75	C	C	No	no change
Between	SR 24	I-80/580	5	8317	9	0.34	8326	0.11%	0.83	0.83	D	D	No	no change
Between	Central	I-80 Jct	2	5207	20	0.78	5227	0.38%	1.30	1.31	F	F	No	no change
Arterials														
Martin Luther King Jr. Way														
Between	SR 24	Adeline	3	2166	45	1.69	2211	2.08%	0.90	0.92	D	E	No	change
San Pablo Avenue														
Between	Carlson	Washington	2	1576	0	0.00	1576	0.00%	0.99	0.99	E	E	No	no change
Between	Washington	Marin	2	616	1	0.03	617	0.16%	0.39	0.39	B	B	No	no change
Between	Marin	Gilman	2	1407	1	0.05	1408	0.07%	0.88	0.88	D	D	No	no change
Between	Gilman	University	2	1975	4	0.16	1979	0.20%	1.23	1.24	F	F	No	no change
Between	University	Allston	2	2080	4	0.16	2084	0.19%	1.30	1.30	F	F	No	no change
Between	Allston	Ashby	2	2355	8	0.31	2363	0.34%	1.47	1.48	F	F	No	no change
Between	Ashby	Stanford	2	1769	9	0.34	1778	0.51%	1.11	1.11	F	F	No	no change
Between	Stanford	53rd	2	1932	11	0.41	1943	0.57%	1.21	1.21	F	F	No	no change
Between	53rd	Park	2	1931	11	0.41	1942	0.57%	1.21	1.21	F	F	No	no change
Between	Park	35th	2	2157	14	0.52	2171	0.65%	1.35	1.36	F	F	No	no change
MTC MTS Arterials														
Castro Street														
Between	Embarcadero	7th Street	2	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	7th Street	14th Street	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Between	14th Street	San Pablo Avenue	3	n/a	n/a	0.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Grand Avenue														
Between	Moraga Ave	I-580	2	1025	15	0.57	1040	1.46%	0.64	0.65	C	C	No	no change
Between	I-580	Harrison	2	1217	6	0.21	1223	0.49%	0.76	0.76	D	D	No	no change
Between	Harrison	Broadway	2	823	5		828	0.61%	0.51	0.52	B	B	No	no change
Between	Broadway	Telegraph	2	998	0	0.00	998	0.00%	0.62	0.62	C	C	No	no change
Between	Telegraph	I-980	2	1258	1	0.03	1259	0.08%	0.79	0.79	D	D	No	no change
Between	I-980	Adeline	2	700	3	0.11	703	0.43%	0.44	0.44	B	B	No	no change
Between	Adeline	I-880	2	956	4	0.16	960	0.42%	0.60	0.60	C	C	No	no change
Broadway														
Between	Embarcadero	7th Street	2	288	141		429	48.96%	0.18	0.27	A	A	Yes	no change
Between	7th Street	14th Street	2	483	219		702	45.34%	0.30	0.44	A	B	Yes	change
Between	14th Street	West Grand	2	290	14		304	4.83%	0.18	0.19	A	A	No	no change
Between	West Grand	MacArthur	2	137	3	0.11	140	2.19%	0.09	0.09	A	A	No	no change
Between	MacArthur	51st Street	2	578	3	0.13	581	0.52%	0.36	0.36	B	B	No	no change
Between	51st Street	SR 24	2	363	0	0.00	363	0.00%	0.23	0.23	A	A	No	no change
Brush Street														
Between	Embarcadero	7th Street	2	19	0	0.00	19	0.00%	0.01	0.01	A	A	No	no change
Between	7th Street	14th Street	3	203	0	0.00	203	0.00%	0.08	0.08	A	A	No	no change
Between	14th Street	San Pablo Avenue	3	57	3	0.13	60	5.26%	0.02	0.03	A	A	No	no change
Telegraph Avenue														
Between	14th Street	West Grand	2	173	2	0.08	175	1.16%	0.11	0.11	A	A	No	no change
Between	West Grand	MacArthur	2	178	1	0.03	179	0.56%	0.11	0.11	A	A	No	no change
Between	MacArthur	51st Street	2	634	1	0.03	635	0.16%	0.40	0.40	B	B	No	no change
Between	51st Street	Ashby	2	1911	3	0.11	1914	0.16%	1.19	1.20	F	F	No	no change
Between	Ashby	Bancroft Way	2	1923	1	0.05	1924	0.05%	1.20	1.20	F	F	No	no change

1. The Congestion Management Agency applies different segment definitions for segments of I-580 between I-238 and Tassajara Road
2. Brush Street and Castro Street are one-way streets
3. Segment limits were taken from the 2004 LOS Monitoring Report *(Alameda County CMA) except for the se* gment of I-880 closest to the project which was divided in two.

Fehr & Peers, 2005.

APPENDIX D

Population, Housing, and Employment Technical Appendix

APPENDIX D.1

BACKGROUND TABLES FOR IV.J POPULATION, HOUSING, AND EMPLOYMENT SETTING

TABLE D.1-2: PERCENTAGE DISTRIBUTIONS

Census 2000 Data for San Antonio Census Tracts

Census Tracts	4052	4053	4054	4055	4056	4057	4058	4059	4060	4062.01	4062.02	4063	4064	Total San Antonio	Lower San Antonio	Oakland
Total Population	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Race and Ethnicity																
White alone	32.3%	30.2%	8.0%	11.4%	16.4%	9.0%	3.5%	3.8%	11.1%	3.3%	5.4%	6.6%	22.3%	**11.8%**	**6.8%**	**23.5%**
Black or African American alone	20.1%	26.4%	25.0%	23.8%	27.8%	38.0%	29.0%	18.3%	11.6%	15.7%	13.3%	29.8%	37.5%	**23.3%**	**19.6%**	**35.1%**
American Indian and Alaska Native alone	0.3%	0.7%	0.6%	0.3%	0.5%	0.2%	0.4%	0.3%	0.4%	0.5%	0.9%	0.3%	0.3%	**0.4%**	**0.4%**	**0.4%**
Asian alone	35.6%	26.9%	39.5%	49.7%	38.0%	31.8%	42.2%	40.7%	43.9%	25.3%	13.5%	26.6%	22.7%	**34.0%**	**39.0%**	**15.1%**
Native Hawaiian and Other Pacific Islander alone	0.3%	0.3%	0.2%	0.3%	0.2%	0.3%	0.2%	0.5%	0.3%	0.4%	0.0%	0.7%	0.0%	**0.3%**	**0.3%**	**0.5%**
Some other race alone	0.3%	0.3%	0.3%	0.2%	0.3%	0.2%	0.4%	0.2%	0.1%	0.1%	0.2%	0.3%	0.0%	**0.2%**	**0.2%**	**0.3%**
Population of two or more races:	3.8%	3.7%	3.7%	2.7%	3.2%	2.8%	3.7%	3.0%	2.5%	3.0%	2.1%	2.7%	2.8%	**3.1%**	**3.1%**	**3.2%**
Hispanic or Latino	7.3%	11.4%	22.8%	11.7%	13.6%	17.6%	20.6%	33.2%	30.3%	51.7%	64.6%	33.1%	14.5%	**26.9%**	**30.5%**	**21.9%**
Sex																
Males	47.3%	49.6%	50.7%	47.8%	48.0%	50.1%	47.6%	50.4%	53.6%	53.0%	53.4%	49.0%	41.7%	**49.8%**	**51.0%**	**48.3%**
Females	52.7%	50.4%	49.3%	52.2%	52.0%	49.9%	52.4%	49.6%	46.4%	47.0%	46.6%	51.0%	58.3%	**50.2%**	**49.0%**	**51.7%**
Age																
Under 5 yrs	3.9%	4.4%	8.1%	6.6%	6.1%	7.7%	7.7%	8.6%	6.2%	10.3%	10.7%	8.0%	6.2%	**7.5%**	**8.2%**	**7.1%**
5 to 17 yrs	10.5%	8.6%	18.7%	17.4%	18.2%	18.0%	25.4%	24.8%	15.5%	25.3%	21.8%	24.9%	17.1%	**19.3%**	**21.0%**	**17.9%**
18 to 21 yrs	2.8%	3.6%	6.9%	6.0%	5.7%	5.7%	6.7%	7.3%	7.3%	7.6%	7.6%	6.7%	3.7%	**6.1%**	**7.1%**	**5.1%**
22 to 29 yrs	17.8%	20.2%	17.9%	16.5%	16.6%	15.7%	13.3%	13.6%	16.4%	16.7%	18.8%	12.3%	9.8%	**16.2%**	**16.2%**	**13.7%**
30 to 39 yrs	21.4%	21.8%	17.0%	18.6%	19.5%	16.6%	14.8%	15.6%	18.1%	16.6%	16.6%	15.1%	13.1%	**17.4%**	**16.9%**	**17.3%**
40 to 49 yrs	17.5%	15.9%	13.5%	14.1%	14.4%	14.0%	12.5%	12.3%	13.6%	10.5%	10.4%	13.2%	13.4%	**13.4%**	**12.7%**	**14.7%**
50 to 64 yrs	15.2%	13.1%	10.3%	12.1%	12.5%	14.1%	11.7%	10.6%	12.5%	7.5%	7.9%	10.4%	14.3%	**11.4%**	**10.3%**	**13.8%**
65 yrs and over	10.9%	12.4%	7.5%	8.6%	7.3%	8.2%	7.9%	7.2%	10.5%	5.4%	6.2%	9.3%	22.4%	**8.8%**	**7.5%**	**10.5%**
Housing Units	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Vacant	3.2%	2.4%	3.9%	5.1%	3.1%	4.2%	2.7%	4.4%	4.9%	4.9%	2.0%	3.6%	4.8%	**3.7%**	**4.5%**	**4.3%**
Owner Occupied	26.2%	8.5%	12.0%	21.7%	23.0%	28.4%	35.1%	26.8%	14.5%	21.9%	16.6%	35.1%	48.7%	**21.8%**	**18.9%**	**39.7%**
Renter Occupied	70.6%	89.2%	84.1%	73.3%	73.9%	67.4%	62.2%	68.8%	80.6%	73.2%	81.4%	61.3%	46.6%	**74.6%**	**76.6%**	**56.1%**
Households (occupied housing units)	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
1-person household:	46.8%	50.0%	28.7%	32.1%	33.4%	33.5%	15.9%	15.1%	34.6%	12.0%	13.8%	21.5%	24.4%	**30.5%**	**24.5%**	**32.5%**
Married-couple family with own children under 18 years	9.6%	8.2%	20.3%	17.8%	16.1%	16.3%	25.6%	31.1%	16.7%	34.4%	34.7%	24.4%	17.8%	**19.7%**	**24.0%**	**16.5%**
Married-couple family without own children under 18 years	15.2%	14.7%	14.4%	16.3%	15.7%	15.0%	17.7%	15.6%	19.5%	12.4%	14.2%	12.2%	21.5%	**15.4%**	**15.4%**	**17.6%**
Other Households	28.4%	27.1%	36.5%	33.8%	34.8%	35.2%	40.8%	38.2%	29.2%	41.1%	37.3%	41.9%	36.2%	**34.5%**	**36.1%**	**33.5%**
Household Incomes in 1999																
Less than $20,000	15.1%	26.5%	35.0%	30.5%	25.0%	26.4%	30.9%	30.5%	36.1%	33.5%	25.6%	33.8%	21.8%	**28.3%**	**33.2%**	**25.8%**
$20,000 to $39,999	24.8%	32.3%	33.0%	22.8%	28.2%	33.0%	27.5%	33.9%	30.0%	27.9%	33.9%	29.8%	20.8%	**29.7%**	**30.3%**	**24.2%**
$40,000 to $60,000	23.4%	15.2%	16.6%	23.6%	18.3%	20.7%	16.2%	18.0%	12.4%	20.4%	22.0%	17.2%	21.7%	**18.6%**	**18.1%**	**17.0%**
$60,000 to $99,999	21.5%	17.1%	10.7%	18.4%	16.8%	16.0%	16.2%	12.8%	9.9%	10.9%	11.0%	16.3%	24.4%	**15.3%**	**12.4%**	**18.6%**
$100,000 or more	15.2%	8.9%	4.5%	4.7%	11.8%	3.9%	9.3%	4.8%	11.5%	7.3%	7.5%	2.9%	11.3%	**8.0%**	**6.1%**	**14.5%**

Source: Census 2000; Hausrath Economics Group

APPENDIX D.2

ANALYSIS OF POTENTIAL FOR INDIRECT PHYSICAL IMPACTS FROM RETAIL DEVELOPMENT PROPOSED FOR THE OAK TO NINTH AVENUE PROJECT

APPENDIX D.2

ANALYSIS OF POTENTIAL FOR INDIRECT PHYSICAL IMPACTS FROM RETAIL DEVELOPMENT PROPOSED FOR THE OAK TO NINTH AVENUE PROJECT

PURPOSE

This Appendix presents the results of analysis done to address the retail market effects of the project and whether the proposed addition of 200,000 sq. ft. of retail/commercial space in the project could cause ripple effects of store closures and consequential long-term vacancies that would result in physical deterioration and urban decay. Public comments on the Notice of Preparation raised concerns about the potential effects of project retail development on existing neighborhood commercial districts and corridors in Oakland, and specifically on the Eastlake District located along International Boulevard and East 12th Street north of the project across the I-880 freeway.

A recent Court of Appeals decision concerning proposed shopping center development (*Bakersfield Citizens for Local Control v. City of Bakersfield, et. al., (2004) 124 Cal. App. 4th 1184)* reconfirmed that CEQA requires analysis of a project's potential to indirectly cause physical deterioration and urban decay. The Court held that certain retailers, including Supercenters, large-scale retailers (such as big-box stores and "category killers"), retailers operating 24 hours a day seven days a week, and others may pose indirect environmental impacts. The retail development in the project does not propose to include those types of large-scale or discount retail uses. However, the potential for indirect physical impacts is still assessed in this EIR as public concerns have been raised about the potential for physical deterioration and urban decay in neighborhood retail districts and corridors as a result of the retail development proposed in the project.

SCOPE OF ANALYSIS

In assessing the potential impact of the proposed retail/commercial development, analysis was done to address the following:

- Extent that Oakland is currently underserved or overserved by retailing;
- Types of retailing envisioned for the project, and the retail sales likely to occur in retail businesses to be located there;
- Additional retail spending to be contributed by residents of new housing in the project;

- How additional spending from project residents would compare to additional sales in project businesses;
- Whether the types of retailing in the project would compete with or complement the types of retailing in the Eastlake District and other surrounding neighborhood retail districts and corridors in Oakland;
- Extent and potential significance of other retail development anticipated in Oakland; and
- Conclusions about the potential for indirect physical impacts of the retail development proposed for the project.

FINDINGS

The sections that follow address each of the issues and questions identified above, summarizing the results of the analysis.

Market Context: Oakland is Underserved by Retailing

Compared to Alameda County and the Bay Area overall, Oakland has substantially less retailing than would be anticipated for a city of its size. Per capita retail sales data summarized in Table D.2-1 provide a comparative measure of overall retail activity at the state, regional, and county levels and for retailing in Oakland and its nearby cities of the Inner East Bay. The data show that total retail sales per capita in Oakland are substantially lower (about 40 percent lower) than total sales per capita for Alameda County and the Bay Area overall. Among the different types of retailing, per capita sales in Oakland are low in all categories except service stations. The differences are quite substantial in many of the retail categories. (Table D.2-9 at the end of this Appendix presents the total taxable retail sales from which the sales per capita are calculated.)

The low retail sales per capita in Oakland indicate that there is substantial "leakage" of spending by Oakland residents to retail establishments outside of Oakland because of the limited retail opportunities available locally. It also indicates the likelihood that Oakland residents may be spending less overall on retailing because of the lack of retail options within convenient access.

Per capita sales data for the Inner East Bay, combining Oakland with its neighboring cities, shows that the Inner East Bay in total also is underserved with retailing relative to other parts of Alameda County and the rest of the region. Comparisons among Inner East Bay cities highlight the low levels of retailing in Oakland and in Alameda (located just across the Estuary from the Oak to Ninth project). The relatively high levels of retailing in Emeryville and San Leandro indicate that retailing in those cities is capturing sales from Oakland and Alameda residents. However, the lower per capita sales for all Inner East Bay cities combined indicates that there is still net leakage of sales to establishments in other areas outside of the Inner East Bay.

TABLE D.2-1
2003 PER CAPITA TAXABLE RETAIL SALES, SELECTED AREAS

	California	Bay Area	Alameda County	Inner East Bay /a/	Oakland	Berkeley	Emeryville	Alameda	San Leandro
2003 Total Population (January 1)	*35,612,116*	*6,960,314*	*1,487,685*	*702,878*	*408,513*	*103,954*	*7,492*	*74,295*	*80,879*
Retail Category									
Apparel stores	426	498	349	299	118	422	6,713	141	705
Home furnishings and appliances	424	519	536	583	253	660	24,807	116	532
Other retail stores	1,529	1,817	1,689	1,656	1,146	2,486	30,029	1,000	1,708
General merchandise stores /b/	1,419	1,513	1,280	907	322	477	2,185	794	4,714
Food stores /b/	545	552	493	483	417	586	2,402	489	660
Eating and drinking places	1,125	1,277	1,037	1,098	903	1,736	7,863	954	1,147
Bldg. materials and farm implements	862	917	1,000	736	512	893	n/a	225	2,455
Auto dealers and auto supplies	1,883	1,813	1,970	1,480	1,308	1,490	n/a	1,140	3,293
Service stations	778	762	762	713	760	496	1,904	557	1,033
Total Taxable Retail Sales /b/	**$8,992**	**$9,669**	**$9,116**	**$7,955**	**$5,740**	**$9,247**	**$75,903**	**$5,417**	**$16,247**

NOTE: The 2003 data were the most current available at the time of the analysis in March 2005.

/a/ Inner East Bay taxable sales data available for Alameda, Berkeley, Emeryville, Oakland, and San Leandro. Inner East Bay population also includes Piedmont and Albany.
/b/ The retail sales data are for taxable sales. However, not all sales in food stores and drug stores are taxable, so that total retail sales in those categories are higher than shown above. It is estimated that taxable sales represent about 30 percent of total sales in food stores, and approximately 46 percent of sales in drug stores.

Source: State of California, Department of Finance, E-5 City/County Population and Housing Estimates, 2004, Revised 2001-2003, with 2000 DRU Benchmark. Sacramento, California, May 2004; State Board of Equalization Taxable Sales in California Annual Report 2003; Hausrath Economics Group.

Given this market context, new retail development does not necessarily mean competition for sales with existing merchants in Oakland. Retail development is needed in Oakland to better serve the retailing needs of local residents. City economic development efforts are focused on attracting additional retailing to Oakland to improve retail opportunities for residents and to keep more local spending in Oakland.

Spending patterns of Oakland residents, as analyzed in another retail study, further support the retail market context described above. Of total retail expenditures by Oakland residents for different types of retailing, Table D.2-2 identifies the shares of spending estimated to occur in retail establishments in Oakland and in establishments located outside of Oakland. The spending patterns of residents show the relatively large shares of spending that occur outside of Oakland because of limited retail opportunities within the city.

TABLE D.2- 2
ESTIMATED SPENDING PATTERNS OF OAKLAND RESIDENTS

Type of Retailing	Place of Expenditure		
	Oakland	Other Inner East Bay	Outside Inner East Bay
Comparison Goods (apparel, home furnishings and appliances, electronics, specialty goods)	37%	29%	34%
Eating and Drinking	46%	17%	37%
Convenience Goods (groceries, drugs, personal care products, housekeeping supplies, etc.)	73%	21%	6%

Source: Oakland Retail Model as prepared for City of Oakland, *Downtown Oakland Retail Market Analysis*, Hausrath Economics Group, March 2001.

Mix of Retailing and Other Uses Envisioned for New Space in the Project

A mix of retail and other commercial uses are envisioned to occupy the 200,000 sq. ft. of retail/commercial space proposed for the project, along with community, cultural, and recreational uses. Just over two-thirds of the space is anticipated to be occupied by retail uses, potentially including a neighborhood-serving grocery, specialty food tenants, a drug store, smaller retail shops, galleries, restaurants, cafés and other eating places, and snack shops. Retail sales for those retail tenants are estimated to total approximately $37 million annually. Other uses and tenants in the rest of the space are envisioned to include small offices (health-related, professional services, real estate, financial services, project office), local service uses (dry cleaning, laundry, hair salon/barber shop), the harbor master/marina office, space for Aquatic Center expansion and other recreation-oriented activities, community facilities, and cultural uses/exhibit space. A potential scenario for the retail, other commercial, and other space is summarized in Table D.2-3. Tables with more detailed assumptions behind the scenario are presented at the end of this Appendix (see Tables D.2-10, D.2-11, and D.2-12).

TABLE D.2-3
POTENTIAL RETAIL/COMMERCIAL SCENARIO
FOR OAK TO NINTH AVENUE PROJECT, BY USE AND TYPE OF RETAILING

	Total Space (Sq. Ft.)	Retail Space (Sq. Ft.)	Estimated Retail Sales ($ 2004/05)
By Type of Space and Use			
Retail/commercial: neighborhood streets (on interior streets)	41,000	15,000	$2.2 mil.
Central area neighborhood retail (along project's Main Street)	42,000	42,000	14.1 mil.
Waterfront retail/restaurant (around Clinton Basin and Marina)	79,000	71,000	19.9 mil.
Park-oriented/recreational uses (in vicinity of Estuary Park and Channel Park)	20,000	5,000	0.6 mil.
Community, cultural, recreation uses (reuse of portion of Ninth Avenue Terminal)	18,000	3,000	0.4 mil.
Total Project	**200,000**	**136,000**	**$37.2 mil.**
By Type of Retailing			
Convenience Retail/Groceries		45,500	$14.6 mil.
Eating and Drinking		58,000	16.8 mil.
Comparison/Specialty Retail		32,500	5.8 mil.
Total Project		136,000	$37.2 mil.

Source: Signature Properties; Hausrath Economics Group.

Project Residents Would Contribute Additional Retail Spending

The Oak to Ninth project is primarily a residential development that includes retail/commercial space. The households to reside in the new housing units in the project would generate additional spending for a variety of retail goods and services. It is estimated that retail expenditures by project residents would total approximately $95 million annually. Their estimated expenditures by type of retailing are summarized in Table D.2-4. (More detailed expenditure estimates are shown in Table D.2-13 at the end of this Appendix.)

TABLE D.2-4
ESTIMATED RETAIL SPENDING BY PROJECT RESIDENTS

Retail Category	Average Annual Spending per Households /a/ ($ 2002/03)	Total Spending ($ 2002/03)
Groceries and Convenience	$8,359	$24.9 mil.
Eating and Drinking	4,418	13.1 mil.
Comparison and Specialty		
Apparel and Footwear	3,401	10.1 mil.
Household Furnishings and Equipment	3,579	10.7 mil.
Specialty and Other Comparison Goods	2,223	6.6 mil.
	9,203	27.4 mil.
Vehicle-related	9,606	28.6 mil.
Building Materials	360	1.1 mil.
Total Retail Spending	**$31,946**	**$95.1 mil.**

/a/ Data from U.S. Bureau of Labor Statistics, *2002-2003 Consumer Expenditure Survey for U.S. Western Region* for "consumer units" or households with income of $70,000 or more. The estimates of spending may be conservative for the purposes of this study as the survey data from 2002-03 has not been inflated. More recent data on retail expenditures are limited, and it is possible that 2004/05 expenditures have not increased very much from 2002/03 levels.

Source: U.S. Bureau of Labor Statistics, *2002-2003 Consumer Expenditure Survey*; Hausrath Economics Group.

Overall Net Addition of Retail Spending from the Project

Overall, the additional retail spending to be contributed by project residents (approximately $95 million) is estimated to be larger than the amount of retail sales to be captured by the retail

development in the project (approximately $37 million). Thus, in the aggregate, the project would contribute a net addition of retail spending to the overall market context. This net addition would support additional retail business activity over and above the amount of retail activity to be accommodated in the project.

TABLE D.2-5
COMPARISON OF RETAIL SALES IN THE PROJECT AND ADDITIONAL RETAIL SPENDING BY PROJECT RESIDENTS

Type of Retailing	Estimates Sales in Project Retail Space (2004/05 $)	Estimated Retail Spending by Project Residents (Based on 2002/03 expenditure patterns)
Convenience Retail/Groceries	14.6 mil.	24.9 mil.
Eating and Drinking	16.8 mil.	13.1 mil.
Comparison/Specialty Retail	5.8 mil.	27.4 mil.
Vehicle-related	-	28.6 mil.
Building Materials/Supplies	-	1.1 mil.
Overall Totals	**$37.2 mil.**	**$95.1 mil.**

Source: See prior Tables and associated text.

Spending and Sales By Types of Retailing and
Consideration of Spending Patterns for the Project

Not all of the spending of project residents would occur in the project and not all of the sales by project retail businesses would come from project residents. Spending patterns are such that people make certain expenditures near to their place of residence, some near to their place of work, and some expenditures in other locations, elsewhere in the city in which they live, in nearby cities, elsewhere in the region, and even a small share outside the region. Those spending patterns vary by type of retailing and are affected by the availability and choice of retail businesses and shopping areas in proximity to where people live and work.

People tend to buy groceries and do other convenience shopping close to home. Given the types of convenience retail tenants anticipated for the project, the spending of project residents for groceries and other convenience items would provide the primary market support for the convenience retail tenants in the project. The convenience spending of project residents also

would support retailers outside the project, primarily those in nearby parts of Oakland. Potentially, about half of the convenience retail expenditures of project residents could be spent within the project and about half outside the project, as evidenced by the comparison of project retail sales and additional spending by project residents in Table D.2-5 on the previous page.

Spending for eating and drinking out and spending for comparison/specialty retailing typically occur over a larger area than convenience retail spending. The eating and drinking and comparison/specialty retail uses to be located in the project would be supported by spending of project residents and by others from outside the project area, particularly those attracted by the visitor-serving retail and restaurant uses to be located around Clinton Basin along the waterfront and new marina. People employed in the project also would provide market support for the eating and drinking uses as would people coming to the project site for recreation. The broader market support anticipated for eating and drinking and specialty retail uses in the project would come from the spending of residents of Oakland, nearby cities, and other parts of the region. Spending in the project by Oakland residents would include dollars that would otherwise be spent outside the city without the project.

Much of the additional expenditures of project residents for eating and drinking out and comparison/specialty retailing would be spent outside the project, elsewhere in Oakland, in nearby cities, and beyond. This additional spending would represent substantial support for restaurants, other eating places, and comparison/specialty retailers in nearby and other areas, as shown by the data in Table D.2-5.

The additional expenditures of project residents also include vehicle-related spending (for vehicle purchases, gas and oil, and auto parts and supplies) and spending for home maintenance/building materials and supplies, as shown in Table D.2-5. As those types of retailing are not anticipated to be located in the project, the additional spending of project residents would occur in surrounding areas and elsewhere in Oakland and nearby cities.

Project Retailing Would Complement Retailing in the Eastlake District and Other Neighborhood Retail Corridors; Spending of Project Residents Would Likely Provide Market Support for Neighborhood Districts

Specific consideration was given to potential effects of the project on the Eastlake Business District and other neighborhood retail corridors nearby in surrounding parts of Oakland. A key issue is how the market orientation and types of retail tenants in the neighborhood districts/corridors compare to those for the types of retailing envisioned for the project. The analysis found that there are notable differences in types of retailing between surrounding neighborhood retail districts/corridors and the retail proposed for the project. The differences occur because of the rich ethnic and cultural diversity in surrounding Oakland neighborhoods which is clearly reflected in the types and market orientations of businesses in the neighborhood retail districts. Thus, rather than competing, the project and surrounding neighborhood retail districts are anticipated to be complementary, in that each would offer different types of goods and services with its own particular market orientation. In addition, project residents could

provide market support for retail establishments in surrounding neighborhood areas, particularly for ethnic-oriented foods and eating places and other goods and services of types not available in the project.

The San Antonio, Eastlake, and Fruitvale districts, located to the north and northeast of the project, are among the most ethnically diverse neighborhoods in the country. This diversity is reflected in the business mix of the neighborhood retail districts there which offer cuisine, specialty foods, cultural activities, and goods from around the world.

The Eastlake Business District is comprised of an eclectic and diverse selection of businesses, many of which are Southeast Asian owned and operated. The area includes Southeast Asian restaurants and other eating places and markets specializing in Southeast Asian produce and other foods. There also are ethnically-oriented apparel and specialty stores. These retailers are catering to neighborhood residents and others seeking the types of specialized foods and other goods and services available here. The unique ethnic character of retailing in the Eastlake District differentiates it from the types of retailing envisioned in the project. As a result, the retail development in the project is not anticipated to adversely affect retailing in the Eastlake District by drawing customers and tenants away from the area. Further, the specialized character of retailing in the Eastlake could attract spending from project residents, thereby providing merchants with additional market support as a result of the project.

Analysis of types of retailing and retail trends in the Eastlake District, as summarized in Table D.2-6, indicate that retail sales have been growing in this area. Trends show notable growth of sales in eating and drinking and convenience retail establishments. These types of retailing focus on the Southeast Asian specialties that the area offers. The data show that sales in eating and drinking and convenience retail establishments totaled $2.4 million and represented 12 percent of total area sales in 1988. By 2003, sales in those categories totaled $10.4 million and now represent 36 percent of total retail sales in the area.

The retail sales data also identify the importance of auto-related businesses in the Eastlake District including service stations, auto parts and repair businesses, and used auto sales. In 2003, auto-related retailing accounted for 25 percent of total retail sales. The sale of building materials/supplies also contributes a notable share of sales in the area. These types of retailing serve a larger market area, and neither type is anticipated to be included in the project. The auto-related businesses in particular could capture spending from project residents.

Just to the east of the Eastlake District along International Boulevard and East 12th Street between 20th and 24th Avenues are additional retail businesses in the San Antonio commercial district. Most retail sales in this smaller area currently come from the mix of auto-related goods and services available there. Other types of establishments include home furnishings retailing and eating and drinking.

Further to the east is the larger Fruitvale Business District The Fruitvale District has emerged as an active multicultural commercial area with a strong Latino identity. The Fruitvale District includes a rich business mix offering ethnic foods, music, jewelry, and clothing from Mexico, El

TABLE D.2-6
RETAIL SALES IN THE EASTLAKE DISTRICT, 1988-2003
($000's)

Type of Retail	1988	1993	1998	2003	Percent of Total 2003	Recent Trends 1998-2003	
Convenience Retailing /a/	$1,499	$5,303	$5,424	$6,008	21%	+$584	+11%
Eating and Drinking	870	1,679	2,693	4,412	15%	+1,719	+64%
Comparison/Specialty Retailing	1,882	2,444	2,982	2,227	8%	(755)	(25%)
Auto-related Retail	8,102	6,874	7,721	7,083	25%	(638)	(8%)
Building Materials/Supplies	3,633	4,363	4,741	5,405	19%	+664	+14%
Subtotal – Retail Stores	**15,986**	**20,663**	**23,561**	**25,135**	**88%**	**+1,574**	+7%
Sales in Service and Other Establishments	3,029	3,140	3,673	3,278	12%	(395)	(11%)
TOTAL SALES	**$19,015**	**$23,803**	**$27,234**	**$28,413**	**100%**	**+$1,179**	+4%

NOTE: Data are for International Boulevard and East 12th Street, between 1st and 14th Avenues. The 2003 data were the most current available at the time of the analysis in March 2005.

/a/ Total sales in food stores and drug stores were estimated based on reported taxable sales adjusted to account for non-taxable sales. Taxable sales are estimated to represent 30 percent of total sales in food stores and 46 percent of total sales in drug stores.

Source: City of Oakland CEDA; Hausrath Economics Group.

Salvador, Vietnam, China, and other countries. Retailing in this district serves nearby residents and others from surrounding areas and beyond who are attracted by the ethnic orientation and specialty foods and other goods and services available here. Like the Eastlake, the Fruitvale District has a specific ethnic market orientation that makes it unique and different from retailing anticipated in the project and from that located in other parts of Oakland. Here again, retail development in the project is not anticipated to compete with retailing in this area. Instead, it is likely that project residents could contribute additional spending in the Fruitvale District.

Anticipated To Be Market Support for Other New
Retail Development in Addition to Project and Existing Retailing

In addition to the new retail space in the project, there are other new retail developments underway in Oakland. These are identified in Table D.2-7. Evaluation of these new retail uses within the context of existing retailing, resident spending patterns, growth of retail spending, and development of the project indicates that there is anticipated to be sufficient market support for the project and the other new retail developments. This conclusion is based on the following:

- Oakland is currently underserved with retailing; new retailers in Oakland would recapture some local spending going outside the area (*i.e.*, recapture leakage); new retailers could also increase total spending by local residents by increasing retail offerings within convenient access of residents;

- Substantial growth of retail spending is projected in Oakland, as a result of (a) the growth of households and population in Oakland, and (b) real growth of household incomes over time. Another retail study recently projected that retail spending by Oakland residents would increase by $887 million (1999 dollars) from 2000 to 2020, as summarized in Table D.2-8. (An updated projection would show higher spending growth, as the existing projection in Table D.2-8 assumed growth of about 11,000 households in Oakland from 2000 to 2020, whereas current projections show growth of about 21,200 households from 2000 to 2025, without the project.);

- The project and the other new developments include different types of retail uses with different market orientations; they will not all be competing for the same spending; and

- The new projects include retail developments and uses that will attract visitor spending from outside the local area, in addition to the spending of local residents.

TABLE D.2-7
ADDITIONAL RETAIL PROJECTS IN OAKLAND

Project	Location	Anticipated Timing	Space (Sq. Ft.)	Description/Comments
Home Depot and Adjacent Use(s)	42nd & High St.	Already Open (2004)	165,000	Home Depot replaces former Super K-Mart store
		2005/06	46,000	Adjacent space
Albertson's Expansion	E. 18th St. near Lakeshore	2005	37,000 expanded store	Rebuilding of former Albertson's into larger, modern store
Hegenberger Gateway	Hegenberger & I-880			
Wal-Mart, In-N-Out Burger, Starbucks, etc.		2005	175,000	New Wal-Mart store (150,000 sq. ft.) does not include groceries
Rest of Mall		2006	70,000	Larger retailer(s) and national chain(s) anticipated
Additional 6-acre Site		?	Approx. 90,000 if retail	May include larger retail uses, auto dealerships, or a hotel
Whole Foods	Harrison/27th/Bay Place	2006	56,000	New grocery store
Jack London Square Redevelopment	Embarcadero at Broadway	2006-2015	Up to 260,000 additional	To include restaurant, smaller retail, larger retail, and possible entertainment uses. Project also includes new hotel, conference center, cinema, and office space.

Sources: Oakland Cumulative Growth Scenario; City of Oakland.

TABLE D.2-8
PROJECTED GROWTH OF RETAIL SPENDING BY OAKLAND RESIDENTS, 2000-2020
(millions of constant 1999 dollars)

Total Retail Spending, 2000	$2.954 bil.
Projected Total Retail Spending, 2020	$3.841 bil.
Growth of Retail Spending by Oakland Residents	+$887 mil.

Source: City of Oakland, *Downtown Oakland Retail Market Analysis*, Hausrath Economics Group, March 2001.

Conclusion That Project Retail Development Would Not Lead to Indirect Physical Impacts

Based on analysis of the retail market context and of the potential effects of the project within that context, the proposed addition of project retail development is not anticipated to create competition for existing retail districts in Oakland, draw customers and tenants from existing areas, and cause ripple effects of store closures and consequential long-term vacancies that would result in physical deterioration and urban decay. The project is not expected to have such effects on existing neighborhood commercial districts and corridors in surrounding areas of Oakland, and specifically not on the Eastlake District. The key reasons supporting this conclusion are summarized from the above analysis by the following:

- Oakland is currently underserved by retailing. There is substantial leakage of spending by Oakland residents to retail establishments outside of Oakland because of the limited retail opportunities available locally. Retail development is desired in Oakland to better serve the retailing needs of residents. Thus, new retail development does not necessarily mean competition for sales from existing merchants in Oakland.

- Because the project is primarily a residential development, project residents would contribute substantial additional retail spending. That additional spending would support retail sales in the project and in other parts of Oakland.

- Project residents are anticipated to provide much of the market support for convenience retailing in the project. Broader market support is anticipated for eating and drinking and specialty retail uses, including spending by project residents and by others, particularly those attracted by the visitor-serving waterfront retail and restaurant uses, by people employed in the project, and by people coming to the project site for recreation.

- In the aggregate, additional retail spending by project residents would exceed the retail sales to be captured in project retail development. Thus, the project would contribute a net addition of retail spending to the overall market context, to support additional retailing over and above the amount developed in the project.

- Project retailing is not anticipated to compete with retailing in surrounding neighborhood retail districts and corridors. Each would have its own market orientation, and would offer different types of goods and services. Rather than competing, the project and neighborhood retail corridors would complement each other. In addition, the spending of project residents is likely to provide additional market support for neighborhood retailers in surrounding areas.

- While there also are other new retail developments occurring in Oakland, sufficient market support is anticipated for the project and the other new developments as well as for existing retailing.

- Substantial growth of retail spending is projected for Oakland in the future as a result of the growth of households and population and the real growth of household incomes over time. Growth of spending as well as reduction in leakage will support substantial additional retail activity in Oakland.

TABLE D.2-9
2003 TAXABLE RETAIL SALES, SELECTED AREAS ($1,000's)

	California	Bay Area	Alameda County	Inner East Bay /a/	Oakland	Berkeley	Emeryville	Alameda	San Leandro
Retail Category									
Apparel stores	15,179,710	3,463,679	519,274	210,159	48,401	43,918	50,295	10,507	57,038
Home furnishings and appliances	15,104,217	3,608,960	797,883	409,478	103,301	68,608	185,856	8,653	43,060
Other retail stores	54,464,256	12,648,260	2,512,346	1,163,905	468,034	258,464	224,978	74,276	138,153
General merchandise stores /b/	50,550,818	10,534,322	1,904,012	637,822	131,558	49,620	16,367	58,987	381,290
Food stores /b/	19,407,823	3,843,418	733,608	339,205	170,543	60,944	17,995	36,367	53,356
Eating and drinking places	40,049,699	8,887,169	1,542,242	771,849	368,871	180,439	58,912	70,852	92,775
Bldg. materials and farm implements	30,693,755	6,385,954	1,487,535	517,333	209,276	92,829	n/a	16,703	198,525
Auto dealers and auto supplies	67,052,141	12,622,252	2,931,258	1,040,398	534,496	154,883	n/a	84,722	266,297
Service stations	27,714,635	5,302,048	1,133,991	501,197	310,513	51,516	14,264	41,382	83,522
Total Taxable Retail Sales /b/	**$320,217,054**	**$67,296,062**	**$13,562,149**	**$5,591,346**	**$2,344,993**	**$961,221**	**$568,667**	**$402,449**	**$1,314,016**

/a/ Inner East Bay taxable sales data available for Alameda, Berkeley, Emeryville, Oakland, and San Leandro. Inner East Bay population also includes Piedmont and Albany. (See Table 1.)
/b/ The retail sales data are for taxable sales. However, not all sales in food stores and drug stores are taxable, so that total retail sales in those categories are higher than shown above. It is estimated that taxable sales represent about 30 percent of total sales in food stores, and approximately 46 percent of sales in drug stores.

Source: State Board of Equalization Taxable Sales in California Annual Report 2003; Hausrath Economics Group.

Table D.2-10
Estimated Retail Sales for Retail/Commercial Space in Proposed Oak to Ninth Avenue Project

Use	Total Space (Sq. Ft.)	Estimated Space with Retail Uses Percent	Estimated Space with Retail Uses Sq. Ft.	Avg. Sales per Sq. Ft. Space	Estimated Sales ($ millions)
Retail/Commercial: neighborhood streets Flexible ground floor space on interior streets for smaller retail and commercial uses. Could accommodate eating places, local service uses, small offices, galleries, and small retail shops.	41,000	37%	15,000	$150	$2.25
Central area neighborhood retail Centrally-located retail space for neighborhood commercial uses along the project's Main Street. Could accommodate neighborhood-serving grocery, specialty food tenants, a drug store, and retail shops.	42,000	100%	42,000	$335	$14.07
Waterfront retail / restaurant Water-oriented retail space around Clinton Basin for visitor serving retail and restaurant uses. Active eating, drinking, and retail uses along the waterfront and new marina are envisioned. Small offices for the harbor master and marina could be included.	79,000	90%	71,000	$280	$19.88
Retail/commercial: park-oriented Flexible, ground floor space in the vicinity of Estuary Park, the Aquatic Center, and Channel Park. Could accommodate services for outdoor activities and expansion space for the Aquatic Center.	20,000	25%	5,000	$125	$0.63
Community, cultural, recreation uses Reuse of a portion of the Ninth Avenue Terminal shed building. Space could accommodate community, cultural, and recreation-oriented service uses.	18,000	17%	3,000	$125	$0.38
Total Project	**200,000**	**68%**	**136,000**	**$274**	**$37.20**

NOTE: Amount of space and description of uses based on inputs from Signature Properties as of September 2004. Sales estimates prepared by Hausrath Economics Group considering potential uses and sales per square foot for comparable retail uses and retail developments. Also see scenario of possible retail uses on the next table.

Source: Signature Properties; Hausrath Economics Group.

TABLE D.2-11
POTENTIAL RETAIL/COMMERCIAL SCENARIO FOR OAK TO NINTH AVENUE PROJECT

Use	Total Space (Sq. Ft.)	Retail Space (Sq. Ft.)	Type of Retailing	Sales per Sq. Ft. Space ($)	Estimated Sales ($ millions)
Retail/commercial: neighborhood streets					
- Small offices/office condos (health-related, professional services, real estate/insurance/finance, project office)	20,000	-			
- Local services and small shops (dry cleaning, shoe repair, video rental, phone store, flower shop)	7,500	7,500	COMP/SPEC	150	1.125
- Personal services (hair salon, barber shop, nails salon, cosmetics)	3,500	3,500	CONV	150	0.525
- Small cafés, coffee shop, snack bars	4,000	4,000	E + D	150	0.600
- Gym, fitness center, spa, etc.	6,000	-			
Subtotal	***41,000***	***15,000***		***150***	***2.250***
Central area neighborhood retail					
- Smaller grocery/market	20,000	20,000	CONV	350	7.000
- Drug store	8,000	8,000	CONV	400	3.200
- Smaller food shops (coffee, bagels, juices, sandwiches, deli, fish/meat, liquor/wine, bakery, health foods, ice cream)	14,000	14,000	CONV	275	3.850
Subtotal	***42,000***	***42,000***		***335***	***14.050***
Waterfront restaurant/retail					
- Larger restaurants and bars	41,000	41,000	E+D	350	14.350
- Smaller cafés, snack shops	5,000	5,000	E+D	175	0.875
- Galleries, arts/crafts	8,000	8,000	COMP/SPEC	175	1.400
- Smaller shops (gifts, kites, etc.)	4,000	4,000	COMP/SPEC	155	0.620
- Sports/boating-related shops	13,000	13,000	COMP/SPEC	200	2.600
- Marina office + harbor master	8,000	-			
Subtotal	***79,000***	***71,000***		***280***	***19.845***
Retail/commercial: park-oriented					
- Aquatic center and/or other outdoor-related activities	15,000	-			
- Smaller café, restaurant, snackbar	5,000	5,000	E+D	125	0.625
Subtotal	***20,000***	***5,000***		***125***	***0.625***
Community, cultural, recreation uses					
- Community space (meetings, weddings, etc.)	10,000	-			
- Food service area / catering	2,000	2,000	E+D	125	0.250
- Snack shop	1,000	1,000	E+D	125	0.125
- Small museum	2,000	-			
- Gallery and artist space	3,000	-			
Subtotal	***18,000***	***3,000***		***125***	***0.375***
TOTAL PROJECT	**200,000**	**136,000**		**273**	**37.145**

Source: Signature Properties; Hausrath Economics Group.

TABLE D.2-12
POTENTIAL RETAIL/COMMERCIAL SCENARIO FOR OAK TO NINTH PROJECT BY TYPE OF RETAILING

Use	Retail Space (Sq. Ft.)	Type of Retailing	Sales per Sq. Ft. Space ($)	Estimated Sales ($ millions)
Convenience Retail/Grocery	45,500	CONV	320	14.575
Eating and Drinking	58,000	E + D	290	16.825
Comparison/Specialty Retail	32,500	COMP/SPEC	177	5.745
TOTAL PROJECT	**136,000**		**273**	**37.145**

Source: Hausrath Economics Group

TABLE D.2-13
ESTIMATED ANNUAL HOUSEHOLD SPENDING
OAK TO NINTH AVENUE PROJECT

	Average Annual Spending per HH /a/	Total Spending
Households in Oak to Ninth Project: 2,976		
Detailed Retail Categories		
Food at home	4,626	13,766,976
Alcoholic beverages	904	2,690,304
Tobacco products and smoking	239	711,264
Housekeeping supplies	888	2,642,688
Household furnishings and equipment	3,579	10,651,104
House maintenance, materials and supplies	360	1,071,360
Personal care products and services	1,030	3,065,280
Drugs and medical supplies	672	1,999,872
Apparel and footwear	3,401	10,121,376
Vehicle purchases (net outlay)	6,742	20,064,192
Gas and Oil	2,126	6,326,976
Auto parts and supplies	738	2,196,288
Entertainment equipment	1,948	5,797,248
Reading	275	818,400
Food away from home	4,418	13,147,968
Total Retail Spending	**$31,946**	**$95,071,296**
General Retail Categories		
Eating and Drinking	4,418	13,147,968
Groceries and Convenience	8,359	24,876,384
Household Furnishings and Equip.	3,579	10,651,104
Apparel and Footwear	3,401	10,121,376
Other Comparison & Specialty	2,223	6,615,648
Building Materials	360	1,071,360
Vehicle-related	9,606	28,587,456
Total Retail Spending	**$31,946**	**$95,071,296**

/a/ Data from U.S. Bureau of Labor Statistics, 2002-2003 Consumer Expenditure Survey for U.S. Western Region "consumer units", or households, with incomes of $70,000 or more.

Source: U.S. Bureau of Labor Statistics, 2002-2003 Consumer Expenditure Survey; Hausrath Economics Group.

APPENDIX D.3

BACKGROUND FOR ESTIMATES OF POPULATION AND EMPLOYMENT FOR THE OAK TO NINTH AVENUE PROJECT

APPENDIX D.3

BACKGROUND FOR ESTIMATES OF POPULATION AND EMPLOYMENT FOR THE OAK TO NINTH AVENUE PROJECT

PURPOSE

Estimates of population and employment for the proposed Oak to Ninth Avenue Project were prepared by Hausrath Economics Group (HEG), based on the project description provided by the project developer. This appendix presents the estimates of population and employment and provides background on the approach and assumptions upon which they are based.

PROJECT POPULATION AND EMPLOYMENT ESTIMATES

The population and employment estimates for the proposed Oak to Ninth Avenue project are presented in Table D.3-1. The estimates reflect a long-term, stabilized situation after the project is built and occupied.

TABLE D.3-1
POPULATION AND EMPLOYMENT ESTIMATES
FOR PROPOSED OAK TO NINTH AVENUE PROJECT

Location	Major Phase /a/	Housing Units /b/	House-holds /c/	Popu-lation /d/	Employed Residents /d/	Sq. Ft. Space /b/	Employ-ment /e/
East of Clinton Basin	1	1,139	1,093	1,859	1,316	69,000	208
East of Clinton Basin	2	873	838	1,425	1,010	79,000	242
Clinton Basin to Channel	3	788	757	1,287	913	37,000	131
West of Channel	4	300	288	490	346	15,000	42
Total Project		**3,100**	**2,976**	**5,061**	**3,585**	**200,000**	**623**

/a/ The four major phases consolidate the eight phases identified in more detailed tables later in this appendix. Major Phase 1 includes subphases 1, 2, and 3, Major Phase 2 includes subphases 4 and 5, Major Phase 3 includes subphases 6 and 7, and Major Phase 4 includes subphase 8.
/b/ Oakland Harbor Properties, September 21, 2004.
/c/ Assumes long-term average vacancy of approximately four percent, consistent with citywide data.
/d/ Estimated by Hausrath Economics Group considering Census data, data and information for new housing developments, and data and projections from Association of Bay Area Governments (ABAG) and State Department of Finance (DOF).
/e/ Estimated by Hausrath Economics Group considering potential uses and employment densities for similar uses and developments.

Source: Hausrath Economics Group based on approach and assumptions described in this appendix.

For cumulative analysis purposes, project population and employment were estimated for two time periods, consistent with the analysis years for the transportation model and analysis: 2010 (interim analysis year) and 2025 (full project). The analysis years refer to the time when the new uses would be built and occupied by population and employment. The population and employment estimates for each analysis time period are summarized in Table D.3-2.

TABLE D.3-2
POPULATION AND EMPLOYMENT ESTIMATES BY ANALYSIS TIME PERIOD FOR PROPOSED OAK TO NINTH AVENUE PROJECT

	Housing Units /a/	House-holds /b/	Popu-lation /c/	Employed Residents /c/	Sq. Ft. Space /a/	Employ-ment /d/
Built and Occupied By 2010 /e/	1,139	1,093	1,859	1,316	69,000	208
Built and Occupied 2011-2025	1,961	1,883	3,202	2,269	131,000	415
Total 2025	**3,100**	**2,976**	**5,061**	**3,585**	**200,000**	**623**

/a/ Oakland Harbor Partners, September 21, 2004.
/b/ Assumes long-term average vacancy of approximately four percent, consistent with citywide data.
/c/ Estimated by Hausrath Economics Group considering Census data, data and information for new housing developments, and data and projections from the Association of Bay Area Governments (ABAG) and State Department of Finance (DOF).
/d/ Estimated by Hausrath Economics Group considering potential uses and employment densities for similar uses and developments.
/e/ Assumes first major phase of the project by 2010.

Source: Hausrath Economics Group based on approach and assumptions described in this appendix.

PROJECT DESCRIPTION

The proposed project description assumed for estimating population and employment is shown in Table D.3-3. The table identifies Traffic Analysis Zones (TAZs) so that population and employment can be summarized for TAZs as needed for the transportation analysis. The table also identifies subareas of the project site. The five subareas are identified on the map in Figure D.3-1.

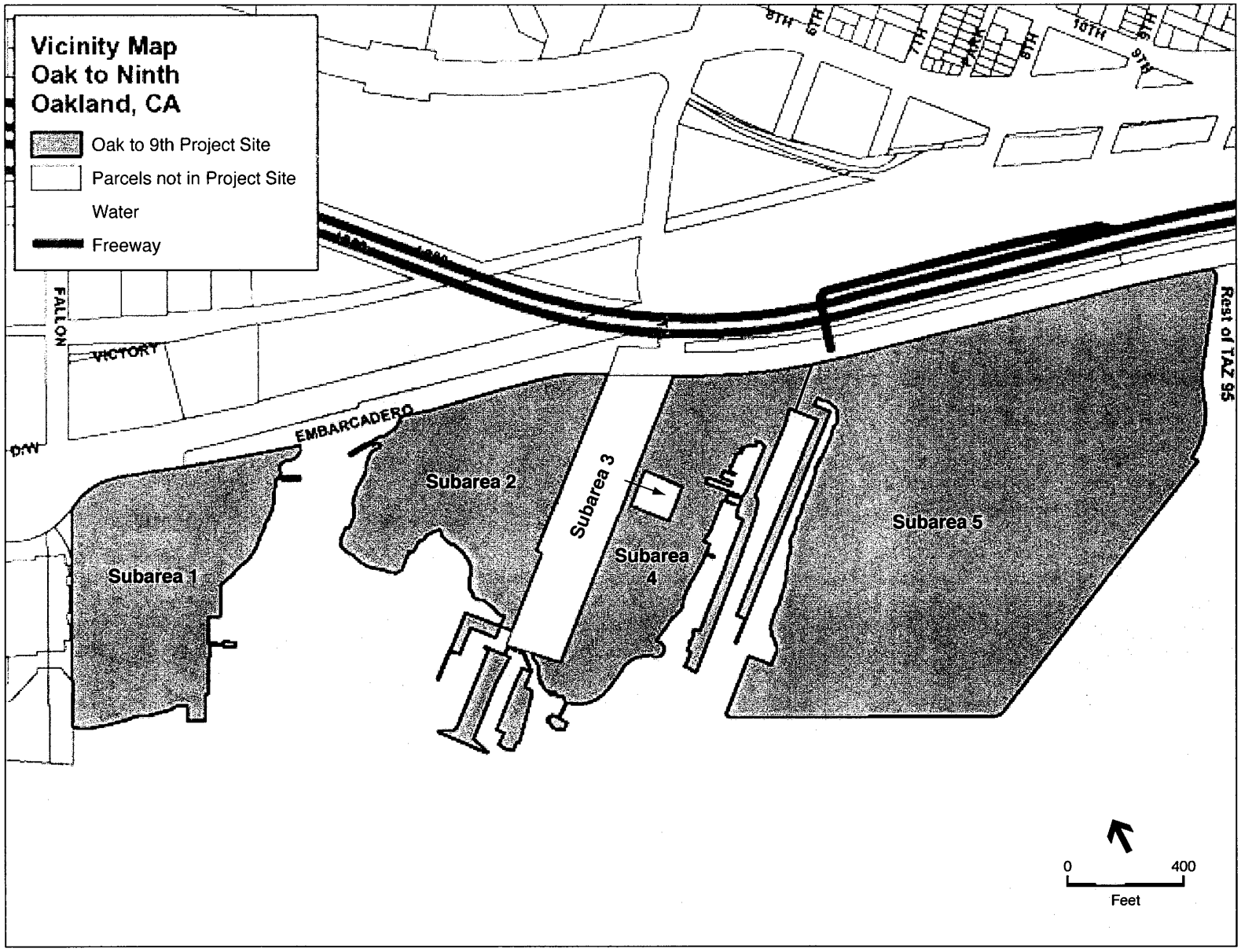
TABLE D.3-3
PROPOSED OAK TO NINTH AVENUE PROJECT DESCRIPTION

TAZ /a/	Subarea /b/	Development Parcel	Phase	Building Height (ft.)	Total Units	Retail/Com'l Sq. Ft.
95	5	A	1	86-240	375	10,000
95	5	F	1	86	164	5,000
95	5	G	2	86-100	280	42,000
95	5	B	3	86	160	6,000
95	5	C	3	86	160	6,000
95	5	D	4	86	160	6,000
95	5	E	4	86	86	8,000
95	5	9th Ave. Terminal	4	--	--	18,000
95	5	H	5	86-240	335	35,000
95	5	J	5	65-240	292	12,000
			Subtotal East of Clinton Basin		2,012	148,000
95	4	K	6	86-240	310	17,000
95	4	L	6	65-86	144	15,000
Subtotal West of Clinton Basin to 5th Ave./Privately-owned Property					454	32,000
95	2	M	7	86-240	334	5,000
		Subtotal West of Private Property to Channel			334	5,000
799	1	N	8	86	300	15,000
			Subtotal West of Channel		300	15,000
TOTAL PROJECT					**3,100**	**200,000**

Notes:
/a/ Traffic Analysis Zone (TAZ) as used in Oakland's land use database for transportation model analyses.
/b/ Subarea 3 includes the privately-owned property in the Fifth Avenue artisan area, and is not included in the Oak to Ninth Avenue Project.

Source: Oakland Harbor Partners, September 21, 2004; Hausrath Economics Group

FIGURE D.3-1: OAK TO NINTH SUBAREAS



BACKGROUND FOR POPULATION ESTIMATES

Data and information considered in developing the population estimates included both those specific to the local area and to the types of housing to be developed in the project, and those reflecting larger citywide and regional demographic patterns and trends. The estimating process progressed from types of housing units to households, households to population, and population to employed population.[1] Consideration also was given to school-age population. The background that follows is presented in that same sequence.

Housing Types

The following identify characteristics of the types of housing proposed for the project, as identified by the project developer and assumed for estimating project population.

- Building Types:
  - Multi-family buildings, with housing over parking
  - Ground-floor retail/commercial space in many buildings
  - Mid-rise and high-rise building types
  - Lobby entrances with units off a common hallway
- Unit Types:
  - One-level condominium and apartment-style units and flats
  - Two-level townhouse-style units
  - Higher-ceiling loft-style housing
  - Could include some two-story lofts and/or two-story live/work spaces
- Unit Sizes

  Potential mix:

30%	1-bedroom units	averaging 750 sq. ft. per unit
65%	2-bedroom units	averaging 1,050 sq. ft. per unit
5%	3-bedroom units	averaging 1,250 sq. ft. per unit

- Other Characteristics:
  - Both ownership and rental housing, with majority of units assumed to be offered for sale.
  - Market-rate housing covering a range of prices and rents depending on the size, type, and location of units, as well as the views and other amenities.
  - No units specifically devoted to senior housing or to deed-restricted affordable housing.

[1] Employed population is required for the transportation analysis as input to the CMA travel model.

Households/Occupied Units

The number of households reflects the number of occupied housing units, assuming that there will be some vacancy of units over time. Average, long-term housing vacancy of four percent is assumed for the project, consistent with the assumptions for other new housing in Oakland in the cumulative growth scenario. For comparison, the 2000 Census shows an overall average vacancy for housing in Oakland of 4.3 percent. The California Department of Finance shows an overall vacancy of 4.17 percent for Oakland as of January 1, 2005. An overall average vacancy in the range of four percent is considered reasonable over the long term.

The estimates of households and occupied units for the project are shown in Table D.3-4.

TABLE D.3-4
POPULATION ESTIMATES FOR PROPOSED OAK TO NINTH AVENUE PROJECT

Type	Average Size /a/	Units /a/	Households / Occ'd Units /b/	Persons Per HH /c/	Residents	Employed Residents Percent /c/	Per HH /c/	Total
1 BR	750 sf	927	890	1.40	1,246	76%	1.06	943
2 BR	1,050 sf	2,017	1,936	1.80	3,485	70%	1.26	2,439
3 BR	1,250 sf	156	150	2.20	330	62%	1.35	203
	TOTAL	3,100	2,976	1.70	5,061	71%	1.20	3,585

Notes:
/a/ Oakland Harbor Partners, September 21, 2004.
/b/ Assumes long-term, average vacancy of approximately four percent, consistent with citywide data.
/c/ Estimates by Hausrath Economics Group considering Census data, data and information for new housing developments, and data and projections from the State Department of Finance (DOF) and the Association of Bay Area Governments (ABAG).

Source: Oakland Harbor Partners, September 21, 2004; Hausrath Economics Group

Population

Population to reside in the new housing in the project was estimated using average household sizes (ratios of persons per household) assumed reasonable for the project based on consideration of the characteristics of the new housing to be built and its appeal to housing consumers in the marketplace.

Both the project's location and the types of higher-density housing to be built are anticipated to attract a high proportion of adult households, over a range of ages and income levels. The project is likely to attract empty nesters (seeking to downsize and stay in Oakland), professionals

(seeking a more affordable alternative to San Francisco), and younger people (including first-time buyers who cannot afford a single family detached home in their desired neighborhoods). The higher-density, urban product types are anticipated to appeal particularly to adult households including couples, single people, and households of unrelated individuals. Some households may have children, likely including one younger child or one older child. Larger family households with three, four, or more children are not likely to be attracted to housing in the project. A relatively high percentage of project residents are anticipated to be employed given the project's central location in proximity to employment in downtown Oakland, downtown San Francisco, elsewhere in Oakland and in nearby cities of the Inner East Bay, and in other closer-in parts of the region around San Francisco Bay.

The ratios of persons per household were estimated drawing from a number of sources and relevant project examples and experience, including census data, in-house data and information for other new housing developments, research done for new higher-density housing as part of other efforts, and data and projections from the Association of Bay Area Governments (ABAG) and the California Department of Finance (DOF). Consideration was given to trends in the age distribution of the population over time. Review of 2000 Census data focused on Census Tracts and Blocks in Oakland with higher-density housing, including residential areas around Lake Merritt, the Adams Point area, and newer housing in Old Oakland and in the Jack London District.

The estimated ratios of persons per household assumed for each type/size of housing in the project are shown in Table D.3-4. Overall, household sizes for the project are estimated to average 1.7 persons per household.

Employed Residents

The number of employed residents was estimated for the project, considering the share of residents likely to be working. Several factors were considered, including the characteristics of the new housing and the new residents and relevant demographic factors and trends.

First, the high proportion of adults expected to reside in the project indicates that a high percentage of residents would be employed. Consideration was given to the likely age distribution of residents, with a focus on the share represented by adults in their prime working years, ages 24 to 64. There also would be residents 65 and older and others aged 18-24, some of whom also would be employed. Second, consideration was given to labor force participation rates for population in these age groups. In the Bay Area, the population of working-age adults is projected to increase in the future as is the population of older adults. Associated with the overall aging of the population, people are projected to work longer. The high cost of living in the Bay Area, expected changes in the Social Security system, and a healthy regional economy over the longer term are anticipated to encourage workers to postpone retirement. Further, the active lifestyle of the baby-boom generation is expected to encourage many of them to work longer than earlier generations and to prefer reduced work schedules over full retirement. The regional projections show increases in labor force participation rates in the future, and increases in the region's labor force. Associated with the aging of the population and with increasing labor

force participation, a larger percentage of the population is projected to be employed in the future.

The factors considered reasonable for estimating employed residents for the project are shown in Table D.3-4. The shares of employed residents were estimated based on the considerations above, drawing from a number of sources including Census data, ABAG projections, and relevant examples and experience from other projects and other HEG analyses. The average, overall share of project population that is assumed to be employed is estimated to approximate 70 percent. The percentages are estimated to vary by size of unit as shown.[2]

Population Estimates By Time Period and Location

The factors and assumptions for estimating households, population, and employed residents for the project as described above were used to develop estimates of population by time period (by 2010 and after 2010) and subarea. Those estimates are shown in Table D.3-5.

School-age Children

An estimate of the number of school-age children (ages 5 to 19) to reside in the project also was developed, consistent with the estimates of total population for the project and the consideration of the age distribution of residents and the share anticipated to be employed (both described above). As with the other demographic characteristics, the number of school-age children to reside in the project depends on the types of housing built, the demographic characteristics of people attracted to the project, and broader demographic factors and trends.

The estimate of school-age children is presented below:

Estimate of School-age Children	
By 2010	93 – 112
After 2010 and by 2025	160 – 192
Total Project	253 – 304
Ratio of school-age population per household	0.085 – 0.1

The analysis indicated that it is reasonable to expect that between five percent and six percent of the project's population could be school-age children, as reflected by the range of estimates

[2] In general, the smaller the unit, the higher the percentage of employed residents, as the person or persons employed and earning income will represent a higher percentage of the people residing in the unit. The ratios used allow for some households with no workers (such as households with retired persons) although relatively few of such households are anticipated in the project, and no units are assumed to be devoted specifically to senior housing.

TABLE D.3-5
POPULATION ESTIMATES FOR PROPOSED OAK TO NINTH AVENUE PROJECT
BY TIME PERIOD AND LOCATION

TAZ	Subarea	Development Parcel	Phase	Type	Average Size /a/	Units /a/	Households / Occ'd Units /b/	Persons Per HH /c/	Residents	Employed Residents Percent /c/	Per HH /c/	Total
Built and Occupied by 2010												
95	5	A,F,G,B,C	1,2,3	1 BR	750 sf	341	327	1.40	458	76%	1.06	346
				2 BR	1,050 sf	741	711	1.80	1,280	70%	1.26	896
				3 BR	1,250 sf	57	55	2.20	121	61%	1.35	74
					Total by 2010	**1,139**	**1,093**	**1.70**	**1,859**	**71%**	**1.20**	**1,316**
Built and Occupied After 2010												
95	5	D,E,H,J	4,5	1 BR	750 sf	261	251	1.40	351	76%	1.06	266
				2 BR	1,050 sf	568	545	1.80	981	70%	1.26	687
				3 BR	1,250 sf	44	42	2.20	93	61%	1.35	57
					Subtotal	873	838	1.70	1,425	71%	1.21	1,010
95	4	K,L	6	1 BR	750 sf	135	130	1.40	182	76%	1.06	138
				2 BR	1,050 sf	296	284	1.80	511	70%	1.26	358
				3 BR	1,250 sf	23	22	2.20	48	63%	1.35	30
					Subtotal	454	436	1.70	741	71%	1.21	526
95	2	M	7	1 BR	750 sf	100	96	1.40	135	76%	1.06	102
				2 BR	1,050 sf	217	209	1.80	376	70%	1.26	263
				3 BR	1,250 sf	17	16	2.20	35	63%	1.35	22
					Subtotal	334	321	1.70	546	71%	1.21	387
799	1	N	8	1 BR	750 sf	90	86	1.40	120	76%	1.06	91
				2 BR	1,050 sf	195	187	1.80	337	70%	1.26	235
				3 BR	1,250 sf	15	15	2.20	33	61%	1.35	20
					Subtotal	300	288	1.70	490	71%	1.20	346
					Total After 2010	**1,961**	**1,883**	**1.70**	**3,202**	**71%**	**1.20**	**2,269**
TOTAL PROJECT				1 BR	750 sf	927	890	1.40	1,246	76%	1.06	943
				2 BR	1,050 sf	2,017	1,936	1.80	3,485	70%	1.26	2,439
				3 BR	1,250 sf	156	150	2.20	330	62%	1.35	203
					TOTAL	**3,100**	**2,976**	**1.70**	**5,061**	**71%**	**1.20**	**3,585**

Notes:
/a/ Oakland Harbor Partners, September 21, 2004.
/b/ Assumes long-term, average vacancy of approximately four percent, consistent with citywide data.
/c/ Estimates by Hausrath Economics Group considering Census data, data and information for new housing developments, and data and projections from the State Department of Finance (DOF) and the Association of Bay Area Governments (ABAG).

Source: Oakland Harbor Partners, September 21, 2004; Hausrath Economics Group

above. The estimates translate into ratios of the average number of school-age children per household of between 0.085 and 0.1, consistent with ratios often used by school districts. These estimates reflect a number of considerations, including: the density and types of multi-family housing proposed, average household sizes for project households, current shares of population represented by school-age children for comparable areas of Oakland with similar types of multi-family housing, and trends in the age distribution of the population.

BACKGROUND FOR EMPLOYMENT ESTIMATES

Employment was estimated for the project based on employment density assumptions for the types of space to be built and the types of uses and tenants anticipated to occupy the space. The employment density assumptions are consistent with those used for the cumulative growth scenario for Oakland.

Types of Retail, Commercial, and Other Uses

The types of retail/commercial uses proposed for the project are identified in Table D.3-6. The descriptions are based on input from the project developer and consideration of the types of uses likely to be attracted to the different types of space and locations proposed for development. Nearly all of the retail/commercial space is assumed to be developed as ground-floor space in residential buildings.

As identified, the new retail/commercial space is anticipated to accommodate a wide variety of types of businesses and other activities involved in retail, service, small office, cultural, and recreational activities. More detail on potential types of tenants for the new space is provided as a part of the retail analysis detailed in Appendix D.2: Analysis of Potential for Indirect Physical Impacts From Retail Development Proposed for the Oak to Ninth Avenue Project.

Employment

Employment was estimated based on employment density factors applicable for the types of uses and tenants anticipated. Development of the appropriate employment density factors drew from data for comparable retail uses, other retail developments, Urban Land Institute publications, other HEG analyses, and employment density assumptions used for the cumulative growth scenario for Oakland. The employment density factors assumed for each group of uses are identified in Table D.3-6. Application of those factors estimates employment of about 574 people in the 200,000 square feet of retail/commercial development that is proposed.

There also would be some on-site employment associated with the management, leasing, and maintenance of the project. Based on the developer's experience with comparable types of projects, 49 jobs are estimated to be associated with the project leasing and management, building and grounds maintenance, and parking area management and maintenance.

Overall on-site employment in the project is estimated to total 623 jobs, as shown in Table D-3.6.

TABLE D.3-6
RETAIL/COMMERCIAL USES AND EMPLOYMENT ESTIMATES FOR PROPOSED OAK TO NINTH AVENUE PROJECT

Use	Sq. Ft. Space	Sq. Ft. per Empl.	Employment
Retail/Commercial: neighborhood streets Flexible ground-floor space on interior streets for smaller retail and commercial uses. Could accommodate eating places, local service uses, small offices, galleries, and small retail shops.	41,000	350	117
Central area neighborhood retail Centrally-located retail space for neighborhood commercial uses along the project's Main Street. Could accommodate neighborhood-serving grocery, specialty food tenants, a drug store, and retail shops.	42,000	375	112
Waterfront retail/restaurant Water-oriented retail space around Clinton Basin for visitor-serving retail and restaurant uses. Active eating, drinking, and retail uses along the waterfront and new marina are envisioned. Small offices for the harbor master and marina could be included.	79,000	300	264
Retail/commercial: park-oriented Flexible, ground-floor space in the vicinity of Estuary Park, the Aquatic Center, and Channel Park. Could accommodate services for outdoor activities and expansion space for the Aquatic Center.	20,000	400	51
Community, cultural, recreation uses Reuse of a portion of the Ninth Avenue Terminal shed building. Space could accommodate community, cultural, and recreation-oriented service uses.	18,000	600	30
Project management and maintenance On-site employment associated with project leasing and management, building and grounds maintenance, and parking area management and maintenance.	n.a.		49
TOTAL PROJECT	**200,000**		**623**

NOTE: Amount of space and description of uses based on inputs from Oakland Harbor Partners as of September 2004. Employment estimates developed by Hausrath Economics Group considering potential uses and employment density factors for comparable retail uses and other retail developments.

Source: Oakland Harbor Partners, September 2004; Hausrath Economics Group.

Employment Estimates By Time Period and Location

The employment density factors were applied to the amounts of space for each type of retail/commercial use as identified for development parcels and phases to develop estimates of employment by time period (by 2010 and after 2010) and subarea. Those estimates are shown in Table D.3-7.

Net Change in Employment

Development of the project would replace the primarily industrial business activities currently on the project site. The existing business activities and their employment are described in the Setting text of Section IV.J. Population, Housing, and Employment. As described there, existing uses employ 231 people on the project site. There is no housing or residential population currently located on the project site.

The net change in employment on the project site as a result of development of the project is calculated by subtracting the estimate of existing employment to be removed for project development from the estimate of employment for the project. All existing uses would be replaced by the project except for the Jack London Aquatic Center which would remain and is assumed to include one job under existing conditions. Thus, the net change in employment on the project site would be +393 jobs as a result of project development, per the following:

Project employment at build-out	623
Existing employment in uses to be removed	(230)
Net change in employment on the Project Site	+393

NET CHANGES IN EMPLOYMENT AND POPULATION

Table D.3-8 on the next page provides a detailed accounting of the changes in employment and population on the project site that would occur over time as the project is developed and existing uses leave the site to allow for the new development. The variables shown in the table are those included in the land use database for the transportation model.

TABLE D.3-7
EMPLOYMENT ESTIMATES FOR PROPOSED OAK TO NINTH AVENUE PROJECT BY TIME PERIOD AND LOCATION

TAZ	Subarea	Development Parcel	Phase	Use	Sq. Ft. Space	Sq. Ft. per Empl.	Employment
Built and Occupied by 2010							
95	5	A	1	Retail/commercial: neighborhood streets /a/	10,000	350	29
95	5	F	1	Retail/commercial: neighborhood streets /a/	5,000	350	14
95	5	G	2	Central area neighborhood retail /b/	42,000	375	112
95	5	B	3	Retail/commercial: neighborhood streets /a/	6,000	350	17
95	5	C	3	Retail/commercial: neighborhood streets /a/	6,000	350	17
95	5	A,F,G,B,C	1,2,3	Project management and maintenance /c/			19
			Total by 2010		**69,000**		**208**
Built and Occupied After 2010							
95	5	D	4	Retail/commercial: neighborhood streets /a/	6,000	350	17
95	5	E	4	Retail/commercial: neighborhood streets /a/	8,000	350	23
95	5	9th Ave. Terminal	4	Community, cultural, recreation uses /d/	18,000	600	30
95	5	H	5	Waterfront retail/restaurant /e/	35,000	300	117
95	5	J	5	Waterfront retail/restaurant /e/	12,000	300	40
95	5	D,E,H,J	4,5	Project management and maintenance /c/			15
			Subtotal		79,000		242
95	4	K	6	Waterfront retail/restaurant /e/	17,000	300	57
95	4	L	6	Waterfront retail/restaurant /e/	15,000	300	50
95	4	K,L	6	Project management and maintenance /c/			7
			Subtotal		32,000		114
95	2	M	7	Retail/commercial: park-oriented /f/	5,000	400	13
95	2	M	7	Project management and maintenance /c/			4
			Subtotal		5,000		17
799	1	N	8	Retail/commercial: park-oriented /f/	15,000	400	38
799	1	N	8	Project management and maintenance /c/			4
			Subtotal		15,000		42
			Total After 2010		**131,000**		**415**
TOTAL PROJECT					**200,000**		**623**

NOTE: Amount of space and description of uses based on inputs from Oakland Harbor Partners as of September 21, 2004. Employment densities estimated by Hausrath Economics Group considering potential uses and experience of other retail developments.

/a/ Flexible, ground floor space on interior streets for smaller retail and commercial uses. Could accommodate eating places, local service uses, small offices, galleries, and small retail shops.
/b/ Centrally-located retail space for neighborhood commercial uses along the project's Main Street. Could accommodate a neighborhood-serving grocery, specialty food tenants, a drug store, and retail shops.
/c/ Includes on-site employment associated with project leasing and management, building and grounds maintenance, and parking area management and maintenance.
/d/ Includes reuse of a portion of the Ninth Avenue Terminal shed building. Space could accommodate community, cultural, and recreation-oriented service uses.
/e/ Water-oriented retail space around Clinton Basin for visitor-serving retail and restaurant uses. Active eating, drinking, and retail uses along the waterfront and new marina are envisioned. Small offices for the harbor master and marina could be included.
/f/ Flexible, ground floor space in the vicinity of Estuary Park, the Aquatic Center, and Channel Park. Could accommodate services for outdoor activities and expansion space for the Aquatic Center.

Source: Oakland Harbor Partners, September 21, 2004; Hausrath Economics Group

TABLE D.3-8
DEVELOPMENT SCENARIO FOR PROPOSED OAK TO NINTH AVENUE PROJECT
BY TIME PERIOD AND LOCATION

TAZ	Subarea	Devel Parcel	Phase	Emplyd Rsdnts	House holds	HH Pop	Group Pop	Total Pop	Manuf	Other	Retail	Service	Total
2004/05													
95	5			-	-	-	-	-	15	50	30	-	95
95	4			-	-	-	-	-	36	9	-	-	45
95	2			-	-	-	-	-	25	-	5	10	40
799	1			-	-	-	-	-	-	50	-	1	51
		Total 2005 /a/		**-**	**-**	**-**	**-**	**-**	**76**	**109**	**35**	**11**	**231**
2005-2010													
95	5			-	-	-	-	-	(15)	(50)	(30)	-	(95)
95	5	A,F,G,B,C	1,2,3	1,316	1,093	1,859	-	1,859	-	7	147	54	208
		Subtotal		1,316	1,093	1,859	-	1,859	(15)	(43)	117	54	113
95	4			-	-	-	-	-	-	-	-	-	-
95	2			-	-	-	-	-	-	-	-	-	-
799	1			-	-	-	-	-	-	-	-	-	-
		Total 2005-2010		**1,316**	**1,093**	**1,859**	**-**	**1,859**	**(15)**	**(43)**	**117**	**54**	**113**
2010													
95	5	A,F,G,B,C		1,316	1,093	1,859	-	1,859	-	7	147	54	208
95	4			-	-	-	-	-	36	9	-	-	45
95	2			-	-	-	-	-	25	-	5	10	40
799	1			-	-	-	-	-	-	50	-	1	51
		Total 2010 /a/		**1,316**	**1,093**	**1,859**	**-**	**1,859**	**61**	**66**	**152**	**65**	**344**
2010-2020/25													
95	5	D,E,H,J	4,5	1,010	838	1,425	-	1,425	-	4	160	78	242
95	4			-	-	-	-	-	(36)	(9)	-	-	(45)
	4	K,L	6	526	436	741	-	741	-	-	91	23	114
		Subtotal		526	436	741	-	741	(36)	(9)	91	23	69
95	2			-	-	-	-	-	(25)	-	(5)	(10)	(40)
95	2	M	7	387	321	546	-	546	-	-	5	12	17
		Subtotal		387	321	546	-	546	(25)	-	-	2	(23)
799	1			-	-	-	-	-	-	(50)	-	-	(50)
	1	N	8	346	288	490	-	490	-	-	13	29	42
		Subtotal		346	288	490	-	490	-	(50)	13	29	(8)
		Total 2010-2020/25		**2,269**	**1,883**	**3,202**	**-**	**3,202**	**(61)**	**(55)**	**264**	**132**	**280**
2020/25													
95	5	A,F,G,B,C	1,2,3										
		D,E,H,J	4,5	2,326	1,931	3,284	-	3,284	-	11	307	132	450
95	4	K,L	6	526	436	741	-	741	-	-	91	23	114
95	2	M	7	387	321	546	-	546	-	-	5	12	17
799	1	N	8	346	288	490	-	490	-	-	13	30	43
		Total 2020/25 /a/		**3,585**	**2,976**	**5,061**	**-**	**5,061**	**-**	**11**	**416**	**197**	**624**

/a/ Includes one service job in Subarea 1 at the existing Aquatic Center that remains in the area identified as the project site. Thus the employment totals in this tableinclude one more job than the totals for the project in Tables 4 and 5.

Source: Oakland Harbor Partners, September 21, 2004; Hausrath Economics Group

APPENDIX D.4

UPDATED CUMULATIVE GROWTH SCENARIO FOR OAKLAND AS PREPARED FOR OAK TO NINTH AVENUE PROJECT EIR

APPENDIX D.4

UPDATED CUMULATIVE GROWTH SCENARIO FOR OAKLAND AS PREPARED FOR *OAK TO NINTH AVENUE PROJECT EIR*

This appendix describes the cumulative growth scenario used for environmental impact analysis purposes in the *Oak to Ninth Avenue Project EIR*. The scenario provides the future cumulative development context for Oakland, identified in terms of future employment, households, and population. Use of the scenario for analyzing the project's environmental impacts ensures that those impacts are appropriately considered as part of the cumulative context of future citywide and regional growth and development.

The need for developing the cumulative growth scenario is explained below, followed by a description of the approach and the chronology of scenario development and updates. Then, the updated cumulative scenario for Oakland prepared for this EIR is summarized, followed by comparisons with projections from the Association of Bay Area Governments (ABAG). The specifics of the scenario for areas surrounding the Oak to Ninth Avenue Project are summarized next. The assumptions for growth in the rest of Alameda County and Bay Area region are then identified.

NEED FOR THE CUMULATIVE GROWTH SCENARIO

The cumulative growth scenario for Oakland was developed primarily for use in the cumulative transportation analyses in Oakland EIRs. The growth scenario was originally prepared in 2000 after analyses indicated that the growth projections from ABAG as incorporated into the Alameda County Congestion Management Agency (CMA) travel demand model did not reflect the level of growth and development occurring in Oakland. Those projections also did not reflect the locations of growth for future development projects under construction, approved, proposed, and reasonably foreseeable for Oakland. Since the cumulative growth scenario for Oakland was originally developed, it continues to be updated and refined as needed for EIR analyses and planning efforts, and to incorporate newly released 2000 Census data and new projections series from ABAG. The cumulative growth scenario is now used to review and provide input for new ABAG projections and for updates to the land use database in the CMA travel model.

Totals for the cumulative growth scenario for Oakland are now relatively similar to the ABAG projections currently incorporated into the CMA travel model. However, Oakland's cumulative growth scenario continues to be used in EIR analyses and planning efforts as it provides more specificity about growth and development occurring in Oakland and can be updated as needed for EIR and planning purposes.

FORECAST-BASED APPROACH THAT INCORPORATES FORESEEABLE FUTURE DEVELOPMENT PROJECTS

The cumulative growth scenario for Oakland is developed using a forecast-based approach, *i.e.*, an approach based on regional forecasts of economic activity and demographic trends. The cumulative growth scenario also considers recent and anticipated future development projects in Oakland as well as other changes in land use, employment, and population. Development projects and other changes are identified and updated based on input from City of Oakland and Port of Oakland staffs and on analysis of economic, demographic, and real estate market data and trends. Anticipated future development projects are identified and updated to include approved, proposed, probable, and potential development projects reasonably foreseeable over the next 20 to 25 years.

The growth that could be accommodated by recent and expected future development projects and other changes in land use, employment, and population is evaluated within the context of regional economic and demographic trends and projections. The ABAG projections provide the reference for citywide and county totals for future years. The list of development projects and other changes provide the ability to relate individual projects to the citywide context. The amount of growth represented by development projects and other changes is "fit" within the ABAG projections, to the extent possible. Citywide totals are increased above the ABAG projections if justified by recent and expected future development projects and other anticipated changes. The locations of specific projects and development sites are used for the allocation of growth to subareas and traffic analysis zones (TAZs) within the city. Transportation analyses using the CMA's travel demand model require inputs at the TAZ level.

CHRONOLOGY OF SCENARIO DEVELOPMENT

The cumulative growth scenario for Oakland was originally prepared and continues to be updated by Hausrath Economics Group (HEG), working closely with City of Oakland staff. The scenario was first completed in November 2000. Since that time, the scenario has been updated and refined for different parts of the City as needed for EIR analyses and planning efforts. It also has been updated to incorporate newly released 2000 Census data and new projections from ABAG. The following identifies the different updates that were completed prior to the scenario developed for this EIR:

- June 2001, updated scenario for *Metroport Project EIR*, focusing on updates in the Oakland Airport/Coliseum area;

- August 2001, updated scenario for *Leona Quarry Project EIR*, focusing on the area surrounding the Leona Quarry project;

- January 2002, updated scenario for *Oakland Army Base (OARB) Redevelopment Project EIR*, focusing on updates in the harbor and OARB redevelopment project area and adjacent parts of West Oakland;

- September 2002, 2000 Census data is incorporated into the land use database, along with future demographic factors consistent with the 2000 Census data, as provided by ABAG *Projections 2002*;

- September 2002, updated scenario for *Central City East (CCE) Redevelopment Project EIR*, focusing on updates in East Oakland, within and surrounding the redevelopment project area;

- Early December 2002, updated scenario for *Jack London Square Redevelopment Project EIR*, focusing on updates in the Jack London District of downtown Oakland including Jack London Square;

- Later December 2002, updated scenario for *West Oakland Redevelopment Project EIR*, focusing on updates in West Oakland, and parts of North Oakland within the redevelopment project area, and in adjacent blocks;

- Early February 2003, updated scenario for *Coliseum Gardens Project EIR*, focusing on the project and surrounding Coliseum BART station area;

- January/February 2003, updated scenario to incorporate ABAG *Projections 2002* and to provide land use inputs for the CMA travel model update completed in May 2003;

- June 2003, updated scenario for *Uptown Project EIR*, focusing on the project and updates in downtown Oakland areas surrounding the project; and

- December 2003, updated scenario for *Central Station/Wood Street Project EIR*, focusing on the project and surrounding areas of West Oakland and the Harbor as well as updates for major projects in downtown Oakland and elsewhere in the city.

The updated cumulative growth scenario prepared for this EIR as of November 2004, incorporates and builds on all of the updates listed above. In addition, for this EIR, changes were made to the citywide land use database to incorporate the Oak to Ninth Avenue Project as currently proposed, and to update assumptions for other growth and development in surrounding areas of Oakland including other parts of the Estuary waterfront to the west and east of the project, downtown Oakland to the northwest of the project, and the San Antonio area neighborhoods to the north and northeast of the project. Assumptions also were updated for major projects elsewhere in Oakland, as identified by City staff, Port staff, and other sources.

UPDATED CUMULATIVE GROWTH SCENARIO FOR OAKLAND

Cumulative Growth Scenario for *Oak to Ninth Avenue Project EIR*

The cumulative growth scenario for Oakland identifies employment, households, and population. Employment is disaggregated into four types: service, retail, manufacturing, and other, as

required for use in the Alameda County CMA travel model. The projections are allocated to the large number of traffic analysis zones identified throughout the city.[1] Scenarios are developed for the years 2005, 2010, and 2025, consistent with the analysis years in the CMA travel model. The cumulative growth scenario for Oakland includes a 2000 base year scenario, consistent with 2000 Census data, although the CMA model does not include year 2000.

The cumulative growth scenario for the City of Oakland, as updated for the *Oak to Ninth Avenue Project EIR*, is summarized in Table D.4-1 below. The scenario includes the Oak to Ninth Avenue Project. The estimates of population and employment for the project and the net changes in population and employment on the project site are described in Appendix D.3: Background for Estimates of Population and Employment for the Oak to Ninth Avenue Project.

TABLE D.4-1
UPDATED CUMULATIVE GROWTH SCENARIO
FOR OAKLAND, AS OF NOVEMBER 2004

	2000 /a/	2005	2010	2025	Growth 2000-2025	Growth 2005-2025
Households	150,790	155,400	162,530	174,950	+24,160	+19,550
Household Population /b/	392,310	410,030	424,250	445,910	+53,600	+35,880
Total Population /b/	399,480	417,350	431,670	453,520	+54,040	+36,170
Employed Residents /b/	174,740	181,230	198,340	232,680	+57,940	+51,450
Total Employment	185,160	198,470	213,770	241,340	+56,180	+42,870
Manufacturing	17,610	17,380	17,920	18,580	+970	+1,200
Other /c/	74,060	78,940	83,170	91,680	+17,620	+12,740
Retail	23,840	25,860	29,080	32,660	+8,820	+6,800
Service	69,650	76,290	83,600	98,420	+28,770	+22,130

NOTE: The cumulative growth scenario includes the Oak to Ninth Avenue Project.
/a/ Households, household population, total population, and employed residents are from the 2000 Census.
/b/ Projections for 2005, 2010, and 2025 incorporate changes in demographic characteristics of the population in the existing housing stock in Oakland as evidenced in persons per household and employed persons per household factors from ABAG *Projections 2002*. The demographic characteristics of residents of new housing to be built in Oakland by 2005, 2010, and 2025 are based on those same ABAG factors or are estimated using special factors that better reflect the anticipated population in new housing, for TAZs with little or no housing in 2000 of the types being built (as the ABAG factors are based on the existing population in 2000).
/c/ Includes employment in finance, insurance, real estate (FIRE); government; construction; transportation, communications, and utilities (TCU); wholesale; and agriculture and mining.

Source: City of Oakland and Hausrath Economics Group based on approach and methodology described in this appendix.

[1] The traffic analysis zones (TAZs) are Census Tracts or subdivisions of Census Tracts identified for transportation analysis purposes and used in the CMA travel demand model.

Following the approach described earlier, analysis to develop the cumulative growth scenario for Oakland evaluated how the amount and type of growth represented by future development projects identified by the City and Port compared to the ABAG projections for Oakland. Other changes in land use, employment, and population also were accounted for. Other additions to employment and population included those resulting from increased occupancies of existing buildings, the re-leasing of space vacated by existing businesses and government activities relocating to newly developed projects, the renovation of space that had previously sat vacant, and the conversion of space in existing buildings to new and more intensive uses. Reductions in employment and population included changes as a result of base closures, displacements by development projects, and the movement of some types of businesses out of the area due to increasing rents and land values as well as other factors. In addition, the cumulative growth scenario also incorporates changes in demographic characteristics of the population in the City's existing housing stock, consistent with the ABAG projections.

Comparison with CMA/ABAG Projections

The Updated Cumulative Growth Scenario for Oakland is compared in Table D.4-2 with the ABAG *Projections 2002* for Oakland and the ABAG projections as incorporated into the Alameda County CMA Travel Model for use in transportation analyses. The ABAG *Projections 2002* series provides the basis for the numbers in the CMA model at the time of the analysis for this EIR.

The cumulative growth scenario for Oakland compares to the CMA/ABAG projections (*Projections 2002*) as follows:

- **Employment**: Employment projections under the cumulative growth scenario are relatively similar to and fall within about one percent of the ABAG projections for Oakland for future years. The economic activity and employment growth to be accommodated by identified major development projects and other anticipated changes in land use and employment in Oakland are estimated to "fit" within the employment growth for Oakland reflected by the ABAG projections for both the shorter term (2010) and longer term (2025) futures.

- **Housing and Households**: Household projections for Oakland in 2010 and 2025 are higher under the cumulative growth scenario than the ABAG projections, about four percent higher in both the near term (2010) and longer term (2025) futures. Housing currently under development in Oakland and housing anticipated to be developed in the future (including the new housing proposed for the project) would accommodate more household growth than reflected by ABAG *Projections 2002*.

TABLE D.4-2
CUMULATIVE GROWTH SCENARIO FOR *OAK TO NINTH AVENUE PROJECT EIR* AND CMA/ABAG PROJECTIONS FOR OAKLAND

	Jobs	Households	Household Population	Total Population	Employed Residents
2000					
Oakland Cumulative Scenario, 11/2004 /a/	185,160	150,790 /d/	392,310 /d/	399,480 /d/	174,740 /d/
2005					
Oakland Cumulative Scenario, 11/2004 /a/	198,470	155,400	410,030	417,350	181,230
CMA Model/ABAG *P2002* /b/	202,060	154,780	410,350	-	175,080 /e/
ABAG *Projections 2002*	202,080	153,530	407,900	415,700	173,000 /e/
2010					
Oakland Cumulative Scenario, 11/2004 /a/	213,770	162,530	424,250	431,670	198,340
CMA Model/ABAG *P2002* /b/	213,820	158,130	418,420	-	186,080 /e/
ABAG *Projections 2002* /c/	215,580	156,610	415,200	423,200	183,800 /e/
2025					
Oakland Cumulative Scenario, 1/2004 /a/	241,340	174,950	445,910	453,520	232,680
CMA Model/ABAG *P2002* /b/	245,060	169,080	442,370	-	217,040 /e/
ABAG *Projections 2002* /c/	243,500	168,640	441,200	449,500	217,600 /e/

/a/ *Oakland Cumulative Growth Scenario for Oak to Ninth Avenue Project EIR*, November 2004, prepared as described in this appendix.
/b/ ABAG *Projections 2002*, as included in the updated Alameda County CMA travel demand model released May 2003.
/c/ From ABAG *Projections* 2002 publication.
/d/ From 2000 Census.
/e/ Not based on 2000 Census, as developed prior to release of employed resident data.

Source: Hausrath Economics Group based on sources identified above, and as described further in this appendix.

- **Population**: The cumulative growth scenario shows somewhat higher population in Oakland than the ABAG projections due to the larger number of households anticipated. Population under the cumulative growth scenario is about two percent higher than the ABAG projections in the near term future (2010) and about one percent higher over the longer term (2025). The differences in population are less than the differences in households because the cumulative growth scenario incorporates demographic assumptions for residents in new housing in Oakland that are specific to the types of new

housing being built (as is the case for the project). Under the ABAG projections, the demographic characteristics of residents of new housing are based on the characteristics of residents in existing housing nearby, which may not necessarily be applicable for the types of new housing being built (such as for the higher-density types of new housing proposed for the project and being built downtown, or for new loft housing in other parts of Oakland). In many cases, the types of higher-density new housing being developed include smaller housing units and attract households with smaller than average household sizes. The characteristics of residents in the existing housing stock and overall demographic trends are similar in both cases, as those assumed for the growth scenario are based on ABAG projections.

- **Employed Residents**: The cumulative growth scenario anticipates more employed residents in Oakland in the future compared to the ABAG projections. One reason is that 2000 Census data that provide the base year for the cumulative growth scenario show about three percent more employed residents in Oakland in 2000, compared to the ABAG projections which were prepared before release of employed resident data from the 2000 Census. The higher number of employed residents in Oakland in 2000 also are included in the future year totals under the cumulative scenario. Other reasons are because of the higher number of households under the cumulative scenario, and because of the demographic characteristics for residents in the types of new housing being built in Oakland, which generally include proportionally more residents who work, compared to demographic characteristics for the population overall.

The cumulative analysis in this EIR assumes the updated cumulative growth scenario for Oakland.[2] This approach ensures that the cumulative effects of all locally anticipated growth and development can be evaluated within the EIR analysis period.

AREAS SURROUNDING THE OAK TO NINTH AVENUE PROJECT

Attention was given to the cumulative growth scenario for traffic analysis zones (TAZs) in areas surrounding the Oak to Ninth Avenue Project. Growth and change in these areas are of particular interest for the cumulative traffic analysis. Analysis was done to review and update the projections for the surrounding areas for use in the cumulative analyses for this EIR.

The updated cumulative scenario for areas including and surrounding the Oak to Ninth Avenue Project is summarized in Table D.4-3 (on the next page). A map outlining the surrounding areas is included in Figure D.4-1 at the end of this appendix. The surrounding areas include the following:

[2] Except for a part of the transportation analysis that specifically requires use of the CMA/ABAG *Projections 2002* land use database, as noted in the Transportation section.

- The **Estuary waterfront**, south of I-880 from Brush Street/MLK Jr. Way east to 66th Avenue. The waterfront includes the Jack London District to the west of the project site, the project site and the rest of the Oak to Ninth Avenue District, and the San Antonio/ Fruitvale Waterfront District to the east of the project site.

- The **San Antonio**, to the north and northeast of the project site, above I-880 between Lake Merritt and the Channel and Fruitvale Avenue. The Lower San Antonio neighborhood is included in this area.

- **Downtown Oakland** and the rest of the larger **Downtown/Oakland Central** area to the north and northwest of the project site, above I-880 to Grand Avenue and from Grand Avenue to I-580 on the north, between I-980 on the west, and Lake Merritt and the Channel on the east.

TABLE D.4-3
CUMULATIVE GROWTH SCENARIO FOR AREAS INCLUDING AND SURROUNDING THE OAK TO NINTH AVENUE PROJECT

	2000	2005	2010	2025	Growth 2000-2025	Growth 2005-2025
Estuary Waterfront, (South of I-880, Brush St./MLK Way east to 66th Avenue)						
Employment	12,940	13,420	15,630	18,130	+5,190	+4,710
Households	640	2,010	3,570	6,310	+5,670	+4,300
Population	1,420	3,950	6,720	11,570	+10,150	+7,620
San Antonio, north of I-880 (North of I-880 to I-580, Lake Merritt east to Fruitvale Ave.)						
Employment	11,520	11,810	12,000	12,590	+1,070	+780
Households	22,190	22,450	22,620	23,060	+870	+610
Population	66,310	67,520	68,030	68,390	+2,080	+870
Downtown/Oakland Central, north of I-880 (North of I-880 to I-580, I-980 east to Lake Merritt/Channel)						
Employment	70,620	75,670	83,120	91,660	+21,040	+15,990
Households	17,790	18,670	21,070	25,810	+8,020	+7,140
Population	31,790	36,570	40,750	49,150	+17,360	+12,580
TOTAL PROJECT AND SURROUNDING AREAS						
Employment	95,080	100,900	110,750	122,380	+27,300	+21,480
Households	40,620	43,130	47,260	55,180	+14,560	+12,050
Population	99,520	108,040	115,500	129,110	+29,590	+21,070

Source: City of Oakland and Hausrath Economics Group based on approach and methodology described in this appendix.

Tables presented at the end of this appendix provide more detailed versions of the estimates and projections for the surrounding areas. Table D.4-4 (parts a. through f.) presents the estimates and projections for subareas and for all of the traffic analysis zones (TAZs) in the surrounding areas. The projections include the growth associated with the project. (The subareas are shown on the map in Figure D.4-1, and the TAZs within the surrounding areas are identified on the maps in Figure D.4-2 and Figure D.4-3, all included at the end of this appendix.[3])

Table D.4-5 (surrounding areas except Downtown/Oakland Central) and Table D.4-6 (Downtown/Oakland Central) list the development projects identified for the surrounding areas based on input from City of Oakland and Port of Oakland staffs as well as other sources. Each list has two parts, one listing housing projects (part a) and the other listing commercial/industrial developments and other changes (part b). The lists include major projects under construction, approved and proposed projects, potential projects under consideration and anticipated to be developed by 2025, as well as other possible developments and changes within the analysis timeframe. In most cases, the project assumptions identified on the lists describe the new development; they do not identify existing uses and activities on development sites that would be removed for development, although the latter are accounted for in the cumulative growth scenario.

The projects on the lists for the surrounding areas all "fit" within the updated cumulative growth scenario summarized herein and used for the cumulative analysis in this EIR. As explained earlier in this appendix, the scenario also includes other changes in land use and in employment and population besides those associated with development of projects on the lists. Thus, the lists alone do not equate to the changes over time in the growth scenario.

The amounts of employment, household, and population growth reflected by the growth scenario, and those represented by the projects on the lists, are more important than the specific projects identified. It is to be expected that the projects on the lists will change over time, and some will be added while others will be deleted. The lists reflect the best information at the time of the analysis. The growth scenario itself can remain valid as changes occur over time in the specifics of the development projects anticipated for the surrounding areas.

GROWTH IN THE REST OF ALAMEDA COUNTY AND BAY AREA REGION

The growth scenario used for the cumulative transportation analysis for this EIR assumes growth in employment, households, and population as projected by ABAG *Projections 2002* and included in the CMA travel demand model for the rest of Alameda County and the Bay Area region outside of Oakland.[4] Because of the close proximity of the City of Alameda to the project

[3] Note that the Lower San Antonio subarea as shown on the attached maps is defined by TAZ boundaries for purposes of tabulating the growth scenario data in the cumulative database. The boundaries differ somewhat from those used to define the Lower San Antonio neighborhood for other purposes.

[4] The land use database in the Alameda County CMA travel model at the time of the analysis for this EIR was that updated as of May 2003 to incorporate ABAG *Projections 2002*, and then revised as of March 2004 to incorporate ABAG's revisions to the allocations of *Projections 2002* employment data to Census Tracts within cities in the region.

site and other parts of Oakland's Estuary waterfront, the CMA/ABAG land use/growth projections included in the CMA model for Alameda were reviewed and discussed with City of Alameda staff. Inconsistencies in the data across analysis years and variables were identified, and the data were adjusted as needed, in coordination with Alameda staff. The adjusted CMA/ABAG projections for Alameda were included in the cumulative database[5]

COMMENTS REGARDING ABAG'S RECENT SMART GROWTH FORECASTS

The ABAG *Projections 2002* referred to throughout this appendix, can be identified as ABAG's trends projections, as they are the most recent ABAG projections based largely on regional and local economic, demographic, real estate, and land use trends. Since those projections, ABAG has recently developed policy-based projections that incorporate regional Smart Growth policy goals over the long-term future. The recently released ABAG *Projections 2005* provide a Smart Growth forecast that assumes the implementation of policies to encourage more growth in central parts of the region, less growth in more outlying areas, and more total housing production in the region at higher overall densities of development and more focused in locations with proximity to employment centers and transit services. Substantial changes in state, regional, and local policies affecting land use, local government tax base, funding for affordable housing, investment in infrastructure, and various other incentives would be required to achieve the Smart Growth forecast. Because of its central location and its role as a center city within the region, long-term growth in Oakland (by 2025 and 2030) would be higher under ABAG's Smart Growth Forecast, compared to the *Projections 2002* trends forecast or the Oakland Cumulative Growth Scenario.

The cumulative analysis for this EIR is based on the Oakland Cumulative Growth Scenario for Oakland and on ABAG's *Projections 2002* for the rest of the region. A primary reason is that the Alameda County CMA's travel demand model and the CMA requirements for transportation analysis continue to be based on the ABAG *P2002* projections.[6] The *P2002* projections are the only ones that have been allocated to TAZs throughout Alameda County and the rest of the region as required for land use inputs to the countywide transportation model. Another reason is that Oakland's Cumulative Growth Scenario reflects an accurate and realistic forecast of current and anticipated future growth and change in Oakland based on the analyses described in this appendix and the City's continuing process of reviewing and updating the cumulative scenario to incorporate new information/data and changing trends. Oakland's cumulative scenario already reflects local Smart Growth land use policies as set forth in the City's *General Plan* Land Use and Transportation Elements. The cumulative scenario also has somewhat higher levels of growth in Oakland than ABAG's *Projections 2002*, particularly household growth, consistent with the intent of the region's Smart Growth policy goals.

[5] Communications occurred in July 2004 and December 2004 with Andrew Thomas of the City of Alameda Planning Department who signed off on use of the adjusted CMA/ABAG projections for Alameda in the cumulative database for the transportation analysis.

[6] The ACCMA has just begun the development of a new travel demand model for Alameda County. That model is to include a new TAZ-level land use database based on ABAG's *Projections 2005*. Completion of that effort is currently targeted for mid-2006 at the earliest.

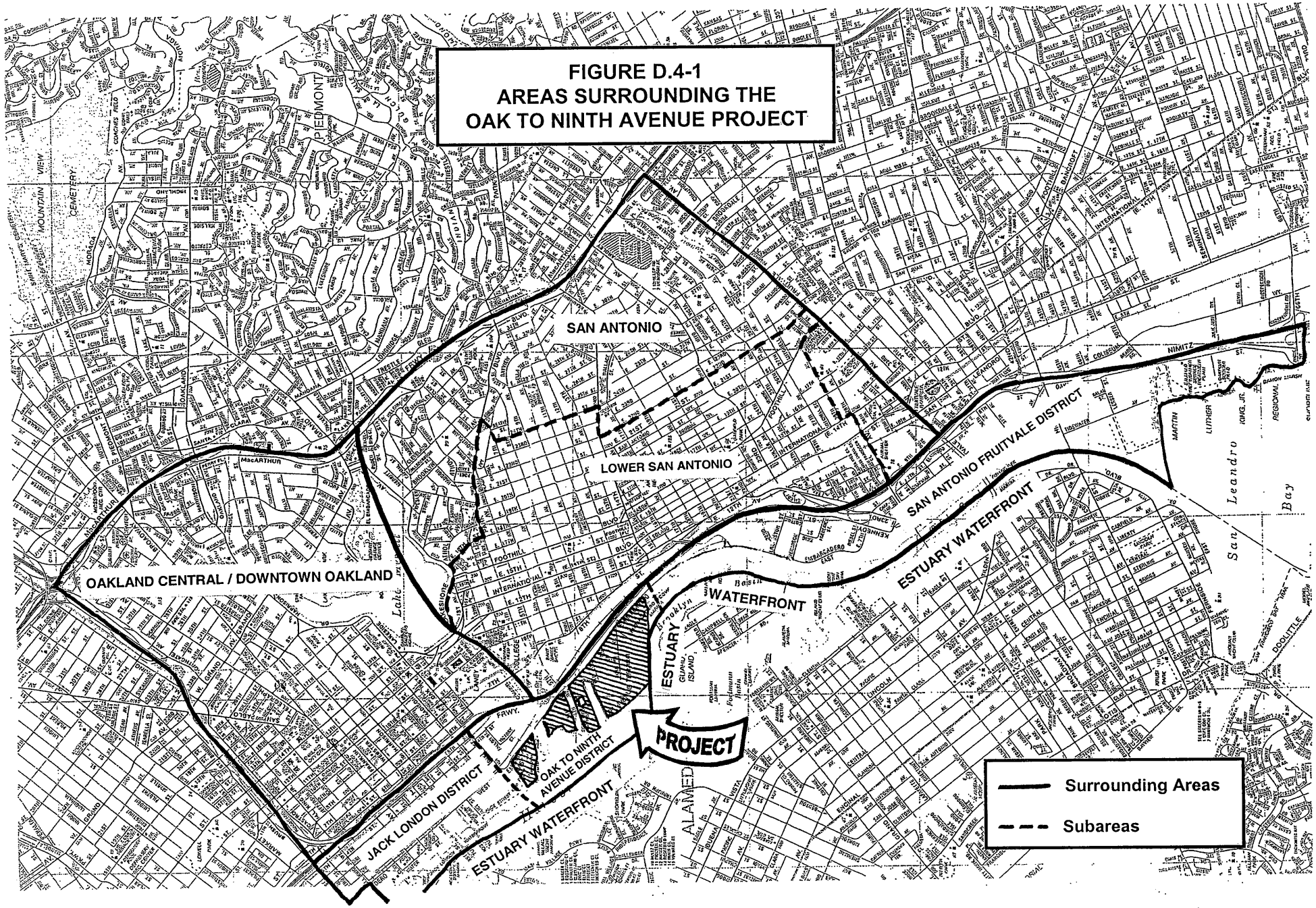


FIGURE D.4-1
AREAS SURROUNDING THE
OAK TO NINTH AVENUE PROJECT
SAN ANTONIO
LOWER SAN ANTONIO
OAKLAND CENTRAL / DOWNTOWN OAKLAND
SAN ANTONIO FRUITVALE DISTRICT
ESTUARY WATERFRONT
ESTUARY WATERFRONT
JACK LONDON DISTRICT
OAK TO NINTH AVENUE DISTRICT
PROJECT
Surrounding Areas
Subareas

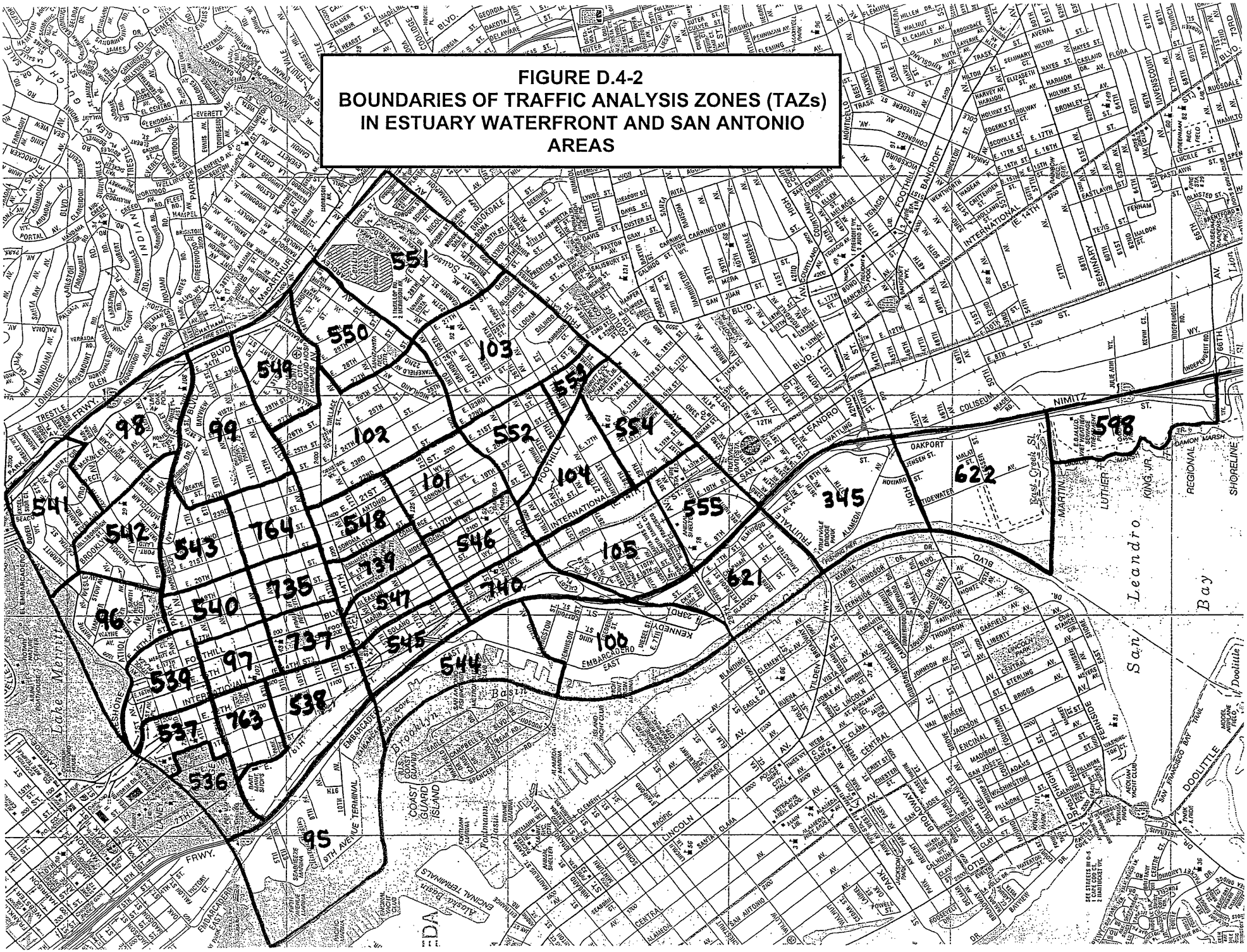


FIGURE D.4-2
BOUNDARIES OF TRAFFIC ANALYSIS ZONES (TAZs)
IN ESTUARY WATERFRONT AND SAN ANTONIO
AREAS

FIGURE D.4-3
BOUNDARIES OF TRAFFIC ANALYSIS ZONES (TAZs)
IN THE DOWNTOWN/OAKLAND CENTRAL AREA

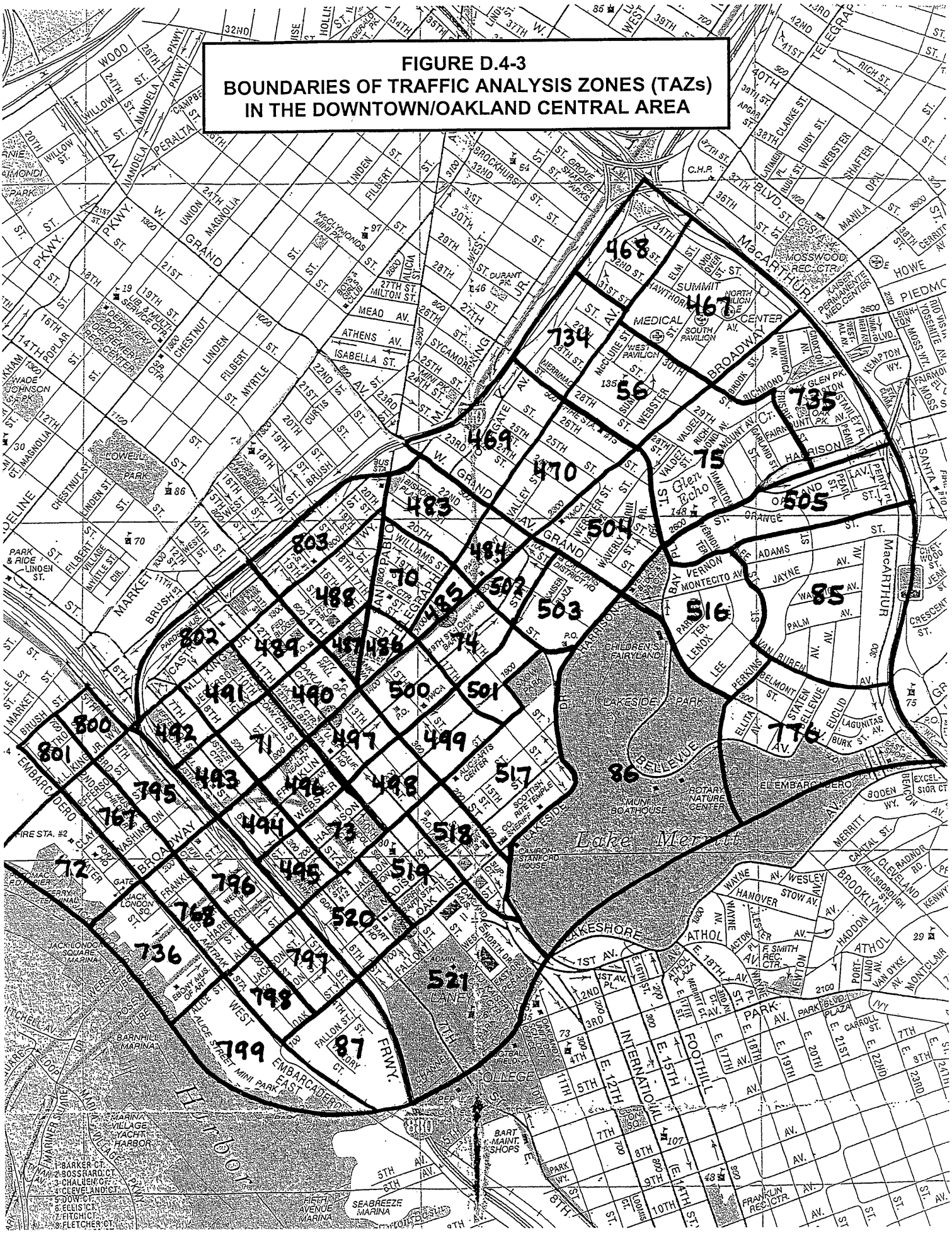


TABLE D.4-4a: 2000 OAKLAND CUMULATIVE SCENARIO FOR OAK TO 9TH PROJECT AND SURROUNDING AREAS

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
ESTUARY WATERFRONT														
Jack London District														
800	481	402000	OC	11	6	15	0	15	81	47	14	12	154	80900
801	481	402000	OC	6	3	10	0	10	0	3	0	4	7	80900
72	72	403200	OC	0	0	0	0	0	0	567	218	181	966	0
736	72	403200	OC	2	1	2	0	2	0	72	524	181	777	50600
767	72	403200	OC	0	0	0	0	0	0	115	324	310	749	0
768	72	403200	OC	8	8	11	0	11	64	498	98	406	1066	50600
795	72	403200	OC	1	1	1	0	1	70	713	110	223	1116	50600
796	72	403200	OC	34	36	48	1	49	134	627	69	254	1084	50600
797	87	403300	OC	1	1	2	1	3	71	23	189	24	307	45800
798	87	403300	OC	0	0	0	0	0	231	54	29	32	346	45800
799	87	403300	OC	212	192	305	0	305	0	216	18	18	252	45800
		Subtotal		***275***	***248***	***394***	***2***	***396***	***651***	***2935***	***1593***	***1645***	***6824***	
Oak to 9th District														
87	87	403300	OC	0	0	0	0	0	72	294	50	43	459	0
95	95	406000	SA	20	17	33	0	33	106	119	63	80	368	36100
		Subtotal		***20***	***17***	***33***	***0***	***33***	***178***	***413***	***113***	***123***	***827***	
San Antonio / Fruitvale District														
100	100	406000	FV	43	70	108	0	108	457	312	28	211	1008	36100
544	544	406000	SA	36	37	60	10	70	240	217	138	565	1160	36100
345	345	406100	FV	88	58	209	0	209	532	146	200	75	953	43500
621	621	406100	FV	248	207	588	5	593	446	102	26	90	664	43500
622	622	407300	AP	2	3	6	0	6	183	689	100	227	1199	39300
598	598	409000	AP	0	0	0	0	0	0	85	0	218	303	0
		Subtotal		***417***	***375***	***971***	***15***	***986***	***1858***	***1551***	***492***	***1386***	***5287***	
Estuary Waterfront - TOTAL				***712***	***640***	***1398***	***17***	***1415***	***2687***	***4899***	***2198***	***3154***	***12938***	
REST OF DOWNTOWN / OAKLAND CENTRAL														
Downtown, Grand to 880														
802	68	402600	OC	133	156	420	0	420	10	55	0	103	168	31000
803	69	402700	OC	184	197	582	0	582	0	136	33	84	253	33100
70	70	402800	OC	14	26	47	5	52	0	0	75	84	159	19300
483	483	402800	OC	170	429	589	32	621	43	103	17	393	556	19300
484	484	402800	OC	0	0	0	0	0	36	365	70	735	1206	0
485	485	402800	OC	0	0	0	0	0	0	122	260	100	482	0
486	486	402800	OC	19	45	67	0	67	5	567	35	464	1071	19300
487	487	402800	OC	0	1	1	0	1	0	725	0	50	775	19300
488	488	402800	OC	319	719	911	258	1169	20	1560	40	160	1780	19300
74	74	402900	OC	32	44	76	0	76	97	690	135	1722	2644	39300
499	499	402900	OC	485	823	1163	0	1163	58	603	135	332	1128	39300
500	500	402900	OC	19	23	28	17	45	133	1090	239	1034	2496	39300
501	501	402900	OC	1	2	2	0	2	269	2067	100	2134	4570	39300
502	502	402900	OC	2	1	4	0	4	30	200	60	353	643	39300
503	503	402900	OC	0	1	1	0	1	540	3444	147	3574	7705	39300
73	73	403000	OC	54	43	140	0	140	449	132	475	142	1198	33100
494	494	403000	OC	55	70	131	10	141	176	78	192	192	638	33100
495	495	403000	OC	68	60	176	0	176	519	132	191	92	934	33100
496	496	403000	OC	425	564	1102	0	1102	178	881	475	968	2502	33100
497	497	403000	OC	118	213	306	0	306	165	1408	267	1525	3365	33100
498	498	403000	OC	335	482	869	0	869	438	112	197	136	883	33100
71	71	403100	OC	33	78	132	1	133	71	54	234	901	1260	19700
489	489	403100	OC	0	0	0	0	0	0	2500	0	40	2540	0
490	490	403100	OC	0	0	0	0	0	1505	1883	324	3048	6760	0
491	491	403100	OC	92	149	367	0	367	202	71	92	77	442	19700
492	492	403100	OC	240	177	288	666	954	0	436	26	97	559	19700
493	493	403100	OC	49	40	53	140	193	70	1840	26	117	2053	19700
519	519	403300	OC	460	334	843	0	843	41	605	51	255	952	45800
520	520	403300	OC	378	245	691	2	693	26	1665	51	212	1954	45800
521	521	403300	OC	254	141	425	41	466	0	1200	80	172	1452	45800
517	517	403400	OC	2010	2336	3477	67	3544	100	804	85	542	1531	58000
518	518	403400	OC	87	89	153	0	153	44	2167	33	231	2475	58000
		Subtotal		***6036***	***7488***	***13044***	***1239***	***14283***	***5225***	***27695***	***4145***	***20069***	***57134***	
Oakland Central, 580 to Grand														
56	56	401300	OC	213	240	431	209	640	6	450	240	1276	1972	26500
467	467	401300	OC	71	64	107	107	214	0	320	280	2136	2736	26500
468	468	401300	OC	190	275	564	9	573	7	160	30	320	517	26500
734	468	401300	OC	100	153	300	0	300	7	160	40	350	557	26500
469	469	401300	OC	238	423	716	0	716	28	160	50	450	688	26500
470	470	401300	OC	122	190	367	0	367	97	390	188	470	1145	26500
86	86	403400	OC	0	0	0	0	0	0	340	0	110	450	0
75	75	403500	OC	1137	1262	1989	0	1989	65	168	369	300	902	47300
735	75	403500	OC	754	652	1308	10	1318	17	154	325	310	806	47300
504	504	403500	OC	143	137	249	0	249	40	650	360	560	1610	47300
505	505	403500	OC	1193	1218	2072	15	2087	0	30	20	20	70	47300
85	85	403600	OC	2915	2573	4319	81	4400	0	40	0	360	400	62200
516	516	403700	OC	1791	1908	2756	40	2796	0	95	45	400	540	60000
776	516	403700	OC	1190	1210	1853	3	1856	5	210	200	675	1090	60000

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
		Subtotal		***10057***	***10305***	***17031***	***474***	***17505***	***272***	***3327***	***2147***	***7737***	***13483***	
Rest of Downtown / Oakland Central - TOTAL				***16093***	***17793***	***30075***	***1713***	***31788***	***5497***	***31022***	***6292***	***27806***	***70617***	
REST OF SAN ANTONIO / FRUITVALE TO FRUITVALE AVE.														
Lower San Antonio														
539	539	405300	SA	1559	1465	2895	0	2895	15	88	335	115	553	51000
97	97	405400	SA	831	699	2152	7	2159	69	138	50	102	359	43200
737	97	405400	SA	635	426	1642	7	1649	57	60	75	134	326	43200
540	540	405400	SA	1002	966	2577	23	2600	0	15	16	45	76	43200
738	540	405400	SA	760	706	1855	118	1973	0	0	0	0	0	43200
543	543	405500	SA	941	925	2157	0	2157	0	0	9	10	19	48900
764	543	405500	SA	867	616	1990	0	1990	0	0	0	0	0	48900
101	101	405900	SA	793	577	2419	0	2419	0	0	6	65	71	48000
546	546	405900	SA	713	544	2131	45	2176	9	28	39	108	184	48000
547	547	405900	SA	388	311	1179	4	1183	0	24	90	80	194	48000
739	547	405900	SA	195	167	596	1	597	0	0	0	40	40	48000
548	548	405900	SA	494	439	1508	0	1508	0	0	6	67	73	48000
536	536	406000	OC	0	0	0	1	1	0	738	0	0	738	0
537	537	406000	SA	523	560	1300	0	1300	5	26	59	174	264	36100
538	538	406000	SA	487	359	1247	0	1247	161	166	95	358	780	36100
763	538	406000	SA	227	190	566	0	566	42	43	76	166	327	36100
545	545	406000	SA	96	67	239	0	239	142	146	126	275	689	36100
740	545	406000	SA	36	21	91	0	91	71	63	39	215	388	36100
105	105	406100	FV	706	415	1576	112	1688	155	143	95	149	542	43500
104	104	406200	SA	1359	1060	4480	79	4559	1	152	65	182	400	41800
552	552	406200	SA	834	693	2794	5	2799	0	0	8	22	30	41800
553	553	406200	SA	223	177	750	0	750	0	0	35	40	75	41800
		Subtotal		***13669***	***11383***	***36144***	***402***	***36546***	***727***	***1830***	***1224***	***2347***	***6128***	
Rest of San Antonio / Fruitvale to 580 and Fruitvale Ave.														
98	98	405200	SA	976	743	1507	0	1507	0	65	26	432	523	65100
541	541	405200	SA	1067	893	1644	3	1647	68	19	64	61	212	65100
542	542	405200	SA	1190	853	1837	0	1837	0	4	38	28	70	65100
96	96	405300	SA	1584	1615	2908	35	2943	0	36	50	50	136	51000
99	99	405600	SA	1831	1438	3734	0	3734	4	48	4	111	167	57700
549	549	405700	SA	577	436	1267	145	1412	0	114	135	2047	2296	46800
550	550	405700	SA	959	901	2345	0	2345	0	0	0	8	8	46800
102	102	405800	SA	1606	1320	4777	0	4777	0	0	0	20	20	48500
103	103	406300	SA	1537	1199	4277	133	4410	0	15	14	178	207	51100
551	551	406400	SA	804	679	1909	367	2276	0	77	23	344	444	68900
555	555	406100	FV	41	31	98	1	99	141	105	305	169	720	43500
554	554	406200	FV	828	698	2632	146	2778	3	72	84	429	588	41800
		Subtotal		***13000***	***10806***	***28935***	***830***	***29765***	***216***	***555***	***743***	***3877***	***5391***	
Rest of San Antonio / Fruitvale - TOTAL				**26669**	**22189**	**65079**	**1232**	**66311**	**943**	**2385**	**1967**	**6224**	**11519**	
GRAND TOTAL				**43474**	**40622**	**96552**	**2962**	**99514**	**9127**	**38306**	**10457**	**37184**	**95074**	

Source: Hausrath Economics Group

TABLE D.4-4a: 2000 OAKLAND CUMULATIVE SCENARIO FOR OAK TO 9TH PROJECT AND SURROUNDING AREAS

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
ESTUARY WATERFRONT														
Jack London District														
800	481	402000	OC	11	6	15	0	15	81	47	14	12	154	80900
801	481	402000	OC	6	3	10	0	10	0	3	0	4	7	80900
72	72	403200	OC	0	0	0	0	0	0	567	218	181	966	0
736	72	403200	OC	2	1	2	0	2	0	72	524	181	777	50600
767	72	403200	OC	0	0	0	0	0	0	115	324	310	749	0
768	72	403200	OC	8	8	11	0	11	64	498	98	406	1066	50600
795	72	403200	OC	1	1	1	0	1	70	713	110	223	1116	50600
796	72	403200	OC	34	36	48	1	49	134	627	69	254	1084	50600
797	87	403300	OC	1	1	2	1	3	71	23	189	24	307	45800
798	87	403300	OC	0	0	0	0	0	231	54	29	32	346	45800
799	87	403300	OC	212	192	305	0	305	0	216	18	18	252	45800
		Subtotal		***275***	***248***	***394***	***2***	***396***	***651***	***2935***	***1593***	***1645***	***6824***	
Oak to 9th District														
87	87	403300	OC	0	0	0	0	0	72	294	50	43	459	0
95	95	406000	SA	20	17	33	0	33	106	119	63	80	368	36100
		Subtotal		***20***	***17***	***33***	***0***	***33***	***178***	***413***	***113***	***123***	***827***	
San Antonio / Fruitvale District														
100	100	406000	FV	43	70	108	0	108	457	312	28	211	1008	36100
544	544	406000	SA	36	37	60	10	70	240	217	138	565	1160	36100
345	345	406100	FV	88	58	209	0	209	532	146	200	75	953	43500
621	621	406100	FV	248	207	588	5	593	446	102	26	90	664	43500
622	622	407300	AP	2	3	6	0	6	183	689	100	227	1199	39300
598	598	409000	AP	0	0	0	0	0	0	85	0	218	303	0
		Subtotal		***417***	***375***	***971***	***15***	***986***	***1858***	***1551***	***492***	***1386***	***5287***	
Estuary Waterfront - TOTAL				***712***	***640***	***1398***	***17***	***1415***	***2687***	***4899***	***2198***	***3154***	***12938***	
REST OF DOWNTOWN / OAKLAND CENTRAL														
Downtown, Grand to 880														
802	68	402600	OC	133	156	420	0	420	10	55	0	103	168	31000
803	69	402700	OC	184	197	582	0	582	0	136	33	84	253	33100
70	70	402800	OC	14	26	47	5	52	0	0	75	84	159	19300
483	483	402800	OC	170	429	589	32	621	43	103	17	393	556	19300
484	484	402800	OC	0	0	0	0	0	36	365	70	735	1206	0
485	485	402800	OC	0	0	0	0	0	0	122	260	100	482	0
486	486	402800	OC	19	45	67	0	67	5	567	35	464	1071	19300
487	487	402800	OC	0	1	1	0	1	0	725	0	50	775	19300
488	488	402800	OC	319	719	911	258	1169	20	1560	40	160	1780	19300
74	74	402900	OC	32	44	76	0	76	97	690	135	1722	2644	39300
499	499	402900	OC	485	823	1163	0	1163	58	603	135	332	1128	39300
500	500	402900	OC	19	23	28	17	45	133	1090	239	1034	2496	39300
501	501	402900	OC	1	2	2	0	2	269	2067	100	2134	4570	39300
502	502	402900	OC	2	1	4	0	4	30	200	60	353	643	39300
503	503	402900	OC	0	1	1	0	1	540	3444	147	3574	7705	39300
73	73	403000	OC	54	43	140	0	140	449	132	475	142	1198	33100
494	494	403000	OC	55	70	131	10	141	176	78	192	192	638	33100
495	495	403000	OC	68	60	176	0	176	519	132	191	92	934	33100
496	496	403000	OC	425	564	1102	0	1102	178	881	475	968	2502	33100
497	497	403000	OC	118	213	306	0	306	165	1408	267	1525	3365	33100
498	498	403000	OC	335	482	869	0	869	438	112	197	136	883	33100
71	71	403100	OC	33	78	132	1	133	71	54	234	901	1260	19700
489	489	403100	OC	0	0	0	0	0	0	2500	0	40	2540	0
490	490	403100	OC	0	0	0	0	0	1505	1883	324	3048	6760	0
491	491	403100	OC	92	149	367	0	367	202	71	92	77	442	19700
492	492	403100	OC	240	177	288	666	954	0	436	26	97	559	19700
493	493	403100	OC	49	40	53	140	193	70	1840	26	117	2053	19700
519	519	403300	OC	460	334	843	0	843	41	605	51	255	952	45800
520	520	403300	OC	378	245	691	2	693	26	1665	51	212	1954	45800
521	521	403300	OC	254	141	425	41	466	0	1200	80	172	1452	45800
517	517	403400	OC	2010	2336	3477	67	3544	100	804	85	542	1531	58000
518	518	403400	OC	87	89	153	0	153	44	2167	33	231	2475	58000
		Subtotal		***6036***	***7488***	***13044***	***1239***	***14283***	***5225***	***27695***	***4145***	***20069***	***57134***	
Oakland Central, 580 to Grand														
56	56	401300	OC	213	240	431	209	640	6	450	240	1276	1972	26500
467	467	401300	OC	71	64	107	107	214	0	320	280	2136	2736	26500
468	468	401300	OC	190	275	564	9	573	7	160	30	320	517	26500
734	468	401300	OC	100	153	300	0	300	7	160	40	350	557	26500
469	469	401300	OC	238	423	716	0	716	28	160	50	450	688	26500
470	470	401300	OC	122	190	367	0	367	97	390	188	470	1145	26500
86	86	403400	OC	0	0	0	0	0	0	340	0	110	450	0
75	75	403500	OC	1137	1262	1989	0	1989	65	168	369	300	902	47300
735	75	403500	OC	754	652	1308	10	1318	17	154	325	310	806	47300
504	504	403500	OC	143	137	249	0	249	40	650	360	560	1610	47300
505	505	403500	OC	1193	1218	2072	15	2087	0	30	20	20	70	47300
85	85	403600	OC	2915	2573	4319	81	4400	0	40	0	360	400	62200
516	516	403700	OC	1791	1908	2756	40	2796	0	95	45	400	540	60000

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
776	516	403700	OC	1190	1210	1853	3	1856	5	210	200	675	1090	60000
		Subtotal		***10057***	***10305***	***17031***	***474***	***17505***	***272***	***3327***	***2147***	***7737***	***13483***	
Rest of Downtown / Oakland Central - TOTAL				***16093***	***17793***	***30075***	***1713***	***31788***	***5497***	***31022***	***6292***	***27806***	***70617***	
REST OF SAN ANTONIO / FRUITVALE TO FRUITVALE AVE.														
Lower San Antonio														
539	539	405300	SA	1559	1465	2895	0	2895	15	88	335	115	553	51000
97	97	405400	SA	831	699	2152	7	2159	69	138	50	102	359	43200
737	97	405400	SA	635	426	1642	7	1649	57	60	75	134	326	43200
540	540	405400	SA	1002	966	2577	23	2600	0	15	16	45	76	43200
738	540	405400	SA	760	706	1855	118	1973	0	0	0	0	0	43200
543	543	405500	SA	941	925	2157	0	2157	0	0	9	10	19	48900
764	543	405500	SA	867	616	1990	0	1990	0	0	0	0	0	48900
101	101	405900	SA	793	577	2419	0	2419	0	0	6	65	71	48000
546	546	405900	SA	713	544	2131	45	2176	9	28	39	108	184	48000
547	547	405900	SA	388	311	1179	4	1183	0	24	90	80	194	48000
739	547	405900	SA	195	167	596	1	597	0	0	0	40	40	48000
548	548	405900	SA	494	439	1508	0	1508	0	0	6	67	73	48000
536	536	406000	OC	0	0	0	1	1	0	738	0	0	738	0
537	537	406000	SA	523	560	1300	0	1300	5	26	59	174	264	36100
538	538	406000	SA	487	359	1247	0	1247	161	166	95	358	780	36100
763	538	406000	SA	227	190	566	0	566	42	43	76	166	327	36100
545	545	406000	SA	96	67	239	0	239	142	146	126	275	689	36100
740	545	406000	SA	36	21	91	0	91	71	63	39	215	388	36100
105	105	406100	FV	706	415	1576	112	1688	155	143	95	149	542	43500
104	104	406200	SA	1359	1060	4480	79	4559	1	152	65	182	400	41800
552	552	406200	SA	834	693	2794	5	2799	0	0	8	22	30	41800
553	553	406200	SA	223	177	750	0	750	0	0	35	40	75	41800
		Subtotal		***13669***	***11383***	***36144***	***402***	***36546***	***727***	***1830***	***1224***	***2347***	***6128***	
Rest of San Antonio / Fruitvale to 580 and Fruitvale Ave.														
98	98	405200	SA	976	743	1507	0	1507	0	65	26	432	523	65100
541	541	405200	SA	1067	893	1644	3	1647	68	19	64	61	212	65100
542	542	405200	SA	1190	853	1837	0	1837	0	4	38	28	70	65100
96	96	405300	SA	1584	1615	2908	35	2943	0	36	50	50	136	51000
99	99	405600	SA	1831	1438	3734	0	3734	4	48	4	111	167	57700
549	549	405700	SA	577	436	1267	145	1412	0	114	135	2047	2296	46800
550	550	405700	SA	959	901	2345	0	2345	0	0	0	8	8	46800
102	102	405800	SA	1606	1320	4777	0	4777	0	0	0	20	20	48500
103	103	406300	SA	1537	1199	4277	133	4410	0	15	14	178	207	51100
551	551	406400	SA	804	679	1909	367	2276	0	77	23	344	444	68900
555	555	406100	FV	41	31	98	1	99	141	105	305	169	720	43500
554	554	406200	FV	828	698	2632	146	2778	3	72	84	429	588	41800
		Subtotal		***13000***	***10806***	***28935***	***830***	***29765***	***216***	***555***	***743***	***3877***	***5391***	
Rest of San Antonio / Fruitvale - TOTAL				**26669**	**22189**	**65079**	**1232**	**66311**	**943**	**2385**	**1967**	**6224**	**11519**	
GRAND TOTAL				**43474**	**40622**	**96552**	**2962**	**99514**	**9127**	**38306**	**10457**	**37184**	**95074**	

Source: Hausrath Economics Group

TABLE D.4-4b: 2005 OAKLAND CUMULATIVE SCENARIO FOR OAK TO 9TH PROJECT AND SURROUNDING AREAS

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
ESTUARY WATERFRONT														
Jack London District														
800	481	402000	OC	11	6	15	0	15	81	47	14	12	154	86900
801	481	402000	OC	48	30	72	0	72	0	53	0	4	57	76000
72	72	403200	OC	0	0	0	0	0	0	567	218	181	966	0
736	72	403200	OC	2	1	2	0	2	0	103	473	133	709	53700
767	72	403200	OC	0	0	0	0	0	0	115	324	340	779	0
768	72	403200	OC	45	31	66	0	66	64	498	131	406	1099	83600
795	72	403200	OC	1	1	1	0	1	70	779	83	429	1361	53700
796	72	403200	OC	34	36	49	1	50	134	584	155	211	1084	53700
797	87	403300	OC	596	477	853	1	854	71	43	234	96	444	93900
798	87	403300	OC	416	311	603	0	603	140	54	29	45	268	94000
799	87	403300	OC	530	463	772	0	772	0	218	18	19	255	74600
		Subtotal		***1683***	***1356***	***2433***	***2***	***2435***	***560***	***3061***	***1679***	***1876***	***7176***	
Oak to 9th District														
87	87	403300	OC	0	0	0	0	0	72	294	50	43	459	0
95	95	406000	SA	20	17	33	0	33	106	59	58	166	389	37300
		Subtotal		***20***	***17***	***33***	***0***	***33***	***178***	***353***	***108***	***209***	***848***	
San Antonio / Fruitvale District														
100	100	406000	FV	44	70	110	0	110	450	319	28	216	1013	37300
544	544	406000	SA	37	37	61	10	71	240	219	138	623	1220	37300
345	345	406100	FV	88	58	212	0	212	532	146	308	75	1061	44800
621	621	406100	FV	587	468	1084	5	1089	400	80	16	90	586	69900
622	622	407300	AP	2	3	6	0	6	173	696	110	237	1216	40500
598	598	409000	AP	0	0	0	0	0	0	85	0	218	303	0
		Subtotal		***758***	***636***	***1473***	***15***	***1488***	***1795***	***1545***	***600***	***1459***	***5399***	
Estuary Waterfront - TOTAL				***2461***	***2009***	***3939***	***17***	***3956***	***2533***	***4959***	***2387***	***3544***	***13423***	
REST OF DOWNTOWN / OAKLAND CENTRAL														
Downtown, Grand to 880														
802	68	402600	OC	280	276	668	0	668	10	55	0	103	168	58000
803	69	402700	OC	180	197	588	0	588	0	136	33	84	253	34500
70	70	402800	OC	0	0	0	0	0	0	27	75	141	243	0
483	483	402800	OC	171	429	1009	32	1041	28	421	37	355	841	20000
484	484	402800	OC	0	0	0	0	0	36	365	70	735	1206	0
485	485	402800	OC	0	0	0	0	0	0	432	289	346	1067	0
486	486	402800	OC	19	45	115	0	115	5	717	107	990	1819	20000
487	487	402800	OC	0	1	2	0	2	0	745	0	117	862	20000
488	488	402800	OC	322	719	1560	258	1818	20	1576	40	383	2019	20000
74	74	402900	OC	32	44	90	0	90	97	790	145	1872	2904	46800
499	499	402900	OC	487	823	1379	0	1379	58	611	150	607	1426	46800
500	500	402900	OC	19	23	33	127	160	133	1090	239	1077	2539	46800
501	501	402900	OC	1	2	2	0	2	269	2067	100	2134	4570	46800
502	502	402900	OC	2	1	5	0	5	30	400	60	353	843	46800
503	503	402900	OC	0	1	1	0	1	540	3844	147	3174	7705	46800
73	73	403000	OC	54	43	149	0	149	404	132	475	156	1167	37600
494	494	403000	OC	55	70	139	10	149	169	76	192	206	643	37600
495	495	403000	OC	69	60	187	0	187	494	125	191	106	916	37600
496	496	403000	OC	528	648	1313	0	1313	168	891	500	1103	2662	43400
497	497	403000	OC	121	223	337	0	337	165	1409	286	1546	3406	37600
498	498	403000	OC	337	482	923	0	923	418	105	187	143	853	37600
71	71	403100	OC	79	116	230	1	231	71	54	234	901	1260	40900
489	489	403100	OC	0	0	0	0	0	175	2800	10	1090	4075	0
490	490	403100	OC	0	0	0	0	0	1505	1883	299	3073	6760	0
491	491	403100	OC	226	260	648	0	648	152	56	116	77	401	47000
492	492	403100	OC	242	177	360	666	1026	0	436	26	97	559	20700
493	493	403100	OC	49	40	66	140	206	20	1740	56	137	1953	20700
519	519	403300	OC	458	372	1102	0	1102	41	905	38	325	1309	47300
520	520	403300	OC	370	245	866	2	868	26	1675	38	221	1960	47300
521	521	403300	OC	249	141	533	41	574	0	1200	80	172	1452	47300
517	517	403400	OC	2333	2593	4252	67	4319	100	804	85	557	1546	63600
518	518	403400	OC	145	137	249	0	249	42	2167	33	231	2473	67900
		Subtotal		***6828***	***8168***	***16806***	***1344***	***18150***	***5176***	***29734***	***4338***	***22612***	***61860***	
Oakland Central, 580 to Grand														
56	56	401300	OC	285	299	557	209	766	6	450	290	1306	2052	38100
467	467	401300	OC	72	64	113	107	220	0	320	295	2161	2776	27200
468	468	401300	OC	192	275	597	9	606	0	140	30	320	490	27200
734	468	401300	OC	101	153	318	0	318	0	140	40	350	530	27200
469	469	401300	OC	428	563	1032	0	1032	10	140	57	447	654	40300
470	470	401300	OC	123	190	389	0	389	40	314	376	460	1190	27200
86	86	403400	OC	0	0	0	0	0	0	365	0	122	487	0
75	75	403500	OC	1145	1262	2058	0	2058	65	168	369	310	912	48000
735	75	403500	OC	759	652	1353	10	1363	17	154	335	315	821	48000
504	504	403500	OC	144	137	258	0	258	40	650	385	585	1660	48000
505	505	403500	OC	1201	1218	2144	15	2159	0	30	113	20	163	48000
85	85	403600	OC	2935	2573	4366	81	4447	0	40	0	360	400	66400
516	516	403700	OC	1804	1908	2816	96	2912	0	95	45	430	570	61300
776	516	403700	OC	1198	1210	1893	3	1896	5	214	200	688	1107	61300

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
		Subtotal		*10387*	*10504*	*17894*	*530*	*18424*	*183*	*3220*	*2535*	*7874*	*13812*	
Rest of Downtown / Oakland Central - TOTAL				*17215*	*18672*	*34700*	*1874*	*36574*	*5359*	*32954*	*6873*	*30486*	*75672*	
REST OF SAN ANTONIO / FRUITVALE TO FRUITVALE AVE.														
Lower San Antonio														
539	539	405300	SA	1617	1553	3058	0	3058	15	89	377	120	601	51400
97	97	405400	SA	837	699	2175	7	2182	64	138	58	104	364	47000
737	97	405400	SA	639	426	1660	7	1667	52	60	85	134	331	47000
540	540	405400	SA	1009	966	2605	23	2628	0	15	16	46	77	47000
738	540	405400	SA	765	706	1875	118	1993	0	0	0	0	0	47000
543	543	405500	SA	947	925	2180	0	2180	0	0	9	10	19	49900
764	543	405500	SA	873	616	2011	0	2011	0	0	0	0	0	49900
101	101	405900	SA	798	577	2444	0	2444	0	0	6	65	71	48800
546	546	405900	SA	718	544	2153	45	2198	8	28	39	111	186	48800
547	547	405900	SA	426	335	1244	4	1248	0	25	95	83	203	50700
739	547	405900	SA	197	167	602	1	603	0	0	0	40	40	48800
548	548	405900	SA	497	439	1524	0	1524	0	0	6	68	74	48800
536	536	406000	OC	0	0	0	1	1	0	728	0	0	728	0
537	537	406000	SA	552	618	1415	0	1415	3	26	64	179	272	37300
538	538	406000	SA	507	359	1269	0	1269	153	166	105	364	788	37300
763	538	406000	SA	229	190	576	0	576	40	43	84	168	335	37300
545	545	406000	SA	97	67	243	0	243	136	146	126	275	683	37300
740	545	406000	SA	36	21	93	0	93	68	63	39	215	385	37300
105	105	406100	FV	828	488	1777	112	1889	163	128	95	244	630	49500
104	104	406200	SA	1369	1060	4528	79	4607	1	154	67	184	406	43400
552	552	406200	SA	840	693	2824	5	2829	0	0	8	22	30	43500
553	553	406200	SA	225	177	758	0	758	0	0	35	40	75	43500
		Subtotal		*14006*	*11626*	*37014*	*402*	*37416*	*703*	*1809*	*1314*	*2472*	*6298*	
Rest of San Antonio / Fruitvale to 580 and Fruitvale Ave.														
98	98	405200	SA	982	743	1523	0	1523	0	66	26	434	526	68900
541	541	405200	SA	1074	893	1661	3	1664	68	19	64	65	216	68900
542	542	405200	SA	1198	853	1856	0	1856	0	4	38	29	71	68900
96	96	405300	SA	1611	1632	2970	35	3005	0	40	70	53	163	51400
99	99	405600	SA	1843	1438	3774	0	3774	4	49	5	113	171	59400
549	549	405700	SA	581	436	1281	145	1426	0	116	134	2071	2321	47700
550	550	405700	SA	966	901	2370	0	2370	0	0	0	10	10	47700
102	102	405800	SA	1617	1320	4828	0	4828	0	0	0	21	21	50200
103	103	406300	SA	1548	1199	4322	133	4455	0	15	16	185	216	54700
551	551	406400	SA	809	679	1930	367	2297	0	79	26	349	454	71200
555	555	406100	FV	42	31	100	1	101	141	105	305	199	750	44800
554	554	406200	FV	834	698	2660	146	2806	3	72	89	429	593	43500
		Subtotal		*13105*	*10823*	*29275*	*830*	*30105*	*216*	*565*	*773*	*3958*	*5512*	
Rest of San Antonio / Fruitvale - TOTAL				**27111**	**22449**	**66289**	**1232**	**67521**	**919**	**2374**	**2087**	**6430**	**11810**	
GRAND TOTAL				**46787**	**43130**	**104928**	**3123**	**108051**	**8811**	**40287**	**11347**	**40460**	**100905**	

Source: Hausrath Economics Group

TABLE D.4-4c: 2010 OAKLAND CUMULATIVE SCENARIO FOR OAK TO 9TH PROJECT AND SURROUNDING AREAS

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
ESTUARY WATERFRONT														
Jack London District														
800	481	402000	OC	11	6	15	0	15	81	47	14	12	154	94100
801	481	402000	OC	48	30	72	0	72	0	53	0	4	57	79200
72	72	403200	OC	0	0	0	0	0	0	576	597	235	1408	0
736	72	403200	OC	2	1	2	0	2	0	173	1033	476	1682	56700
767	72	403200	OC	0	0	0	0	0	0	100	427	340	867	0
768	72	403200	OC	172	137	246	0	246	64	598	183	640	1485	96100
795	72	403200	OC	1	1	1	0	1	70	789	83	449	1391	56700
796	72	403200	OC	139	123	197	1	198	134	584	155	245	1118	86300
797	87	403300	OC	704	567	1006	1	1007	36	43	234	126	439	98400
798	87	403300	OC	416	311	603	0	603	110	53	33	78	274	98500
799	87	403300	OC	530	463	772	0	772	0	218	18	19	255	77800
		Subtotal		***2023***	***1639***	***2914***	***2***	***2916***	***495***	***3234***	***2777***	***2624***	***9130***	
Oak to 9th District														
87	87	403300	OC	0	0	0	0	0	72	294	50	43	459	0
95	95	406000	SA	1336	1110	1892	0	1892	91	16	175	220	502	97600
		Subtotal		***1336***	***1110***	***1892***	***0***	***1892***	***163***	***310***	***225***	***263***	***961***	
San Antonio / Fruitvale District														
100	100	406000	FV	276	214	455	0	455	410	299	49	296	1054	70200
544	544	406000	SA	39	37	61	10	71	240	219	178	700	1337	38600
345	345	406100	FV	92	58	210	0	210	532	166	308	75	1081	46900
621	621	406100	FV	659	506	1169	5	1174	340	80	16	90	526	73600
622	622	407300	AP	2	3	6	0	6	163	704	120	247	1234	42600
598	598	409000	AP	0	0	0	0	0	0	85	0	218	303	0
		Subtotal		***1068***	***818***	***1901***	***15***	***1916***	***1685***	***1553***	***671***	***1626***	***5535***	
Estuary Waterfront - TOTAL				***4427***	***3567***	***6707***	***17***	***6724***	***2343***	***5097***	***3673***	***4513***	***15626***	
REST OF DOWNTOWN / OAKLAND CENTRAL														
Downtown, Grand to 880														
802	68	402600	OC	343	324	749	0	749	10	55	0	103	168	64100
803	69	402700	OC	187	197	571	0	571	0	136	33	84	253	36300
70	70	402800	OC	965	747	1373	0	1373	0	27	149	276	452	85600
483	483	402800	OC	178	429	1012	32	1044	28	421	37	355	841	20300
484	484	402800	OC	0	0	0	0	0	36	365	87	735	1223	0
485	485	402800	OC	0	0	0	0	0	0	467	324	446	1237	0
486	486	402800	OC	20	45	115	0	115	5	717	107	990	1819	20300
487	487	402800	OC	0	1	2	0	2	0	745	0	117	862	20300
488	488	402800	OC	335	719	1565	262	1827	0	2426	35	363	2824	20300
74	74	402900	OC	34	44	91	0	91	97	800	155	1892	2944	48900
499	499	402900	OC	508	823	1392	0	1392	58	611	150	607	1426	48900
500	500	402900	OC	192	167	278	127	405	173	1502	249	1890	3814	91700
501	501	402900	OC	1	2	2	0	2	269	2077	100	2144	4590	48900
502	502	402900	OC	2	1	5	0	5	110	1451	109	818	2488	48900
503	503	402900	OC	0	1	1	6	7	590	4261	147	4018	9016	48900
73	73	403000	OC	56	43	149	0	149	404	132	485	156	1177	41200
494	494	403000	OC	239	221	396	10	406	169	76	202	148	595	71500
495	495	403000	OC	72	60	187	0	187	494	125	191	106	916	41200
496	496	403000	OC	547	648	1313	0	1313	168	908	520	1124	2720	47000
497	497	403000	OC	126	223	337	0	337	165	1467	292	1862	3786	41200
498	498	403000	OC	464	576	1083	0	1083	418	105	197	156	876	48400
71	71	403100	OC	80	116	230	1	231	71	66	234	989	1360	42500
489	489	403100	OC	289	241	410	0	410	175	2800	18	1090	4083	98500
490	490	403100	OC	0	0	0	0	0	1640	2308	339	4498	8785	0
491	491	403100	OC	329	343	789	0	789	152	56	116	77	401	57800
492	492	403100	OC	252	177	360	676	1036	0	436	26	97	559	21500
493	493	403100	OC	51	40	66	142	208	0	890	56	137	1083	21500
519	519	403300	OC	633	502	1274	0	1274	41	905	38	325	1309	61600
520	520	403300	OC	386	245	826	2	828	26	1675	38	221	1960	48700
521	521	403300	OC	259	141	508	42	550	0	1211	80	178	1469	48700
517	517	403400	OC	2507	2667	4374	68	4442	100	804	93	577	1574	66800
518	518	403400	OC	149	137	249	0	249	42	2167	33	231	2473	70700
		Subtotal		***9204***	***9880***	***19707***	***1368***	***21075***	***5441***	***32192***	***4640***	***26810***	***69083***	
Oakland Central, 580 to Grand														
56	56	401300	OC	294	299	560	212	772	6	450	367	1336	2159	39800
467	467	401300	OC	75	64	114	109	223	0	320	305	2191	2816	28600
468	468	401300	OC	200	275	602	9	611	0	140	30	320	490	28600
734	468	401300	OC	105	153	320	0	320	0	140	40	350	530	28600
469	469	401300	OC	438	563	1037	0	1037	10	140	67	447	664	42200
470	470	401300	OC	665	631	1136	0	1136	30	268	370	410	1078	79100
86	86	403400	OC	0	0	0	0	0	0	365	0	122	487	0
75	75	403500	OC	1193	1262	2085	0	2085	65	168	379	330	942	50200
735	75	403500	OC	791	652	1371	10	1381	17	154	345	325	841	50200
504	504	403500	OC	440	379	672	0	672	35	650	399	610	1694	81000
505	505	403500	OC	1252	1218	2172	15	2187	0	30	113	32	175	50200
85	85	403600	OC	3059	2573	4361	82	4443	0	40	0	360	400	69200
516	516	403700	OC	1880	1908	2813	96	2909	0	95	45	430	570	63700
776	516	403700	OC	1249	1210	1891	3	1894	5	235	200	750	1190	63700

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
		Subtotal		*11641*	*11187*	*19134*	*536*	*19670*	*168*	*3195*	*2660*	*8013*	*14036*	
Rest of Downtown / Oakland Central - TOTAL				*20845*	*21067*	*38841*	*1904*	*40745*	*5609*	*35387*	*7300*	*34823*	*83119*	
REST OF SAN ANTONIO / FRUITVALE TO FRUITVALE AVE.														
Lower San Antonio														
539	539	405300	SA	1685	1553	3055	0	3055	15	92	397	130	634	53500
97	97	405400	SA	873	699	2173	7	2180	64	138	66	106	374	49100
737	97	405400	SA	666	426	1658	7	1665	52	60	93	139	344	49100
540	540	405400	SA	1052	966	2602	23	2625	0	15	16	46	77	49100
738	540	405400	SA	798	706	1873	120	1993	0	0	0	0	0	49100
543	543	405500	SA	987	925	2177	0	2177	0	0	9	10	19	51200
764	543	405500	SA	910	616	2008	0	2008	0	0	0	0	0	51200
101	101	405900	SA	832	577	2441	0	2441	0	0	6	65	71	50400
546	546	405900	SA	748	544	2151	46	2197	8	28	39	111	186	50400
547	547	405900	SA	443	335	1243	4	1247	0	25	97	83	205	52500
739	547	405900	SA	205	167	601	1	602	0	0	0	40	40	50400
548	548	405900	SA	518	439	1522	0	1522	0	0	6	68	74	50400
536	536	406000	OC	0	0	0	1	1	0	728	0	0	728	0
537	537	406000	SA	576	618	1403	0	1403	3	26	69	184	282	38600
538	538	406000	SA	529	359	1258	0	1258	145	166	115	370	796	38600
763	538	406000	SA	239	190	571	0	571	38	43	92	172	345	38600
545	545	406000	SA	101	67	241	0	241	136	146	156	275	713	38600
740	545	406000	SA	38	21	92	0	92	68	63	39	215	385	38600
105	105	406100	FV	987	560	2035	114	2149	163	128	95	254	640	51100
104	104	406200	SA	1427	1060	4524	80	4604	1	154	67	184	406	44900
552	552	406200	SA	876	693	2822	5	2827	0	0	8	22	30	44900
553	553	406200	SA	234	177	757	0	757	0	0	35	40	75	44900
		Subtotal		*14724*	*11698*	*37207*	*408*	*37615*	*693*	*1812*	*1405*	*2514*	*6424*	
Rest of San Antonio / Fruitvale to 580 and Fruitvale Ave.														
98	98	405200	SA	1024	743	1521	0	1521	0	66	26	434	526	71900
541	541	405200	SA	1120	893	1660	3	1663	68	19	64	65	216	71900
542	542	405200	SA	1249	853	1855	0	1855	0	4	38	29	71	71900
96	96	405300	SA	1680	1632	2967	36	3003	0	40	70	53	163	53500
99	99	405600	SA	1982	1484	3889	0	3889	4	49	5	113	171	61000
549	549	405700	SA	605	436	1279	147	1426	0	116	134	2071	2321	49100
550	550	405700	SA	1007	901	2367	0	2367	0	0	0	10	10	49100
102	102	405800	SA	1686	1320	4825	0	4825	0	0	0	21	21	51600
103	103	406300	SA	1636	1216	4379	135	4514	0	15	16	185	216	56700
551	551	406400	SA	844	679	1927	373	2300	0	79	26	349	454	73400
555	555	406100	FV	45	32	102	1	103	141	105	305	199	750	46900
554	554	406200	FV	916	735	2799	148	2947	3	72	89	493	657	44900
		Subtotal		*13794*	*10924*	*29570*	*843*	*30413*	*216*	*565*	*773*	*4022*	*5576*	
Rest of San Antonio / Fruitvale - TOTAL				**28518**	**22622**	**66777**	**1251**	**68028**	**909**	**2377**	**2178**	**6536**	**12000**	
GRAND TOTAL				**53790**	**47256**	**112325**	**3172**	**115497**	**8861**	**42861**	**13151**	**45872**	**110745**	

Source: Hausrath Economics Group

TABLE D.4-4d: 2025 OAKLAND CUMULATIVE SCENARIO FOR OAK TO 9TH PROJECT AND SURROUNDING AREAS

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
ESTUARY WATERFRONT														
Jack London District														
800	481	402000	OC	12	6	15	0	15	41	25	14	172	252	106800
801	481	402000	OC	48	30	72	0	72	0	53	0	7	60	90600
72	72	403200	OC	0	0	0	0	0	0	729	597	382	1708	0
736	72	403200	OC	2	1	2	0	2	25	315	1055	741	2136	64700
767	72	403200	OC	0	0	0	0	0	0	194	490	617	1301	0
768	72	403200	OC	328	267	467	0	467	64	514	261	829	1668	111300
795	72	403200	OC	1	1	1	0	1	70	789	83	482	1424	64700
796	72	403200	OC	212	181	295	1	296	106	479	178	365	1128	103200
797	87	403300	OC	704	567	1006	1	1007	3	63	251	219	536	112600
798	87	403300	OC	728	571	1045	0	1045	28	136	81	248	493	112700
799	87	403300	OC	898	751	1257	0	1257	0	168	31	48	247	98600
		Subtotal		***2933***	***2375***	***4160***	***2***	***4162***	***337***	***3465***	***3041***	***4110***	***10953***	
Oak to 9th District														
87	87	403300	OC	115	96	163	0	163	72	294	50	43	459	112700
95	95	406000	SA	3291	2730	4654	0	4654	48	16	426	366	856	111900
		Subtotal		***3406***	***2826***	***4817***	***0***	***4817***	***120***	***310***	***476***	***409***	***1315***	
San Antonio / Fruitvale District														
100	100	406000	FV	588	406	908	0	908	330	269	119	370	1088	89000
544	544	406000	SA	43	37	56	10	66	240	239	203	820	1502	45800
345	345	406100	FV	101	58	209	0	209	442	166	375	275	1258	55900
621	621	406100	FV	839	602	1396	5	1401	220	40	31	130	421	86000
622	622	407300	AP	2	3	6	0	6	163	734	125	267	1289	51100
598	598	409000	AP	0	0	0	0	0	0	85	0	218	303	0
		Subtotal		***1573***	***1106***	***2575***	***15***	***2590***	***1395***	***1533***	***853***	***2080***	***5861***	
Estuary Waterfront - TOTAL				***7912***	***6307***	***11552***	***17***	***11569***	***1852***	***5308***	***4370***	***6599***	***18129***	
REST OF DOWNTOWN / OAKLAND CENTRAL														
Downtown, Grand to 880														
802	68	402600	OC	357	324	746	0	746	10	55	0	113	178	72800
803	69	402700	OC	298	274	695	0	695	0	110	28	126	264	57100
70	70	402800	OC	1320	1007	1854	0	1854	0	47	180	315	542	101800
483	483	402800	OC	823	1070	2430	32	2462	0	421	51	223	695	67500
484	484	402800	OC	0	0	0	0	0	36	385	97	815	1333	0
485	485	402800	OC	0	0	0	0	0	0	517	344	661	1522	0
486	486	402800	OC	21	45	114	0	114	5	727	137	1090	1959	22000
487	487	402800	OC	0	1	2	0	2	0	809	20	143	972	22000
488	488	402800	OC	461	796	1685	274	1959	0	2536	70	388	2994	29400
74	74	402900	OC	37	44	90	0	90	137	1273	195	2527	4132	54800
499	499	402900	OC	708	948	1595	0	1595	58	621	163	647	1489	62400
500	500	402900	OC	194	167	278	127	405	172	1982	279	2673	5106	104700
501	501	402900	OC	1	2	2	0	2	269	2087	113	2164	4633	54800
502	502	402900	OC	2	1	5	0	5	110	1481	129	918	2638	54800
503	503	402900	OC	0	1	1	6	7	590	4422	214	4268	9494	54800
73	73	403000	OC	62	43	148	0	148	404	138	495	182	1219	47700
494	494	403000	OC	516	447	779	10	789	169	76	227	108	580	90100
495	495	403000	OC	79	60	186	0	186	494	131	201	132	958	47700
496	496	403000	OC	591	648	1306	0	1306	168	952	545	1274	2939	54200
497	497	403000	OC	346	396	629	0	629	165	1467	332	1972	3936	69700
498	498	403000	OC	730	768	1403	0	1403	348	111	209	258	926	66400
71	71	403100	OC	245	250	457	1	458	11	79	269	1151	1510	74800
489	489	403100	OC	289	241	410	0	410	395	3221	18	2396	6030	112700
490	490	403100	OC	0	0	0	0	0	1640	2308	399	4548	8895	0
491	491	403100	OC	526	499	1052	0	1052	52	36	141	167	396	75800
492	492	403100	OC	478	345	644	706	1350	0	456	26	117	599	59800
493	493	403100	OC	148	117	197	148	345	0	1290	76	414	1780	72500
519	519	403300	OC	679	502	1267	0	1267	20	905	49	375	1349	71800
520	520	403300	OC	654	437	1147	2	1149	25	1736	42	249	2052	75300
521	521	403300	OC	1091	813	1647	44	1691	0	1271	90	218	1579	103100
517	517	403400	OC	2717	2667	4347	71	4418	98	804	103	735	1740	75700
518	518	403400	OC	399	338	590	0	590	41	2387	34	281	2743	90900
		Subtotal		***13772***	***13251***	***25706***	***1421***	***27127***	***5417***	***34841***	***5276***	***31648***	***77182***	
Oakland Central, 580 to Grand														
56	56	401300	OC	317	299	557	221	778	6	455	377	1366	2204	45400
467	467	401300	OC	82	64	113	114	227	0	325	315	2236	2876	32500
468	468	401300	OC	220	275	598	9	607	0	145	35	335	515	32500
734	468	401300	OC	116	153	318	0	318	0	145	45	365	555	32500
469	469	401300	OC	776	824	1477	0	1477	10	140	67	467	684	63900
470	470	401300	OC	677	631	1134	0	1134	20	268	420	440	1148	90500
86	86	403400	OC	0	0	0	0	0	0	385	0	127	512	0
75	75	403500	OC	1312	1262	2071	0	2071	65	173	394	350	982	58500
735	75	403500	OC	869	652	1362	10	1372	17	159	360	345	881	58500
504	504	403500	OC	1788	1490	2559	0	2559	25	650	417	630	1722	107700
505	505	403500	OC	1376	1218	2157	15	2172	0	34	113	42	189	58500
85	85	403600	OC	3363	2573	4333	85	4418	0	40	0	335	375	80200
516	516	403700	OC	2067	1908	2863	96	2959	0	95	49	450	594	74300
776	516	403700	OC	1373	1210	1925	3	1928	5	235	210	790	1240	74300

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
		Subtotal		*14336*	*12559*	*21467*	*553*	*22020*	*148*	*3249*	*2802*	*8278*	*14477*	
Rest of Downtown / Oakland Central - TOTAL				*28108*	*25810*	*47173*	*1974*	*49147*	*5565*	*38090*	*8078*	*39926*	*91659*	
REST OF SAN ANTONIO / FRUITVALE TO FRUITVALE AVE.														
Lower San Antonio														
539	539	405300	SA	1878	1575	3080	0	3080	15	95	417	148	675	62300
97	97	405400	SA	960	699	2159	7	2166	64	141	78	112	395	55700
737	97	405400	SA	733	426	1647	7	1654	52	60	109	149	370	55700
540	540	405400	SA	1156	966	2585	24	2609	0	15	16	48	79	55700
738	540	405400	SA	877	706	1861	126	1987	0	0	0	0	0	55700
543	543	405500	SA	1085	925	2162	0	2162	0	0	9	10	19	58700
764	543	405500	SA	1000	616	1994	0	1994	0	0	0	0	0	58700
101	101	405900	SA	922	582	2447	0	2447	0	0	6	72	78	58300
546	546	405900	SA	823	544	2137	48	2185	6	29	43	121	199	58300
547	547	405900	SA	557	385	1364	4	1368	0	26	107	93	226	63500
739	547	405900	SA	225	167	598	1	599	0	0	0	40	40	58300
548	548	405900	SA	570	439	1512	0	1512	0	0	6	72	78	58300
536	536	406000	OC	0	0	0	1	1	0	718	10	20	748	0
537	537	406000	SA	920	858	1720	0	1720	3	25	79	104	211	60400
538	538	406000	SA	718	447	1410	0	1410	143	171	139	425	878	50600
763	538	406000	SA	263	190	533	0	533	36	46	107	182	371	45800
545	545	406000	SA	111	67	225	0	225	136	170	161	307	774	45800
740	545	406000	SA	42	21	86	0	86	68	65	39	226	398	45800
105	105	406100	FV	1074	560	2023	119	2142	143	128	105	284	660	60400
104	104	406200	SA	1584	1070	4537	83	4620	1	160	77	198	436	52100
552	552	406200	SA	963	693	2803	5	2808	0	0	8	22	30	52100
553	553	406200	SA	258	177	752	0	752	0	0	43	50	93	52100
		Subtotal		*16719*	*12113*	*37635*	*425*	*38060*	*667*	*1849*	*1559*	*2683*	*6758*	
Rest of San Antonio / Fruitvale to 580 and Fruitvale Ave.														
98	98	405200	SA	1126	743	1511	0	1511	0	70	28	466	564	83800
541	541	405200	SA	1231	893	1649	3	1652	68	19	70	85	242	83800
542	542	405200	SA	1373	853	1842	0	1842	0	4	40	31	75	83800
96	96	405300	SA	1847	1632	2948	38	2986	0	40	78	55	173	62300
99	99	405600	SA	2178	1484	3862	0	3862	4	49	5	120	178	70400
549	549	405700	SA	666	436	1271	153	1424	0	123	140	2101	2364	56600
550	550	405700	SA	1107	901	2353	0	2353	0	0	0	11	11	56600
102	102	405800	SA	1889	1346	4874	0	4874	0	0	0	24	24	59500
103	103	406300	SA	1798	1216	4348	141	4489	0	15	22	205	242	65600
551	551	406400	SA	929	679	1909	390	2299	0	79	30	379	488	84500
555	555	406100	FV	49	32	101	1	102	100	105	320	239	764	55900
554	554	406200	FV	1007	735	2781	154	2935	3	76	101	523	703	52100
		Subtotal		*15200*	*10950*	*29449*	*880*	*30329*	*175*	*580*	*834*	*4239*	*5828*	
Rest of San Antonio / Fruitvale - TOTAL				**31919**	**23063**	**67084**	**1305**	**68389**	**842**	**2429**	**2393**	**6922**	**12586**	
GRAND TOTAL				**67939**	**55180**	**125809**	**3296**	**129105**	**8259**	**45827**	**14841**	**53447**	**122374**	

Source: Hausrath Economics Group

TABLE D.4-4e: 2000-2025 OAKLAND CUMULATIVE SCENARIO FOR OAK TO 9TH PROJECT AND SURROUNDING AREAS

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
ESTUARY WATERFRONT														
Jack London District														
800	481	402000	OC	1	0	0	0	0	-40	-22	0	160	98	25900
801	481	402000	OC	42	27	62	0	62	0	50	0	3	53	9700
72	72	403200	OC	0	0	0	0	0	0	162	379	201	742	0
736	72	403200	OC	0	0	0	0	0	25	243	531	560	1359	14100
767	72	403200	OC	0	0	0	0	0	0	79	166	307	552	0
768	72	403200	OC	320	259	456	0	456	0	16	163	423	602	60700
795	72	403200	OC	0	0	0	0	0	0	76	-27	259	308	14100
796	72	403200	OC	178	145	247	0	247	-28	-148	109	111	44	52600
797	87	403300	OC	703	566	1004	0	1004	-68	40	62	195	229	66800
798	87	403300	OC	728	571	1045	0	1045	-203	82	52	216	147	66900
799	87	403300	OC	686	559	952	0	952	0	-48	13	30	-5	52800
		Subtotal		***2658***	***2127***	***3766***	***0***	***3766***	***-314***	***530***	***1448***	***2465***	***4129***	
Oak to 9th District														
87	87	403300	OC	115	96	163	0	163	0	0	0	0	0	112700
95	95	406000	SA	3271	2713	4621	0	4621	-58	-103	363	286	488	75800
		Subtotal		***3386***	***2809***	***4784***	***0***	***4784***	***-58***	***-103***	***363***	***286***	***488***	
San Antonio / Fruitvale District														
100	100	406000	FV	545	336	800	0	800	-127	-43	91	159	80	52900
544	544	406000	SA	7	0	-4	0	-4	0	22	65	255	342	9700
345	345	406100	FV	13	0	0	0	0	-90	20	175	200	305	12400
621	621	406100	FV	591	395	808	0	808	-226	-62	5	40	-243	42500
622	622	407300	AP	0	0	0	0	0	-20	45	25	40	90	11800
598	598	409000	AP	0	0	0	0	0	0	0	0	0	0	0
		Subtotal		***1156***	***731***	***1604***	***0***	***1604***	***-463***	***-18***	***361***	***694***	***574***	
Estuary Waterfront - TOTAL				***7200***	***5667***	***10154***	***0***	***10154***	***-835***	***409***	***2172***	***3445***	***5191***	
REST OF DOWNTOWN / OAKLAND CENTRAL														
Downtown, Grand to 880														
802	68	402600	OC	224	168	326	0	326	0	0	0	10	10	41800
803	69	402700	OC	114	77	113	0	113	0	-26	-5	42	11	24000
70	70	402800	OC	1306	981	1807	-5	1802	0	47	105	231	383	82500
483	483	402800	OC	653	641	1841	0	1841	-43	318	34	-170	139	48200
484	484	402800	OC	0	0	0	0	0	0	20	27	80	127	0
485	485	402800	OC	0	0	0	0	0	0	395	84	561	1040	0
486	486	402800	OC	2	0	47	0	47	0	160	102	626	888	2700
487	487	402800	OC	0	0	1	0	1	0	84	20	93	197	2700
488	488	402800	OC	142	77	774	16	790	-20	976	30	228	1214	10100
74	74	402900	OC	5	0	14	0	14	40	583	60	805	1488	15500
499	499	402900	OC	223	125	432	0	432	0	18	28	315	361	23100
500	500	402900	OC	175	144	250	110	360	39	892	40	1639	2610	65400
501	501	402900	OC	0	0	0	0	0	0	20	13	30	63	15500
502	502	402900	OC	0	0	1	0	1	80	1281	69	565	1995	15500
503	503	402900	OC	0	0	0	6	6	50	978	67	694	1789	15500
73	73	403000	OC	8	0	8	0	8	-45	6	20	40	21	14600
494	494	403000	OC	461	377	648	0	648	-7	-2	35	-84	-58	57000
495	495	403000	OC	11	0	10	0	10	-25	-1	10	40	24	14600
496	496	403000	OC	166	84	204	0	204	-10	71	70	306	437	21100
497	497	403000	OC	228	183	323	0	323	0	59	65	447	571	36600
498	498	403000	OC	395	286	534	0	534	-90	-1	12	122	43	33300
71	71	403100	OC	212	172	325	0	325	-60	25	35	250	250	55100
489	489	403100	OC	289	241	410	0	410	395	721	18	2356	3490	112700
490	490	403100	OC	0	0	0	0	0	135	425	75	1500	2135	0
491	491	403100	OC	434	350	685	0	685	-150	-35	49	90	-46	56100
492	492	403100	OC	238	168	356	40	396	0	20	0	20	40	40100
493	493	403100	OC	99	77	144	8	152	-70	-550	50	297	-273	52800
519	519	403300	OC	219	168	424	0	424	-21	300	-2	120	397	26000
520	520	403300	OC	276	192	456	0	456	-1	71	-9	37	98	29500
521	521	403300	OC	837	672	1222	3	1225	0	71	10	46	127	57300
517	517	403400	OC	707	331	870	4	874	-2	0	18	193	209	17700
518	518	403400	OC	312	249	437	0	437	-3	220	1	50	268	32900
		Subtotal		***7736***	***5763***	***12662***	***182***	***12844***	***192***	***7146***	***1131***	***11579***	***20048***	
Oakland Central, 580 to Grand														
56	56	401300	OC	104	59	126	12	138	0	5	137	90	232	18900
467	467	401300	OC	11	0	6	7	13	0	5	35	100	140	6000
468	468	401300	OC	30	0	34	0	34	-7	-15	5	15	-2	6000
734	468	401300	OC	16	0	18	0	18	-7	-15	5	15	-2	6000
469	469	401300	OC	538	401	761	0	761	-18	-20	17	17	-4	37400
470	470	401300	OC	555	441	767	0	767	-77	-122	232	-30	3	64000
86	86	403400	OC	0	0	0	0	0	0	45	0	17	62	0
75	75	403500	OC	175	0	82	0	82	0	5	25	50	80	11200
735	75	403500	OC	115	0	54	0	54	0	5	35	35	75	11200
504	504	403500	OC	1645	1353	2310	0	2310	-15	0	57	70	112	60400
505	505	403500	OC	183	0	85	0	85	0	4	93	22	119	11200
85	85	403600	OC	448	0	14	4	18	0	0	0	-25	-25	18000
516	516	403700	OC	276	0	107	56	163	0	0	4	50	54	14300
776	516	403700	OC	183	0	72	0	72	0	25	10	115	150	14300

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
		Subtotal		*4279*	*2254*	*4436*	*79*	*4515*	*-124*	*-78*	*655*	*541*	*994*	
Rest of Downtown / Oakland Central - TOTAL				*12015*	*8017*	*17098*	*261*	*17359*	*68*	*7068*	*1786*	*12120*	*21042*	
REST OF SAN ANTONIO / FRUITVALE TO FRUITVALE AVE.														
Lower San Antonio														
539	539	405300	SA	319	110	185	0	185	0	7	82	33	122	11300
97	97	405400	SA	129	0	7	0	7	-5	3	28	10	36	12500
737	97	405400	SA	98	0	5	0	5	-5	0	34	15	44	12500
540	540	405400	SA	154	0	8	1	9	0	0	0	3	3	12500
738	540	405400	SA	117	0	6	8	14	0	0	0	0	0	12500
543	543	405500	SA	144	0	5	0	5	0	0	0	0	0	9800
764	543	405500	SA	133	0	4	0	4	0	0	0	0	0	9800
101	101	405900	SA	129	5	28	0	28	0	0	0	7	7	10300
546	546	405900	SA	110	0	6	3	9	-3	1	4	13	15	10300
547	547	405900	SA	169	74	185	0	185	0	2	17	13	32	15500
739	547	405900	SA	30	0	2	0	2	0	0	0	0	0	10300
548	548	405900	SA	76	0	4	0	4	0	0	0	5	5	10300
536	536	406000	OC	0	0	0	0	0	0	-20	10	20	10	0
537	537	406000	SA	397	298	420	0	420	-2	-1	20	-70	-53	24300
538	538	406000	SA	231	88	163	0	163	-18	5	44	67	98	14500
763	538	406000	SA	36	0	-33	0	-33	-6	3	31	16	44	9700
545	545	406000	SA	15	0	-14	0	-14	-6	24	35	32	85	9700
740	545	406000	SA	6	0	-5	0	-5	-3	2	0	11	10	9700
105	105	406100	FV	368	145	447	7	454	-12	-15	10	135	118	16900
104	104	406200	SA	225	10	57	4	61	0	8	12	16	36	10300
552	552	406200	SA	129	0	9	0	9	0	0	0	0	0	10300
553	553	406200	SA	35	0	2	0	2	0	0	8	10	18	10300
		Subtotal		*3050*	*730*	*1491*	*23*	*1514*	*-60*	*19*	*335*	*336*	*630*	
Rest of San Antonio / Fruitvale to 580 and Fruitvale Ave.														
98	98	405200	SA	150	0	4	0	4	0	5	2	34	41	18700
541	541	405200	SA	164	0	5	0	5	0	0	6	24	30	18700
542	542	405200	SA	183	0	5	0	5	0	0	2	3	5	18700
96	96	405300	SA	263	17	40	3	43	0	4	28	5	37	11300
99	99	405600	SA	347	46	128	0	128	0	1	1	9	11	12700
549	549	405700	SA	89	0	4	8	12	0	9	5	54	68	9800
550	550	405700	SA	148	0	8	0	8	0	0	0	3	3	9800
102	102	405800	SA	283	26	97	0	97	0	0	0	4	4	11000
103	103	406300	SA	261	17	71	8	79	0	0	8	27	35	14500
551	551	406400	SA	125	0	0	23	23	0	2	7	35	44	15600
555	555	406100	FV	8	1	3	0	3	-41	0	15	70	44	12400
554	554	406200	FV	179	37	149	8	157	0	4	17	94	115	10300
		Subtotal		*2200*	*144*	*514*	*50*	*564*	*-41*	*25*	*91*	*362*	*437*	
Rest of San Antonio / Fruitvale - TOTAL				**5250**	**874**	**2005**	**73**	**2078**	**-101**	**44**	**426**	**698**	**1067**	
GRAND TOTAL				**24465**	**14558**	**29257**	**334**	**29591**	**-868**	**7521**	**4384**	**16263**	**27300**	

Source: Hausrath Economics Group

TABLE D.4-4f: 2005-2025 OAKLAND CUMULATIVE SCENARIO FOR OAK TO 9TH PROJECT AND SURROUNDING AREAS

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
ESTUARY WATERFRONT														
Jack London District														
800	481	402000	OC	1	0	0	0	0	-40	-22	0	160	98	19900
801	481	402000	OC	0	0	0	0	0	0	0	0	3	3	14600
72	72	403200	OC	0	0	0	0	0	0	162	379	201	742	0
736	72	403200	OC	0	0	0	0	0	25	212	582	608	1427	11000
767	72	403200	OC	0	0	0	0	0	0	79	166	277	522	0
768	72	403200	OC	283	236	401	0	401	0	16	130	423	569	27700
795	72	403200	OC	0	0	0	0	0	0	10	0	53	63	11000
796	72	403200	OC	178	145	246	0	246	-28	-105	23	154	44	49500
797	87	403300	OC	108	90	153	0	153	-68	20	17	123	92	18700
798	87	403300	OC	312	260	442	0	442	-112	82	52	203	225	18700
799	87	403300	OC	368	288	485	0	485	0	-50	13	29	-8	24000
		Subtotal		***1250***	***1019***	***1727***	***0***	***1727***	***-223***	***404***	***1362***	***2234***	***3777***	
Oak to 9th District														
87	87	403300	OC	115	96	163	0	163	0	0	0	0	0	112700
95	95	406000	SA	3271	2713	4621	0	4621	-58	-43	368	200	467	74600
		Subtotal		***3386***	***2809***	***4784***	***0***	***4784***	***-58***	***-43***	***368***	***200***	***467***	
San Antonio / Fruitvale District														
100	100	406000	FV	544	336	798	0	798	-120	-50	91	154	75	51700
544	544	406000	SA	6	0	-5	0	-5	0	20	65	197	282	8500
345	345	406100	FV	13	0	-3	0	-3	-90	20	67	200	197	11100
621	621	406100	FV	252	134	312	0	312	-180	-40	15	40	-165	16100
622	622	407300	AP	0	0	0	0	0	-10	38	15	30	73	10600
598	598	409000	AP	0	0	0	0	0	0	0	0	0	0	0
		Subtotal		***815***	***470***	***1102***	***0***	***1102***	***-400***	***-12***	***253***	***621***	***462***	
Estuary Waterfront - TOTAL				***5451***	***4298***	***7613***	***0***	***7613***	***-681***	***349***	***1983***	***3055***	***4706***	
REST OF DOWNTOWN / OAKLAND CENTRAL														
Downtown, Grand to 880														
802	68	402600	OC	77	48	78	0	78	0	0	0	10	10	14800
803	69	402700	OC	118	77	107	0	107	0	-26	-5	42	11	22600
70	70	402800	OC	1320	1007	1854	0	1854	0	20	105	174	299	101800
483	483	402800	OC	652	641	1421	0	1421	-28	0	14	-132	-146	47500
484	484	402800	OC	0	0	0	0	0	0	20	27	80	127	0
485	485	402800	OC	0	0	0	0	0	0	85	55	315	455	0
486	486	402800	OC	2	0	-1	0	-1	0	10	30	100	140	2000
487	487	402800	OC	0	0	0	0	0	0	64	20	26	110	2000
488	488	402800	OC	139	77	125	16	141	-20	960	30	5	975	9400
74	74	402900	OC	5	0	0	0	0	40	483	50	655	1228	8000
499	499	402900	OC	221	125	216	0	216	0	10	13	40	63	15600
500	500	402900	OC	175	144	245	0	245	39	892	40	1596	2567	57900
501	501	402900	OC	0	0	0	0	0	0	20	13	30	63	8000
502	502	402900	OC	0	0	0	0	0	80	1081	69	565	1795	8000
503	503	402900	OC	0	0	0	6	6	50	578	67	1094	1789	8000
73	73	403000	OC	8	0	-1	0	-1	0	6	20	26	52	10100
494	494	403000	OC	461	377	640	0	640	0	0	35	-98	-63	52500
495	495	403000	OC	10	0	-1	0	-1	0	6	10	26	42	10100
496	496	403000	OC	63	0	-7	0	-7	0	61	45	171	277	10800
497	497	403000	OC	225	173	292	0	292	0	58	46	426	530	32100
498	498	403000	OC	393	286	480	0	480	-70	6	22	115	73	28800
71	71	403100	OC	166	134	227	0	227	-60	25	35	250	250	33900
489	489	403100	OC	289	241	410	0	410	220	421	8	1306	1955	112700
490	490	403100	OC	0	0	0	0	0	135	425	100	1475	2135	0
491	491	403100	OC	300	239	404	0	404	-100	-20	25	90	-5	28800
492	492	403100	OC	236	168	284	40	324	0	20	0	20	40	39100
493	493	403100	OC	99	77	131	8	139	-20	-450	20	277	-173	51800
519	519	403300	OC	221	130	165	0	165	-21	0	11	50	40	24500
520	520	403300	OC	284	192	281	0	281	-1	61	4	28	92	28000
521	521	403300	OC	842	672	1114	3	1117	0	71	10	46	127	55800
517	517	403400	OC	384	74	95	4	99	-2	0	18	178	194	12100
518	518	403400	OC	254	201	341	0	341	-1	220	1	50	270	23000
		Subtotal		***6944***	***5083***	***8900***	***77***	***8977***	***241***	***5107***	***938***	***9036***	***15322***	
Oakland Central, 580 to Grand														
56	56	401300	OC	32	0	0	12	12	0	5	87	60	152	7300
467	467	401300	OC	10	0	0	7	7	0	5	20	75	100	5300
468	468	401300	OC	28	0	1	0	1	0	5	5	15	25	5300
734	468	401300	OC	15	0	0	0	0	0	5	5	15	25	5300
469	469	401300	OC	348	261	445	0	445	0	0	10	20	30	23600
470	470	401300	OC	554	441	745	0	745	-20	-46	44	-20	-42	63300
86	86	403400	OC	0	0	0	0	0	0	20	0	5	25	0
75	75	403500	OC	167	0	13	0	13	0	5	25	40	70	10500
735	75	403500	OC	110	0	9	0	9	0	5	25	30	60	10500
504	504	403500	OC	1644	1353	2301	0	2301	-15	0	32	45	62	59700
505	505	403500	OC	175	0	13	0	13	0	4	0	22	26	10500
85	85	403600	OC	428	0	-33	4	-29	0	0	0	-25	-25	13800

OAK TAZ	CMA TAZ	CENSUS TRACT	PLAN DIST	EMPLYD RSDNTS	HOUSE HOLDS	HH POP	GROUP POP	TOT POP	MFG JOBS	OTHER JOBS	RETAIL JOBS	SERVICE JOBS	TOTAL JOBS	MEAN HH INCOME
516	516	403700	OC	263	0	47	0	47	0	0	4	20	24	13000
776	516	403700	OC	175	0	32	0	32	0	21	10	102	133	13000
		Subtotal		***3949***	***2055***	***3573***	***23***	***3596***	***-35***	***29***	***267***	***404***	***665***	
Rest of Downtown / Oakland Central - TOTAL				***10893***	***7138***	***12473***	***100***	***12573***	***206***	***5136***	***1205***	***9440***	***15987***	
REST OF SAN ANTONIO / FRUITVALE TO FRUITVALE AVE.														
Lower San Antonio														
539	539	405300	SA	261	22	22	0	22	0	6	40	28	74	10900
97	97	405400	SA	123	0	-16	0	-16	0	3	20	8	31	8700
737	97	405400	SA	94	0	-13	0	-13	0	0	24	15	39	8700
540	540	405400	SA	147	0	-20	1	-19	0	0	0	2	2	8700
738	540	405400	SA	112	0	-14	8	-6	0	0	0	0	0	8700
543	543	405500	SA	138	0	-18	0	-18	0	0	0	0	0	8800
764	543	405500	SA	127	0	-17	0	-17	0	0	0	0	0	8800
101	101	405900	SA	124	5	3	0	3	0	0	0	7	7	9500
546	546	405900	SA	105	0	-16	3	-13	-2	1	4	10	13	9500
547	547	405900	SA	131	50	120	0	120	0	1	12	10	23	12800
739	547	405900	SA	28	0	-4	0	-4	0	0	0	0	0	9500
548	548	405900	SA	73	0	-12	0	-12	0	0	0	4	4	9500
536	536	406000	OC	0	0	0	0	0	0	-10	10	20	20	0
537	537	406000	SA	368	240	305	0	305	0	-1	15	-75	-61	23100
538	538	406000	SA	211	88	141	0	141	-10	5	34	61	90	13300
763	538	406000	SA	34	0	-43	0	-43	-4	3	23	14	36	8500
545	545	406000	SA	14	0	-18	0	-18	0	24	35	32	91	8500
740	545	406000	SA	6	0	-7	0	-7	0	2	0	11	13	8500
105	105	406100	FV	246	72	246	7	253	-20	0	10	40	30	10900
104	104	406200	SA	215	10	9	4	13	0	6	10	14	30	8700
552	552	406200	SA	123	0	-21	0	-21	0	0	0	0	0	8600
553	553	406200	SA	33	0	-6	0	-6	0	0	8	10	18	8600
		Subtotal		***2713***	***487***	***621***	***23***	***644***	***-36***	***40***	***245***	***211***	***460***	
Rest of San Antonio / Fruitvale to 580 and Fruitvale Ave.														
98	98	405200	SA	144	0	-12	0	-12	0	4	2	32	38	14900
541	541	405200	SA	157	0	-12	0	-12	0	0	6	20	26	14900
542	542	405200	SA	175	0	-14	0	-14	0	0	2	2	4	14900
96	96	405300	SA	236	0	-22	3	-19	0	0	8	2	10	10900
99	99	405600	SA	335	46	88	0	88	0	0	0	7	7	11000
549	549	405700	SA	85	0	-10	8	-2	0	7	6	30	43	8900
550	550	405700	SA	141	0	-17	0	-17	0	0	0	1	1	8900
102	102	405800	SA	272	26	46	0	46	0	0	0	3	3	9300
103	103	406300	SA	250	17	26	8	34	0	0	6	20	26	10900
551	551	406400	SA	120	0	-21	23	2	0	0	4	30	34	13300
555	555	406100	FV	7	1	1	0	1	-41	0	15	40	14	11100
554	554	406200	FV	173	37	121	8	129	0	4	12	94	110	8600
		Subtotal		***2095***	***127***	***174***	***50***	***224***	***-41***	***15***	***61***	***281***	***316***	
Rest of San Antonio / Fruitvale - TOTAL				**4808**	**614**	**795**	**73**	**868**	**-77**	**55**	**306**	**492**	**776**	
GRAND TOTAL				**21152**	**12050**	**20881**	**173**	**21054**	**-552**	**5540**	**3494**	**12987**	**21469**	

Source: Hausrath Economics Group

TABLE D.4-5a
OAKLAND CUMULATIVE GROWTH SCENARIO
ASSUMPTIONS FOR HOUSING PROJECTS IN AREAS INCLUDING AND SURROUNDING OAK TO 9TH PROJECT EXCLUSIVE OF DOWNTOWN / OAKLAND CENTRAL
OAK TO 9TH PROJECT EIR - NOVEMBER 2004

/a/	Project	Time Period	Change /b/	Oak TAZ	CMA TAZ	Plan Dist	Units	House Holds /c/	Special Factor	Location	Status /d/	Comments/Status /e/
	PROJECTS TO BE COMPLETED 2000 - 2005 (Post Census 2000)											
C	Cotton Mill Studios (work/live)	1		105	105	FV	74	73	LOFT-2	1091 Calcot	2	Under construction 3/04; conversion of historic building to live-work
x	Water Park Lofts	1		621	621	FV	27	26	DT-1	2875 Glascock	1	Completed (Signature)
O	Derby/Live-Work / Boathouse Lofts	1	C	621	621	FV	35	34	LOFT-2	400-450 Derby St.	1	Adaptive reuse; completed
x	Glascock Lofts, The Estuary	1		621	621	FV	100	96	DT-1	2893 Glascock @ Derby (2 blocks)	2	Under construction 2004 (Signature)
O	Chapman Street	1	N	621	621	FV	8	8	LOFT-2	Chapman / Derby to Lancaster	2	Under construction (HEG est. of units)
O	Ford/Lancaster	1	N	621	621	FV	20	19	LOFT-2	Corner Ford + Lancaster	2	Under construction (HEG est. of units)
O	Ford Street Lofts / Harbor Walk	1	T	621	621	FV	81	78	DT-1	3041, 3061, 3065 Ford / Lancaster to Glasscock	2	Under construction 2004 (Signature)
x	Lakeview Court	1		96	96	SA	18	17		E. 18th St. & Athol	1	Completed 2002
x	Evergreen Annex/Irene Cooper Terrace	1		537	537	SA	40	39	SENIOR	1218 2nd Ave.	1	Completed 2000; senior housing
O	E. 12th St. @ 4th Ave.	1	N	537	537	SA	20	19		E. 12th St. @ 4th Ave.	1	Completed (HEG est. of units)
O	Oak Park Homes / affordable rental	1	N	539	539	SA	35	34		2616 E. 16th St.	2	Under construction 2004
O	Lake Merritt Apartments / senior rental	1	N	539	539	SA	55	54	SENIOR	1417 1st Ave.	1	Completed 2004
O	District Homes	1	N	547	547	SA	25	24	TV-1	1515 14th Ave.	1	Completed 2004 (HEG est. of units)
	PROJECTS TO BE COMPLETED 2000 - 2005 TOTAL						**538**	**521**				
	PROJECTS TO BE COMPLETED 2005 - 2010											
O	Embarcadero Cove	2	N	100	100	FV	150	144	NEW-1	1820-1830 Embarcadero + 945 22nd St.	5	Predevelopment; small lot single-family
x	1091 Calcot	2		105	105	FV	73	72		1091 Calcot	4	In site acquisition for affordable project as of 7/1/02
O	Seven Directions	2	C	554	554	FV	38	37		2946 International Blvd.	3	Approved 10/03
x	AACWA-homeownership	2		555	555	FV	1	1		1230 31st Ave.	4	Predevelopment 7/1/02; funded affordable project
O	Fruitvale Waterfront / Kennedy Tract	2	N	621	621	FV	40	38	NEW-2			Additional infill; smaller sites
O	Oak to 9th Project - Phass 1, 2, 3	2	N	95	95	SA	1,139	1,093	PROJ	Oak to 9th Parcels A,F,G,B,C	5	Predevelopment 2004; see project tables for more detail
x	1173 28th St.	2		99	99	SA	47	46		1173 28th St.	4	In site acquisition for affordable project as of 7/1/02
O	Sausal Creek	2	N	103	103	SA	17	17		2464 26th Ave.	5	In predevelopment 2004; affordable housing
	PROJECTS TO BE COMPLETED 2005 - 2010 TOTAL						**1,505**	**1,448**				
	PROJECTS TO BE COMPLETED 2010 - 2020											
O	Con Agra Site or nearby	3	T	100	100	FV	200	192	NEW-1		7	Opportunity Site
O	Fruitvale Waterfront / Kennedy Tract	3	T	621	621	FV	100	96	NEW-2		7	Additional infill; possible larger site

/a/	Project	Time Period	Change /b/	Oak TAZ	CMA TAZ	Plan Dist	Units	House Holds /c/	Special Factor	Location	Status /d/	Comments/Status /e/
O	Fifth Avenue / Oak to 9th	3	N	95	95	SA	25	25	PROJ	Fifth Avenue Artisans Area	7	Intensification/infill under Estuary Policy Plan
O	Oak to 9th Project - Phases 4, 5, 6, 7	3	N	95	95	SA	1,661	1,595	PROJ	Oak to 9th Parcels D,E,H,J,K,L,M	5	Predevelopment 2004; also see Downtown Projects List for 300 units in TAZ 799 west of the channel.
O	EO-42/E. 22nd	3	C	102	102	SA	7	7		2202 E. 22nd St.	7	Housing Opportunity Site
x	Channel Area	3		537	537	SA	250	240	DT-2	Oak/5th Ave/Embarcadero/12th St.	7	Housing Opportunity Site DT-28
O	EO-45/E. 10th	3	C	538	538	SA	14	13		1000 E. 10th St. at 9th Ave; 1002, 920, 926 E. 10th	7	Housing Opportunity Site
O	E. 12th Street	3	N	538	538	SA	50	48	TV-1	E. 12th St. / 8th to 14th Aves.		Additional infill here or in vicinity
x	EO-47/E. 15th St. + 14th Ave.	3		547	547	SA	13	12		E. 15th St. + 14th Ave.	7	Housing Opportunity Site
O	14th Avenue	3	N	547	547	SA	40	38	TV-1	14th Ave. in vicinity of E. 14th, E. 15th, + Fruitvale Streets		Additional infill in vicinity
	PROJECTS TO BE COMPLETED 2010 - 2020 TOTAL						**2,360**	**2,266**				
	PROJECTS TO BE COMPLETED 2020 - 2025											
O	EO-43 / 23rd Ave.	4	C	101	101	SA	5	5		2141 23rd Ave.	7	Housing Opportunity Site
O	EO-44 / 23rd Ave.	4	C	102	102	SA	20	19		E. 23rd St. + 23rd Ave.	7	Housing Opportunity Site
x	EO-41 / Foothill	4		104	104	SA	10	10		2301 Foothill Blvd.	7	Housing Opportunity Site
O	EO-46 / 8th Ave.	4	C	538	538	SA	28	27		1100 8th Ave. @ E. 11th St.	7	Housing Opportunity Site
x	EO-48 / International	4		539	539	SA	7	7		252 International Blvd @ 3rd Ave.	7	Housing Opportunity Site
x	EO-49 / 1st	4		539	539	SA	16	15		1420 1st Ave.	7	Housing Opportunity Site
	PROJECTS TO BE COMPLETED 2020 - 2025 TOTAL						**86**	**83**				
	TOTAL 2000 - 2025						**4,489**	**4,318**				

NOTE: The Oak to 9th Project also includes 300 units to be developed west of the channel in TAZ 799 in the downtown area. That portion of the project is included on the Housing Projects List for the Downtown/Oakland Central area.

/a/ 'X' in first column indicates updated assumptions compared to original 11/21/00 Cumulative Scenario. 'U' indicates updated assumptions for Uptown Project EIR, May 2003. 'C' indicates updated assumptions for Central Station Project, December 2003. 'O' indicates updated assumptions for Oak to 9th EIR, November 2004.

/b/ Codes indicate change made for Oak to 9th Project EIR. C = change in number of units and/or number of households; N = new project added to list; T = change in time period assumed for development and occupancy.

/c/ Households equal units multiplied by an assumed vacancy factor.

/d/ Status as of the end of 2002: 1 = completed; 2 = under construction; 3 = approved; 4 = affordable housing project in predevelopment; 5 = other projects in predevelopment; 6 = in planning or part of existing plan; 7 = other housing opportunity site.

/e/ Housing Opportunity Sites are those identified in Oakland's Draft Housing Element (September 2002). The numbers (e.g., DT-11) are those used in Housing Element tables.

/f/ YWCA housing for CCAC students, Perkins Residential Care housing for people with Alzheimer's, and UC Berkeley student housing are treated as group quarters in the growth scenario.

/g/ The total units completed during 2000 were 293 for Acorn Parcels 1, 2, and 3, and 71 for Bayporte Village, replacing 480 and 196 original units, respectively, that were removed by 2000.

/h/ Includes additional housing units and households in the downtown and rest of Oakland Central (OC) planning district as well as along the channel in TAZ 537 (SA).

/i/ This list reflects Maximum Trips Alternative with residential, retail, and office development.

Source: City of Oakland; Hausrath Economics Group

TABLE D.4-5b
OAKLAND CUMULATIVE GROWTH SCENARIO
ASSUMPTIONS FOR COMMERCIAL/INDUSTRIAL PROJECTS IN AREAS INCLUDING AND SURROUNDING OAK TO 9TH PROJECT EXCLUSIVE OF DOWNTOWN / OAKLAND CENTRAL
OAK TO 9TH PROJECT EIR - NOVEMBER 2004

/a/	Project	Time Period	Change /b/	Oakland TAZ	CMA TAZ	Planning District	Sq. Ft.	Empls	SF/Emp	Location	Comments
	PROJECTS COMPLETED BY 2000										
	K-Mart (42nd & High)			345	345	FV	130,000	173	750	42nd + High	Space estimate now appears low (see below)
	Fruitvale Station Retail (I-880)			555	555	FV	120,000	200	600		
	PROJECTS TO BE COMPLETED 2000 - 2005										
x	Homewood Suites by Hilton	1		95	95	SA	144 rms	86	0.6 empl/rm	1103 Embarcadero	Completed 2002
O	Albertson's expansion	1	C	539	539	SA	+19,400	32	600	247 East 18th St.	Under construction 2004; new 36,400 s.f. store to replace 17,000 s.f. store
x	Executive Inn expansion	1		544	544	SA	82 rms	33	0.4 emp/rm	1755 Embarcadero	Completed
O	Ground floor commercial in residential development	1	N	547	547	SA	3,000	9	350	1515 14th Ave.	Completed 2004
O	New public school facilities	1	C	105	105	FV		70		Former Montgomery Wards site	
O	Former K-Mart occupied by Home Depot, and adjacent tenant	1	N	345	345	FV	211,000	281	750	42nd + High	165,000 s.f. Home Depot and 46,000 s.f. in adjacent space; additional on-site employment of 108
O	Cal Crew development	1	N	621	621	FV		1		Glasscock at Derby	Includes relocated historic boathouse
	PROJECTS TO BE COMPLETED 2005 - 2010										
O	Oak to 9th Project - Phases 1, 2, 3	2	N	95	95	SA					Predevelopment 2004
O	Retail/commercial: neighborhood streets	2	N	95	95	SA	27,000	77	350	Oak to 9th Parcels A, F, B, C	Predevelopment 2004
O	Central area neighborhood retail	2	N	95	95	SA	42,000	112	375	Oak to 9th Parcel G	Predevelopment 2004
O	Project management and maintenance	2	N	95	95	SA		19		Oak to 9th Parcels A, F, G, B, C	Predevelopment 2004
O	Removal of existing uses	2	N	95	95	SA		(95)		Oak to 9th Parcels A, F, G, B, C	Predevelopment 2004
O	Eastlake commercial intensification/infill	2	N	97	97	SA		10			
O	Commercial intensification/infill - E. 18th area + Eastlake	2	N	539	539	SA		33			Intesnficiation of commercial district
O	Additional waterfront commercial	2	N	544	544	SA	40,000	117	350	Embarcadero Cove	Crowley site or other location
O	Additional development / infill / intensification	2	N	545	545	SA		30			Along International and/or near freeway
O	Eastlake commercial intensification	2	N	763	538	SA		10			
O	Embarcadero Cove, mixed use project	2	N	100	100	FV	39,000	111	350	1820-1830 Embarcadero + 924 22nd Ave.	Pre-application filed; also replaces some existing employment
O	Seven Directions, clinic	2	N	554	554	FV	25,600	64	400	2946 International Blvd.	Approved 10/03; part of mixed-use housing project
	PROJECTS TO BE COMPLETED 2010 - 2020/2025										
O	Oak to 9th Project - Phases 4, 5, 6, 7	3	N	95	95	SA					Predevelopment 2004; also see Downtown Projects List for additional commercial space in Oak to 9th Project.
O	Retail/commercial: neighborhood streets	3	N	95	95	SA	14,000	40	350	Oak to 9th Parcels D, E	Predevelopment 2004
O	Community, cultural, recreation uses	3	N	95	95	SA	18,000	30	600	9th Ave. Terminal	Predevelopment 2004
O	Waterfront retail/restaurant	3	N	95	95	SA	79,000	264	300	Oak to 9th Parcels H, J, K, L	Predevelopment 2004
O	Retail/commercial: park-oriented	3	N	95	95	SA	5,000	13	400	Oak to 9th Parcel M	Predevelopment 2004
O	Project management and maintenance	3	N	95	95	SA		26		Oak to 9th Parcels D, E, H, J, K, L, M	Predevelopment 2004
O	Removal of existing uses	3	N	95	95	SA		(85)		Oak to 9th Parcels K, L, M	Predevelopment 2004

/a/	Project	Time Period	Change /b/	Oakland TAZ	CMA TAZ	Planning District	Sq. Ft.	Empls	SF/Emp	Location	Comments
O	Eastlake commercial intensification/infill	3	N	97	97	SA		20			
O	Con Agra site or nearby - mixed use development	3	N	100	100	SA	40,000	114	350		Opportunity site; development also replaces existing employment
O	Ground floor commercial in residential development	3	N	538	538	SA	10,000	29	350	E. 12th St.	Additional infill
O	Commercial infill and intensification	3	N	538	538	SA		50			Along International and/or near freeway
O	Commercial intensification/infill - E. 18th area + Eastlake	3	N	539	539	SA		40			
O	Additional development/infill	3	N	544	544	SA	40,000	117	350	Along Embarcadero and vicinity	Infill/intensification
x	Additional development/infill/intensification	3		545	545	SA		40		East 12th to 880 in vicinity of 14th Ave. and 17th Ave.	Older industrial areas near freeway transition to auto/service and other uses
O	Ground floor commercial in residential development	3	N	547	547	SA	3,000	9	350	Vicinity of 14th Ave.	
O	Eastlake commercial intensification/infill	3	N	763	538	SA		26			
O	Light Industrial / R+D and Retail infill	3	N	345	345	FV		200			Upgrading and infill
O	Commercial / Light Industrial infill	3	N	622	622	AP		55			Infill and intensification
								988			

NOTE: The Oak to 9th Project also includes a site west of the channel in TAZ 799 in the downtown area. That portion of the project is included on the Commercial Projects List for the Downtown/Oakland Central area.

/a/ 'X' in first column indicates updated assumptions compared to original 11/21/00 Cumulative Scenario. 'U' indicates updated assumptions for Uptown Project EIR, May 2003. 'C' indicates updated assumptions for Central Station Project, December 2003. 'O' indicates updated assumptions for Oak to 9th EIR, November 2004.

/b/ Codes indicate change made for Oak to 9th Project EIR. C = change in number of employees, amount of space, and/or number of hotel rooms; N = new project added to list or significantly changed project; T = change in time period assumed for development and occupancy.

Source: City of Oakland; Port of Oakland; Hausrath Economics Group

TABLE D.4-6a
OAKLAND CUMULATIVE GROWTH SCENARIO
ASSUMPTIONS FOR HOUSING PROJECTS IN DOWNTOWN / OAKLAND CENTRAL
OAK TO 9TH PROJECT EIR - NOVEMBER 2004

/a/	Project	Time Period	Change /b/	Oak TAZ	CMA TAZ	Plan Dist	OC/DT Subarea	Units	House Holds /c/	Special Factor	Location	Status /d/	Comments/Status /e/
	PROJECTS TO BE COMPLETED 2000 - 2005 (Post Census 2000)												
O	Le Property Marks Building (senior housing)	1	T	497	497	OC	CC	10	10	SENIOR	380-388 12th St.	2	Under construction 2004
x	YWCA /f/	1		500	500	OC	CC	70	-	GROUP	1515 Webster St.	1	Completed 2000
O	Oak Street Terrace (senior rental)	1	T	519	519	OC	CM	39	38	SENIOR	1109 Oak St.	2	Under construction 2004
	Arioso Project / SNK Development	1		496	496	OC	CT	88	84	DT-2	901 Franklin @ 9th St.	2	Approved 8/00; under construction 3/04
x	Tower Lofts	1		768	72	OC	JLD	24	23	LOFT-1	SW corner 3rd + Alice	1	Completed (not in 2000 Census)
	4th Street Lofts	1		797	87	OC	JLD	61	59	LOFT-1	247 4th	1	Completed (not in 2000 Census)
O	Sierra (former Dreyers)	1	C	797	87	OC	JLD	220	211	DT-1	311 Oak	1	Completed 2004
	New Market Lofts (former Safeway)	1		797	87	OC	JLD	46	44	DT-1	201 4th St. @ Jackson	1	Completed 2001
x	Allegro	1		797	87	OC	JLD	168	162	DT-1	308 Jackson; 189 3rd	1	Completed 2001 (312 total units)
x	Allegro	1		798	87	OC	JLD	144	138	DT-1	2nd to 3rd / Jackson to Madison	1	Completed 2001 (312 total units)
x	Brick House Lofts	1		798	87	OC	JLD	10	10	LOFT-1	SW corner 3rd + Jackson	1	Completed (not in 2000 Census)
C	Harbor View Lofts (Second Street Lofts)	1		798	87	OC	JLD	100	96	LOFT-1	121-129 Second St.	2	Under construction 2004
C	206 Second St. (Miller Smoked Meats)	1		798	87	OC	JLD	70	67	DT-1	206 Second St.	2	Approved/under construction 2004 (part of Housing Opportunity Site DT-40)
	The Landing - Legacy Partners	1		799	87	OC	JLD	282	271	DT-1	99 Embarcadero	1	Completed 2000
	Phoenix Lofts	1		801	481	OC	JLD	31	30	LOFT-2	737 2nd	1	Completed 2000
x	Removal of Housing in Census	1		801	481	OC	JLD	(3)	(3)		2nd to 3rd / Bush to Castro	1	Housing no longer there
	Lake Point Tower / The Essex	1		517	517	OC	KC	270	257	DT-1	108 17th St. @ Lakeshore Blvd.	1	Completed 2002
x	Jackson Courtyard Condominiums	1		518	518	OC	KC	50	48	DT-2	210 14th St. @ Jackson	2	Under construction 10/04
x	Perkins Street Residential Care (Lakeside Park) /f/	1		516	516	OC	LGA	56	-	GROUP	468-484 Perkins @ Bellevue	1	Completed
	Swan's Market	1		71	71	OC	OO	39	38	DT-2	9th & Washington	1	Completed 2001
O	Housewives Market - Phase 1	1	C	491	491	OC	OO	116	111	DT-2	8th/9th/Clay/Jefferson	2	Under construction 10/04
	Preservation Park III / Landmark Place	1		802	68	OC	OO	92	88	DT-1	11th/12th & MLK	1	Completed 2004
	8th & Castro Lofts	1		802	68	OC	OO	18	17	DT-2	8th & Castro	1	Completed 2002
	Gem Building Condos (Eighth Street)	1		802	68	OC	OO	16	15	DT-2	485 8th St.	1	Completed 2000
U	Removal of Housing for Uptown Development	1		70	70	OC	UT	(33)	(26)				
x	425 28th St. / 427 27th St. / The Midtown	1		56	56	OC	VSA	20	19	DT-2	27th/28th/Telegraph/Broadway	1	Completed 2004
x	371 30th St.	1		56	56	OC	VSA	22	21	DT-2	371 30th St.	1	Completed 2003
O	McClure Street Housing	1	N	56	56	OC	VSA	20	19	DT-2	2941/43 McClure St.	1	Completed 10/2004; HEG estimate of units
	Former Sears	1		469	469	OC	VSA	53	51	LOFT-2	27th & Telegraph	1	Completed 2003
	Telegraph Gateway	1		469	469	OC	VSA	50	48	DT-2	2401 Telegraph @ 24th St.	1	Completed 2004
x	Northgate Apartments	1		469	469	OC	VSA	42	41	DT-2	2301 Northgate (23rd + Northgate)	1	Completed 2004
	PROJECTS TO BE COMPLETED 2000 - 2005 TOTAL							**2,191**	**1,987**				

/a/	Project	Time Period	Change /b/	Oak TAZ	CMA TAZ	Plan Dist	OC/DT Subarea	Units	House Holds /c/	Special Factor	Location	Status /d/	Comments/Status /e/
	PROJECTS TO BE COMPLETED 2005 - 2010												
O	City Center T10 / Olson Company	2	C	489	489	OC	CC	251	241	DT-1	13th/14th/MLK/Jefferson	3	Approved 2004; Housing Opportunity Site DT-2
	14th & Harrison Residential (1331 Harrison Project)	2		498	498	OC	CC	98	94	DT-2	1331 Harrison	3	Approved 12/3/03
	1640 Broadway (17th & Broadway)	2		500	500	OC	CC	150	144	DT-1	1640 Broadway	3	Approved 10/01; Assumes mixed use project
C	Jackson Center II	2		519	519	OC	CM	100	96	DT-1	11th/12th/Alice	3	Approved 9/03
O	1018-26 Jackson	2	N	519	519	OC	CM	35	34	DT-1	1018-26 Jackson	5	Predevelopment
O	Broadway/6th/7th - 8 Orchids	2	N	494	494	OC	CT	157	151	DT-2	620-636 Broadway	5	Predevelopment; Howard Johnson's site
O	3rd + Broadway Mixed Use (Roscoe's site)	2	T	768	72	OC	JLD	110	106	DT-1	200-228 Broadway	3	Approved 2002
O	300 Harrison / Signature	2	C	796	72	OC	JLD	91	87	DT-1	3rd + Harrison	3	Approved 2003/04
x	Wheelink	2		797	87	OC	JLD	94	90	DT-1	426 Alice @ 4th St.	3	Approved 2002
O	Rectory at new cathedral	2	N	503	503	OC	KC	6	-	GROUP	2121 Harrison @ Grand	3	Approved 2004
O	Madison Lofts	2	C,T	517	517	OC	KC	76	74	DT-2	160 14th St.	3	Approved 12/03
O	Housewives Market - Phase 2	2	C,T	491	491	OC	OO	86	83	DT-2	8th/9th/Clay/Jefferson	3	Approved 3/04; total of 202 units
O	Castro Courts	2	N	802	68	OC	OO	50	48	DT-2	683 9th St.	5	Predevelopment
O	Forest City Residential / Uptown - apartments	2	C	70	70	OC	UT	700	678	PROJ	San Pablo/Telegraph/20th/18th	3	Approved 2004
O	Uptown - affordable apartments	2	N	70	70	OC	UT	70	69	PROJ	San Pablo/Telegraph/20th/18th	3	Approved 2004
O	Broadway/West Grand Mixed use	2	N	470	470	OC	VSA	475	456	DT-1	NW corner Broadway + West Grand	5	Predevelopment 2004; environmental review underway
O	Removal of housing for Broadway/W. Grand Mixed Use	2	N	470	470	OC	VSA	(16)	(15)		24th St., near Valley St.		
O	2300 Broadway	2	N	504	504	OC	VSA	48	46	DT-1	2300 Broadway	5	Predevelopment
O	Valdez + 23rd / Upper Lake Merritt Residential	2	C,T	504	504	OC	VSA	204	196	DT-1	2315 Valdez @ 23rd	3	Approved 1/02 and modified 2004
	PROJECTS TO BE COMPLETED 2005 - 2010 TOTAL							**2,785**	**2,678**				
	PROJECTS TO BE COMPLETED 2010 - 2020												
x	18th + Jefferson	3		488	488	OC	CC	80	77	DT-2	18th/Jefferson/San Pablo	7	Housing Opportunity Site DT-14
	17th + Harrison	3		499	499	OC	CC	60	58	DT-1	17th + Harrison	7	Housing Opportunity Site DT-6
x	15th + Harrison	3		499	499	OC	CC	70	67	DT-1	15th + Harrison	7	Housing Opportunity Site DT-4
x	13th + Madison	3		518	518	OC	CM	70	67	DT-2	1309 and 1329 Madison	7	Housing Opportunity Site DT-31
x	Channel Area	3		521	521	OC	CM	450	432	DT-1	Oak/5th Ave/Embarcadero/12th St.	7	Housing Opportunity Site DT-11 (Peralta/City)
x	Salvation Army	3		494	494	OC	CT	175	168	DT-2	6th/7th/Franklin	7	Housing Opportunity Site DT-7
x	Channel Area	3		87	87	OC	JLD	100	96	DT-1	Oak/5th/Embarcadero/12th	7	Housing Opportunity Site DT-11
C	Jack London Area (Meyers Plumbing site)	3		768	72	OC	JLD	75	72	DT-1	2nd + Harrison	7	Housing Opportunity Site DT-43
	Jack London Area Lofts (conversions or new constr)	3		796	72	OC	JLD	60	58	DT-1	4th + Alice	7	
x	Jack London Area (Monahan Paper site)	3		798	87	OC	JLD	135	130	DT-1	175 2nd	7	Housing Opportunity Site DT-42
C	Jack London Area (Miller Meat Packing Site)	3		798	87	OC	JLD	60	58	DT-1	2nd / Alice to Jackson	7	Housing Opportunity Site DT-40 (part)
O	Oak to 9th Project - Phase 8	3	N	799	799	OC	JLD	300	288	PROJ	Oak to 9th Parcel N, west of channel	5	Predevelopment 2004; also see Surrounding Areas List for rest of Oak to 9th Project.
x	Old Oakland/Rattos block	3		71	71	OC	OO	100	96	DT-2	8th/9th/Washington/Clay	7	Housing Opportunity Site DT-26
	8th + Washington	3		71	71	OC	OO	40	38	DT-2	8th + Washington	7	Housing Opportunity Site DT-15

/a/	Project	Time Period	Change /b/	Oak TAZ	CMA TAZ	Plan Dist	OC/DT Subarea	Units	House Holds /c/	Special Factor	Location	Status /d/	Comments/Status /e/
x	901 Jefferson	3		491	491	OC	OO	82	79	DT-2	Jefferson/9th/10th	5	Pre-application 2002; Housing Opportunity Site DT-5
x	St. Mary's	3		492	492	OC	OO	75	72	DT-2	MLK/7th/8th	7	Housing Opportunity Site DT-21
x	7th/Clay/Washington	3		493	493	OC	OO	80	77	DT-2	7th/Washington/Clay	7	Housing Opportunity Site DT-36
O	Uptown - condos	3	T	70	70	OC	UT	270	260	PROJ	San Pablo/Telegraph/18th/19th	3	Approved 2004
U	Dones / Berkley Square Project Housing	3		483	483	OC	UT	98	95	DT-2	San Pablo/21st/20th	5	Predevelopment; Housing Opportunity Site DT-27
U	Old Cathedral Site	3		483	483	OC	UT	100	96	DT-2	20th/22nd/San Pablo	7	Housing Opportunity Site DT-19
O	Uptown - student housing	3	T	483	483	OC	UT	400	400	PROJ	Telegraph/20th/21st	5	1000 beds of student housing; assumed in 400 units/hh's for transportation modeling purposes
O	Uptown - faculty housing	3	T	483	483	OC	UT	50	50	PROJ	Telegraph/20th/21st	5	50 units of faculty housing
	Former Sears - Phase II	3		469	469	OC	VSA	200	190	DT-2	27th & Telegraph	7	Housing Opportunity Site DT-8
x	Telegraph Gateway 2	3		469	469	OC	VSA	74	71	DT-2	24th + Telegraph	7	Housing Opportunity Site DT-22
	Grand + Webster	3		504	504	OC	VSA	200	190	DT-1	Valdez + 23rd St. + Webster	7	Housing Opportunity Site DT-9 (Westmark Labor Temple)
x	24th + Webster	3		504	504	OC	VSA	120	115	DT-1	24th/Webster/Valdez	7	Housing Opportunity Site DT-10
x	West Coast Properties	3		504	504	OC	VSA	140	134	DT-1	23rd/24th/Valdez/Waverly	7	Housing Opportunity Site DT-3
	PROJECTS TO BE COMPLETED 2010 - 2020 TOTAL							**3,664**	**3,534**				
	PROJECTS TO BE COMPLETED 2020 - 2025												
x	Merchants Garage	4		497	497	OC	CC	180	173	DT-2	1314 Franklin St.	7	Housing Opportunity Site DT-34
x	Cochran and Celli site	4		498	498	OC	CC	200	192	DT-2	12th + Harrison	7	Housing Opportunity Site DT-13
x	Post Office Parking	4		518	518	OC	CM	140	134	DT-2	13th/14th/Jackson/Alice	7	Housing Opportunity Site DT-24
x	BART - Lake Merritt	4		520	520	OC	CM	200	192	DT-2	8th/9th/Fallon/Oak	7	Housing Opportunity Site DT-23
x	Channel Area	4		521	521	OC	CM	250	240	DT-1	Oak/5th Ave./Embarcadero/12th St.	7	Housing Opportunity Site DT-11
x	Broadway + 7th	4		494	494	OC	CT	60	58	DT-2	7th/8th/Broadway	7	Housing Opportunity Site DT-16
	Jack London Area Lofts (Mid-Block Parking)	4		768	72	OC	JLD	60	58	DT-1	2nd to 3rd / Webster to Harrison	7	Housing Opportunity Site DT-41
x	Jack London Area	4		798	87	OC	JLD	75	72	DT-1	2nd to 3rd / Oak to Madison	7	
x	Flower Warehouse	4		491	491	OC	OO	80	77	DT-2	8th + Jefferson	7	Housing Opportunity Site DT-38
x	Mexicali Rose	4		492	492	OC	OO	100	96	DT-2	7th/8th/Clay	7	Housing Opportunity Site DT-37
x	Greyhound Site	4		803	69	OC	UT	80	77	DT-2	San Pablo/Telegraph/21st/19th	7	Housing Opportunity Site DT-20
x	Valdez Area	4		504	504	OC	VSA	250	240	DT-1	24th/27th/Valdez	7	Housing Opportunity Site DT-12
x	Valdez Area	4		504	504	OC	VSA	350	336	DT-1	23rd/24th/Waverly/Harrison	7	Housing Opportunity Site DT-18
x	27th + Broadway	4		504	504	OC	VSA	100	96	DT-1	26th/27th/Broadway	7	Housing Opportunity Site DT-35
	PROJECTS TO BE COMPLETED 2020 - 2025 TOTAL							**2,125**	**2,041**				
	TOTAL 2000 - 2025							**10,765**	**10,240**				

/a/	Project	Time Period	Change /b/	Oak TAZ	CMA TAZ	Plan Dist	OC/DT Subarea	Units	House Holds /c/	Special Factor	Location	Status /d/	Comments/Status /e/

Notes:
/a/ 'X' in first column indicates updated assumptions compared to original 11/21/00 Cumulative Scenario. 'U' indicates updated assumptions for Uptown Project EIR, May 2003. 'C' indicates updated assumptions for Central Station Project, December 2003. 'O' indicates updated assumptions for Oak to 9th EIR, November 2004.
/b/ Codes indicate change made for Oak to 9th Project EIR. C = change in number of units and/or number of households; N = new project added to list; T = change in time period assumed for development and occupancy.
/c/ Households equal units multiplied by an assumed vacancy factor.
/d/ Status of project: 1 = completed; 2 = under construction; 3 = approved; 4 = affordable housing project in predevelopment; 5 = other projects in predevelopment; 6 = in planning or part of existing plan; 7 = other housing opportunity site.
/e/ Housing Opportunity Sites are those identified in Oakland's Draft Housing Element (September 2002). The numbers (e.g., DT-11) are those used in Housing Element tables.
/f/ YWCA housing for CCAC students, Perkins Residential Care housing for people with Alzheimer's, and clergy housing in the rectory of the new Catholic Cathedral are treated as group quarters in the growth scenario. For the transportation analyses, the student housing proposed nearthe Uptown Project is treated as households although it could provide group quarters housing.

Source: City of Oakland; Hausrath Economics Group

TABLE D.4-6b
OAKLAND CUMULATIVE GROWTH SCENARIO
ASSUMPTIONS FOR COMMERCIAL/INDUSTRIAL PROJECTS IN DOWNTOWN / OAKLAND CENTRAL
OAK TO 9TH PROJECT EIR - NOVEMBER 2004

/a/	Project	Time Period	Change /b/	Oakland TAZ	CMA TAZ	Planning District	Subarea	Sq. Ft.	Empls	SF/Emp	Location	Comments
	PROJECTS COMPLETED 1990 - 2000											
	City Administration - Wilson Building (office)			486	486	OC	CC	165,430	414	400	14th + Broadway	
x	City Administration - Wilson Building (retail)			486	486	OC	CC	4,000	10	400	14th + Broadway	
	City Administration - Dalziel Building (office only)			487	487	OC	CC	225,710	564	400	Frank Ogawa Plaza	
	City Hall			487	487	OC	CC	80,000	200	400	Frank Ogawa Plaza	
	State Building			488	488	OC	CC	600,000	1,500	400	Clay Street	
	Federal Building			489	489	OC	CC	1,000,000	2,500	400	Clay/12th/14th/Jefferson	
	1111 Broadway			490	490	OC	CC	535,000	1,783	300	1111 Broadway	
	UC Office of the President			497	497	OC	CC	232,500	1,000		Franklin/11th to 12th	
	Tribune Tower			497	497	OC	CC	89,000	297	300	13th + Franklin	
	New County Building			519	519	OC	CM		334		Madison + 11th	
x	115 Broadway Office			767	72	OC	JLD	10,000	29	350	115 Broadway	
x	Kimball's Salsa Club			767	72	OC	JLD	10,000	29	350	mid-blk 2nd/3rd near Washington	
x	Upper Floor Entertainment & Add'l Retail/Restaurant (infill)			796	72	OC	JLD	12,000	32	376	Broadway	
x	415 20th Street (LBL Supercomputer)			74	74	OC	KC	70,000	140	500	415 20th Street	
	Caltrans Building			503	503	OC	KC		1,180		Grand/Webster	
	Warriors Practice Facility			71	71	OC	OO	60,000	20		530 10th Street	
x	Washington & 8th Street (renovation)			71	71	OC	OO	68,000	60		Washington + 8th	
x	Swan's Market			71	71	OC	OO				9th/10th/Clay/Washington	
x	Office			71	71	OC	OO	17,000	49	350		
x	Retail			71	71	OC	OO	25,000	55	450		
x	Rattos + others in area (renovations)			71	71	OC	OO		80		Washington	
	Oakland Ice Center			70	70	OC	UT		35		18th + San Pablo	
x	I. Magnin Building (renovation)			484	484	OC	UT	63,000	210	300	20th + Broadway	
x	Sweets Ballroom - Supper Club			485	485	OC	UT	12,000	15	800	Broadway/19th to 20th	
x	Rehabs/infill for office 17th-19th Blk			485	485	OC	UT		100		17th-19th/Broadway to Telegraph	
	PROJECTS TO BE COMPLETED 2000 - 2005											
	Rotunda Building	1		486	486	OC	CC				16th & Broadway	Completed
	Office	1		486	486	OC	CC	187,000	534	350		
	Retail	1		486	486	OC	CC	50,000	111	450		
	17th Street Parking Garage (retail - 500 spaces)	1		486	486	OC	CC	23,000	51	450	16th/17th/San Pablo	Approved 11/02
x	City Administration - Wilson Building (retail)	1		486	486	OC	CC	12,800	32	400	Broadway + 14th	
	Lathan Square Building (renovation)	1		486	486	OC	CC	107,000	122		Telegraph + Broadway	Assumes ~/+ 40%; completed
	City Administration - Dalziel Building (retail)	1		487	487	OC	CC	20,000	44	455	250 Frank Ogawa Plaza	
	Plaza Building	1		487	487	OC	CC	13,000	43	300	Frank Ogawa Plaza	Completed
	518 17th Street (renovation)	1		488	488	OC	CC	32,000	98	325	518 17th St.	
	Old PG&E Building (renovation)	1		488	488	OC	CC	37,685	116	325	Clay + 17th	Completed
	Shorenstein T9 / 555 City Center	1		489	489	OC	CC				11th to 12th/Clay to Jefferson	Completed 2002
C	Office	1		489	489	OC	CC	450,000	1,500	300		
	Retail	1		489	489	OC	CC	7,500	25	300		

/a/	Project	Time Period	Change /b/	Oakland TAZ	CMA TAZ	Planning District	Subarea	Sq. Ft.	Empls	SF/Emp	Location	Comments
O	Tribune Press Building Rehabilitation	1	N	497	497	OC	CC				406-412 12th St.	Approved 2004
O	Retail	1	N	497	497	OC	CC	2,800	8	350		
O	Office	1	N	497	497	OC	CC	6,700	22	300		
O	Document / self-storage	1	N	497	497	OC	CC	45,300	1			
O	Le Property Marks Building - ground floor	1	T	497	497	OC	CC	~4,000	11	350	380-388 12th St.	Under construction 2004
U	Oakland Athletic Club - renovation to office	1		499	499	OC	CC	85,500	263	325	1438 Webster	Completed 2004
	1404 Franklin (renovation)	1		500	500	OC	CC	50,000	43		1404 Franklin	
C	1111 Jackson (former State Building)	1		519	519	OC	CM	111,000	370	300	1111 Jefferson	Completed
	Courtyard Marriott Hotel	1		496	496	OC	CT	150 rooms	75	0.5/rm	9th & Broadway	Completed
O	Arioso Mixed Use	1	C	496	496	OC	CT	6,000	25		900 Broadway/9th St.	Commercial/88 units; completed 2004
	Remove Jack London Village	1		736	72	OC	JLD		(81)		Waterfront JLS	Demolition for upcoming new construction
O	66 Franklin	1	C,T	736	72	OC	JLD					Rehabilitation of existing bldg.; approved 2004
O	Office	1	C,T	736	72	OC	JLD	61,200	204	300		Net change of 13 jobs for total project.
O	Retail/Restaurant	1	C,T	736	72	OC	JLD	32,600	142	230		
x	Jack London Cinema (seat reduction for stadium seating)	1		767	72	OC	JLD		(5)		Washington/2nd to 3rd	Seats reduced from 2,000 to 1,500; completed
O	Metrovation / Terranomics	1	N	767	72	OC	JLD	11,366	35	325	201 Clay St.	Additional office; with existing equals 25,000 s.f.
x	Oak Tree Commercial - retail/restaurant/entertainment	1		768	72	OC	JLD	10,000	33	300	Along Embarcadero	Reuse
x	Terranomics - office (conversion and new)	1		795	72	OC	JLD	31,000	78	400	Clay/3rd to 4th	Completed; removes light industrial
x	Terranomics - Iguana Amerimex Conversions	1		795	72	OC	JLD					
O	Additional Office	1	C	795	72	OC	JLD	60,000	171	350	4th/Jefferson/3rd/MLK	Completed 2004; removes retail
x	Reduced Retail	1		795	72	OC	JLD	(21,000)	(27)		4th/Jefferson/3rd/MLK	
x	Conversion to office	1		795	72	OC	JLD	10,587	35	300	4th + Washington	Government office replaces auto repair use; completed
x	Allegro Housing	1		797	87	OC	JLD	8,500	23	375	3rd and Jackson (2 blocks)	Completed 2001 (13,500 s.f. total commercial)
C	Sierra (former Dreyers)	1		797	87	OC	JLD	30,000	80	375	3rd to 4th / Oak to Madison	Completed 2004
	New Market Lofts (former Safeway) Housing	1		797	87	OC	JLD					Completed
	Office	1		797	87	OC	JLD	6,500	19	325	201 4th St. and Jackson	Ground floor commercial; completed 2002
	Retail/Commercial	1		797	87	OC	JLD	4,500	15	300	201 4th St. and Jackson	Ground floor commercial; completed 2002
x	Allegro Housing	1		798	87	OC	JLD	5,000	13	375	2nd to 3rd / Jackson to Madison	Completed 2001 (13,500 s.f. total commercial)
	Telecommunications Access Facility/Mortenson	1		801	481	OC	JLD	120,000	50		3rd/Brush to Castro	Completed
x	Wakefield Rehab (renovation)	1		74	74	OC	KC	68,000	194	350	17th St. / Broadway to Franklin	Renovation underway in 2000; occupied after 2000
U	20th & Broadway Renovation	1		502	502	OC	KC		200		20th + Broadway	Renovation of existing bank bldg; completed 2002
O	Cox Cadillac / Whole Foods	1	C,T	505	505	OC	LGA	56,000	93	600	Harrison/27th St./Bay Place	Under construction 10/2004; incl. renovation of historic showroom
O	Housewives Market / Residential Mixed-use	1	C	491	491	OC	OO	3,000	9	350	8th/9th/Clay/Jefferson	Ground floor commercial; under construction 10/04
x	Renovations for Office / Ice Center Block	1		70	70	OC	UT	36,000	110	325	510 17th St., 1727 Telegraph, etc.	Completed but not fully occupied; 2002/03/04
O	Berkley Square Project / County Building	1	T	483	483	OC	UT	111,000	350	Avg. 317	San Pablo / 20th to 21st	Includes office, public service, child care, and ground floor commercial uses; approved and under construction 2004
	Sears Building (upper floor office renovation)	1		485	485	OC	UT	180,000	514	350	20th + Broadway	Completed
U	Floral Depot Block - rehabs to office/retail/educational	1		485	485	OC	UT	~25,000	71	350	19th / Broadway to Telegraph	Includes J. Malnick and Big N Tall
x	Telegraph Gateway	1		469	469	OC	VSA	5,300	14	375	2401 Telegraph @ 24th St.	Ground floor commercial; under construction 3/04
O	Retail intensification - Telegraph	1	N	470	470	OC	VSA		45			Expansion of Korean-oriented retailing
	PROJECTS TO BE COMPLETED 2005 - 2010											
U	New Police Headquarters / Center	2		488	488	OC	CC	200,000	850		14th/16th/Jefferson/MLK	Moves from current location on Broadway + 7th
O	City Center T10 Housing - ground floor commercial	2	N	489	489	OC	CC	2,600	8	350	14th/MLK/Jefferson	Approved 2004
	Shorenstein T5/T6	2		490	490	OC	CC				11th/12th/Clay	Approved
C	Office	2		490	490	OC	CC	600,000	2,000	300		

/a/	Project	Time Period	Change /b/	Oakland TAZ	CMA TAZ	Planning District	Subarea	Sq. Ft.	Empls	SF/Emp	Location	Comments
	Retail	2		490	490	OC	CC	7,500	25	300		
O	Kerry's Office Supply Building	2	N	497	497	OC	CC				379-381 12th St.	Completed 2004 with shift of employment within TAZ. Employment growth occurs after 2005.
O	Retail	2	N	497	497	OC	CC	3,800	6	600		
O	Office	2	N	497	497	OC	CC	12,000	34	350		
O	Keystone Hotel/Hilton Gardens	2	T	497	497	OC	CC	214 rooms	140	0.65/rm	11th/12th/Broadway	Approved
O	13th and Broadway/Utility Building (renovation)	2	T	497	497	OC	CC	60,000	200	300	13th + Broadway	Underway / on hold
	14th & Harrison Project (1331 Harrison Project)	2		498	498	OC	CC	9,000	23	400	1331 Harrison @ 14th St.	Ground floor commercial; predevelopment
	1640 Broadway Mixed Use	2		500	500	OC	CC				1640 Broadway	Approved; assumes mixed-use project
	Office	2		500	500	OC	CC	177,680	592	300		
C	Retail	2		500	500	OC	CC	4,710	16	300		
C	Potential additional office development	2		500	500	OC	CC	200,000	667	300		Could be in this or nearby TAZ
O	Broadway / 6th / 7th - 8 Orchids	2	N	494	494	OC	CT	3,600	10	350	620-636 Broadway	Residential project with ground floor commercial
O	Embarcadero & Broadway (Site D)	2	C	72	72	OC	JLD				Embarcadero + Broadway	Variant 2b+; approved 2004; replaces 69 jobs
O	Office	2	C,T	72	72	OC	JLD	22,000	73	300		Rest of office absorbed after 2010.
O	Retail/restaurant	2	C	72	72	OC	JLD	6,350	21	300		
O	Cinema	2		72	72	OC	JLD	1700 seats	27			
O	Larger Retail	2	C	72	72	OC	JLD	64,550	144	450		
	Intensification	2		72	72	OC	JLD		81		Along Water St. and Washington St.	Additional retail / restaurant activity
O	Meadow Commercial (Site C) - restaurant uses	2	C,T	72	72	OC	JLD	33,000	165	200	Jack London Square	Approved 2004
O	Site F1 - JLS Phase 2 Area (Harvest Hall)	2	C	736	72	OC	JLD					Approved 2004
O	Office	2	C	736	72	OC	JLD	60,000	200	300		
O	Retail/restaurant	2	C	736	72	OC	JLD	125,000	492	264		
U	Site F3 - JLS Phase 2 Area (Hotel Site)	2		736	72	OC	JLD					Approved 2004
U	Hotel	2		736	72	OC	JLD	250 rooms	213	0.85/rm		
U	Restaurant/Retail	2		736	72	OC	JLD	10,000	39	250		
O	Pavillion 2 - retail	2	C,T	736	72	OC	JLD	10,000	29	350		Approved 2004
x	Union Machine Works - retail/off-price retail	2		767	72	OC	JLD	25,000	63	400	2nd/Clay	Adaptive reuse; could convert to office or residential instead
x	Terranomics - retail expansion	2		767	72	OC	JLD	16,000	40	400	3rd/Jefferson	Expansion into parking lot behind
O	Amtrak Station (Site G)	2	C	768	72	OC	JLD				Embarcadero/Alice/2nd	Approved 2004
O	Retail/restaurant	2	C	768	72	OC	JLD	15,000	59	254		
O	Parking garage	2	C	768	72	OC	JLD		11			
O	3rd & Broadway Mixed Use (Roscoe's site)	2	T	768	72	OC	JLD				3rd + Broadway	Approved 2002; Also includes 110 dwelling units
O	Office	2	T	768	72	OC	JLD	105,000	323	325		
O	Retail/restaurant	2	T	768	72	OC	JLD	9,000	33	275		
x	Office conversion/rehab	2		796	72	OC	JLD	12,000	34	350	4th / Harrison to Alice	Intensification of use in existing space
x	Wheelink Residential - ground floor office	2		797	87	OC	JLD	9,800	30	325	426 Alice @ 4th St.	Approved
C	206 2nd St.	2		798	87	OC	JLD				206 2nd St.	Approved and under construction 2004; Miller Smoked Meats site
C	Residential / Ground floor retail	2		798	87	OC	JLD	1,310	4	325		Housing developed by 2005; job growth follows
C	Live-work space	2		798	87	OC	JLD	2,380	6	400		
C	Second Street Lofts / Harbor View Lofts	2		798	87	OC	JLD	5,190	15	350	121-129 2nd St.	Under construction 2004; housing developed by 2005; job growth follows
U	Bermuda Building site	2		502	502	OC	KC	160,000	533	300	21st & Franklin	Demolished 2004
U	20th & Broadway	2		502	502	OC	KC				20th + Broadway	
U	Office (new)	2		502	502	OC	KC	325,000	1,083	300		Approved
U	Ground floor retail (new)	2		502	502	OC	KC	11,500	29	400		Approved
O	Cathedral of Christ the Light Center	2	N	503	503	OC	KC				2121 Harrison, SW corner Harrison + Grand	Approved 2004; replaces previously approved office tower
O	Sanctuary	2	N	503	503	OC	KC	25,000	-			

/a/	Project	Time Period	Change /b/	Oakland TAZ	CMA TAZ	Planning District	Subarea	Sq. Ft.	Empls	SF/Emp	Location	Comments
O	Offices, meeting facilities, retail, support facilities	2	N	503	503	OC	KC	93,000	144			
O	Potential additional office development	2	N	503	503	OC	KC	350,000	1,167	300	21st St. / Webster to Harrison	Site in Kaiser Center Master Plan; could replace Lakepoint Towers development
O	Madison Lofts - retail/commercial	2	N	517	517	OC	KC	2,666	8	350	160 14th St.	Ground floor commercial; approved project
	Grand Ave. Office	2		776	516	OC	LGA	25,000	83	300		
	Old Oakland (infill)	2		71		OC	OO		100			
O	Forest City/Uptown - ground floor commercial on Telegraph	2	C	70	70	OC	UT	14,500	42	350	Telegraph / 19th to 20th	Approved 2004
O	Uptown project / residential and parking maint. + mgmt	2	C	70	70	OC	UT		20		Telegraph/San Pablo/18th/20th	Approved 2004
U	Fox Theater (renovation)	2		70	70	OC	UT				Telegraph / 18th to 19th	In planning 2002/2003
U	Cabaret (~650 seats)	2		70	70	OC	UT		40			
U	Retail/commercial (side bldgs - ground floor)	2		70	70	OC	UT	18,000	51	350		
U	Office (side bldgs - upper floors)	2		70	70	OC	UT	30,100	93	325		
U	Relocated Sears Auto Center	2		484	484	OC	UT	10,000	25		Telegraph/20th to 22nd	To be relocated from TAZ 70 for Uptown Project
U	Floral Depot Block - rehabs to office/retail/educational	2		485	485	OC	UT	~35,000	100	350	19th / Broadway to Telegraph	
U	Additional Infill / Rehab 17th-19th Blk	2		485	485	OC	UT		70		Broadway to Telegraph / 17th to 19th	
O	Mercedes dealership expansion	2	N	56	56	OC	VSA	10,000+	47		370 29th St.	Expanded parts dept. and additional mechanic service bays
O	Broadway / West Grand Mixed Use - retail/commercial	2	N	470	470	OC	VSA	40,000	114	350	Broadway/West Grand/24th St.	New project removes auto-related uses and employment
O	Valdez + 23rd / Residential	2	N	504	504	OC	VSA	5,000	14	350	2315 Valdez @ 23rd St.	Ground floor commercial; approved project
	PROJECTS TO BE COMPLETED 2010 - 2020/2025											
	Shorenstein T12	3		489	489	OC	CC	584,000	1,947	300	11th/12th/Jefferson/MLK	
O	Additional infill/intensification	3	C	497	497	OC	CC		150			Could be in this or nearby TAZ
C	Potential additional office development	3		500	500	OC	CC	250,000	833	300		Could be in this or nearby TAZ
	Intensification	3		72	72	OC	JLD		33			Additional upper floor office uses
O	Embarcadero + Broadway (Site D)	3	C,T	72	72	OC	JLD	80,000	267	300	Embarcadero + Broadway	Absorption of rest of new office space
O	Site F2 - JLS Phase 2 Area	3	C	736	72	OC	JLD					Approved 2004
O	Office	3	C	736	72	OC	JLD	122,500	408	300		
O	Retail/Restaurant	3	C	736	72	OC	JLD	6,600	22	300		
O	Health Club	3	N	736	72	OC	JLD	20,300	17	1,200		
O	Parking garage	3	C	736	72	OC	JLD		7			
	Lower Broadway (reuse and/or new development)	3		767	72	OC	JLD					Removes some existing uses/space
	Office	3		767	72	OC	JLD	120,000	369	325		Allocated to TAZ 767 although could be TAZ 795
	Retail/entertainment/restaurant	3		767	72	OC	JLD	25,000	63	400		Allocated to TAZ 767 although could be TAZ 795
	Rehab and/or intensification	3		767	72	OC	JLD				2nd to 3rd / Jefferson to MLK	Marcus Hardware, Griffco, and nearby bldgs
	Retail	3		767	72	OC	JLD	5,000	13	400		Could be intensification of existing space
	Office	3		767	72	OC	JLD	5,000	15	325		
x	Mixed Use - Meyers Plumbing site / office/commercial	3		768	72	OC	JLD	20,000	67	300	2nd/Harrison to Embarcadero	Replaces lt. Ind.; ground floor commercial/office
	Conversions - Produce District Bldgs - office/retail/restaurant	3		768	72	OC	JLD	75,000	214	350		Replaces lt. Ind.; adds parking
x	Office development (Oak Tree commercial site)	3		768	72	OC	JLD	40,000	123	325	Embarcadero to 2nd / Webster to Franklin	Redevelopment - mid-block area
x	Office intensification	3		795	72	OC	JLD		33		Clay / 3rd to 4th	Intensification of use in existing space
	Conversions - Produce District Bldgs - office/retail/restaurant	3		796	72	OC	JLD	70,000	200	350		Replaces lt. Ind.; adds parking
x	Commercial/office expansion/new	3		797	87	OC	JLD	20,000	57	350	4th + Jackson	Replaces light industrial
x	Commercial/office infill	3		797	87	OC	JLD	15,000	43	350	4th / Madison to Oak	Replaces industrial over longer term
x	Monahan Paper Mixed Use - office/commercial	3		798	87	OC	JLD	20,000	62	325	2nd / Jackson to Madison	Replaces industrial use
C	Office/comm'l in mixed-use development - Miller Meat site	3		798	87	OC	JLD	35,000	108	325	2nd / Alice to Jackson	Replaces industrial; Miller Meat packing site
x	Mixed use development/office/light industrial	3		798	87	OC	JLD	50,000	143	350	2nd to 3rd / Madison to Oak	Replaces industrial

/a/	Project	Time Period	Change /b/	Oakland TAZ	CMA TAZ	Planning District	Subarea	Sq. Ft.	Empls	SF/Emp	Location	Comments
O	Oak to 9th Project - Phase 8	3	N	799	87	OC	JLD				Oak to 9th Parcel N, west of channel	Predevelopment 2004; also see Surrounding Areas List for rest of Oak to 9th Project.
O	Retail/commercial: park-oriented	3	N	799	87	OC	JLD	15,000	38	400	Oak to 9th Parcel N	Predevelopment 2004
O	Project management and maintenance	3	N	799	87	OC	JLD		4		Oak to 9th Parcel N	Predevelopment 2005
O	Removal of existing uses	3	N	799	87	OC	JLD		(50)		Oak to 9th Parcel N	Predevelopment 2006
	Conversions / new development for office/commercial use	3		800	481	OC	JLD	60,000	172	350		Replaces light industrial (-74 jobs)
O	Potential additional office development	3	N	74	74	OC	KC	325,000	1,083	300	20th St. @ Webster or other site	Could replace Lakepoint Towers development
O	Potential additional office development	3	N	503	503	OC	KC	100,000	333	300	20th St. / Webster to Harrison	Site in Kaiser Center Master Plan; could replace Lakepoint Towers development
	Old Oakland (infill)	3		71	71	OC	OO		100			
U	Office development (police headquarters site)	3		493	493	OC	OO	200,000	667	300	Broadway + 7th	New office building on police headquarters site; could also be mixed use development
U	Additional infill / renovations	3		70	70	OC	UT	20,000	72	325	Telegraph / 17th to 18th	
O	Uptown / condo development	3	C,T	70	70	OC	UT	7,500	21	350	Telegraph/San Pablo/18th St./20th St.	Additional commercial - in this project or elsewhere in TAZ
O	Uptown / condo development - maintenance + management	3	C,T	70	70	OC	UT		7		Telegraph/San Pablo/18th St./20th St.	
	Additional infill	3		483	483	OC	UT		70			
O	Uptown / U.C. Housing - ground floor commercial	3	T	483	483	OC	UT	11,000	31	350	Telegraph/20th/21st	
O	Uptown / U.C. Housing - maint. + mgmt	3	T	483	483	OC	UT		30		Telegraph/20th/21st	
	Additional infill/rehab	3		484	484	OC	UT		110			
	Additional infill/rehab	3		485	485	OC	UT		285			
O	Additional entertainment venue	3	N	803	69	OC	UT	18,000	22	800	San Pablo area	Could be on or around Greyhound site
O	Retail/commercial intensification on Telegraph	3	N	470	470	OC	VSA		70			
									8,259			

Notes:
/a/ 'X' in first column indicates updated assumptions compared to original 11/21/00 Cumulative Scenario. 'U' indicates updated assumptions for Uptown Project EIR, May 2003. 'C' indicates updated assumptions for Central Station Project, December 2003. 'O' indicates updated assumptions for Oak to 9th EIR, November 2004.
/b/ Codes indicate change made for Oak to 9th Project EIR. C = change in number of employees, amount of space, and/or number of hotel rooms; N = new project added to list or significantly changed project; T = change in time period assumed for development and occupancy.

Source: City of Oakland; Port of Oakland; Hausrath Economics Group

APPENDIX E

EBMUD Letter Regarding Water Supply Assessment

EAST BAY
MUNICIPAL UTILITY DISTRICT

August 12, 2004

Margaret Stanzione, Project Manager
City of Oakland
250 Frank Ogawa Plaza, Suite 3330
Oakland, CA 94607

Dear Ms. Stanzione:

RE: Water Supply Assessment – Oak to Ninth Avenue Mixed Use Development Project

This letter responds to your request of June 3, 2004 for water agency consultation concerning the Oak to Ninth Avenue Mixed Use Development Project (Enclosure 1). The East Bay Municipal Utility District (EBMUD) appreciates the opportunity to provide this response.

Pursuant to Sections 10910-10915 (SB-610) of the California Water Code, the project meets the threshold requirement for an assessment of water supply availability based on the amount of water this project would require, which would be greater than the amount required by a 500 dwelling unit project.

Please note that this assessment addresses the issue of water supply only and is not a guarantee of service, and future water service is subject to rates and regulations in effect at the time.

Project Demand

The water demands for the Oak to Ninth Avenue Mixed Use Development Project area are accounted for in EBMUD's water demand projections as published in EBMUD's 2000 Urban Water Management Plan (UWMP/Enclosure 2). EBMUD's water demand projections account for anticipated future water demands within EBMUD's service boundaries and for variations in demand-attributed changes in development patterns. The current water demand for the existing land uses in the Oak to Ninth Avenue Mixed Use Development Project area is about 60,000 gallons per day (gpd). The projected demand, based on the projected water consumption by the applicant for the project area, is estimated to be 640,000 gpd and is consistent with EBMUD's demand projections that indicate densification of these types of land uses.

Project Area

The Oak to Ninth Avenue Mixed Use Development Project is located along the Oakland Estuary and consists of approximately 62 acres. The project is bounded by Embarcadero

Road to the north, Oakland Estuary to the south, Fallon Street to the west and 10th Avenue to the east (see Attachment A).

The project under consideration includes up to 3,100 residential units, 200,000 square feet of ground-floor commercial space, 3,500 structured parking spaces and approximately 27 acres of open space.

EBMUD Water Demand Projections

The water consumption of EBMUD customers has remained relatively level in recent years in spite of population and account growth. Between 1987 and the present, consumption has ranged from a high of approximately 220 million gallons per day (mgd) in 1987 to a low of 170 mgd in 1989. Based on extensive forecasting in EBMUD's Water Supply Management Program (WSMP) and recent land use based demand forecasting, the WSMP forecast for 2020 water demand of 277 mgd can be reduced to 229 mgd with successful water recycling and conservation programs that are in place. The Oak to Ninth Avenue Mixed Use Development Project will not change the EBMUD 2020 demand projection.

EBMUD Water Supply and Water Rights

EBMUD has water rights and facilities to divert up to a maximum of 325 mgd from the Mokelumne River, subject to the availability of Mokelumne River runoff and the prior water rights of other users. EBMUD's position in the hierarchy of Mokelumne River water users is determined by a variety of agreements between Mokelumne River water right holders, the appropriative water rights permits and licenses that have been issued by the State, pre-1914 rights and riparian rights. Conditions that restrict EBMUD's ability to use its 325 mgd entitlement include:

- Upstream water use by prior right holders.
- Downstream water use by riparian and senior appropriators and other downstream obligations, including protection of public trust resources.
- Drought, or less than normal rainfall for more than a year.
- Emergency outage.

During periods of drought, runoff from the Mokelumne River is insufficient to supply the 325 mgd entitlement. EBMUD studies indicate that, with its current water supply and the water demands expected in 2020, deficiencies in supply of up to 67 percent could occur during droughts.

EBMUD UWMP

The UWMP, adopted by the Board of Directors in Resolution No. 33242-01, includes planning level analyses at the County- and EBMUD-wide levels for existing

and projected water demand. A summary of EBMUD's demand and supply projections in five-year increments is provided in a table (Enclosure 3) from the UWMP. The data reflects the latest actual and forecast values.

EBMUD's evaluation of water supply availability accounts for the diversions of both upstream and downstream water right holders and fishery releases. Fishery releases are based on the requirements of a 1998 Joint Settlement Agreement (JSA) between EBMUD and State and Federal wildlife agencies. The JSA requires EBMUD to make minimum flow releases from its reservoirs to the lower Mokelumne River to benefit the fishery. As this water is released downriver, it is, therefore, not available for use by EBMUD's customers.

The available supply shown in the table (Enclosure 3) in years 1, 2 and 3 of a multiple-year drought was determined by EBMUD's hydrologic model with the following assumptions:

- EBMUD Drought Planning Sequence is used for 1976, 1977 and 1978.
- Total system storage is depleted by the end of the third year of the drought.
- The diversions by Amador and Calaveras Counties upstream of Pardee Reservoir increase over time.
- Releases are made to meet the requirements of senior downstream water right holders and fishery releases are made according to the JSA.

As discussed under the Drought Management Program section in Chapter 3 of the UWMP, EBMUD's system storage generally allows it to continue serving its customers during dry-year events. EBMUD imposes rationing based on the projected storage at the end of September. By imposing rationing in the first dry year of potential drought, EBMUD attempts to minimize rationing in subsequent years if a drought persists while continuing to meet its current and subsequent-year fishery flow release requirements and obligations to downstream agencies. Table 3-1 in the UWMP summarizes the guidelines for consumer water reduction goals based on system storage.

In the table (Enclosure 3), "Single Dry" year (or Year 1 of "Multiple Dry Years") is determined to be a year that EBMUD would implement Drought Management Program elements at the "moderate" stage with the goal of achieving between 0 to 15 percent reduction in customer demand. Year 2 of Multiple Dry Years is determined to be a year that EBMUD would implement Drought Management Program elements at the "severe" stage with the goal of achieving between 15 to 25 percent reduction in customer demand. In Year 3 of the multiple-year drought, deficiencies from about 48 percent in year 2005 to about 67 percent in year 2020 are forecast to occur. Therefore, a supplemental supply is needed, which is defined by EBMUD as the additional amount of water necessary to limit customer deficiency to 25 percent in a multiple-year drought while continuing to meet the requirements of senior downstream water right holders and the provisions of the 1998 JSA.

Supplemental Water Supply and Demand Management

The goals of meeting projected water needs and increased water reliability rely on three components: supplemental supply, water conservation and recycled water.

Chapter 2 of the UWMP describes EBMUD's supplemental water supply project alternatives to meet its long-term water demand. To address the need for a supplemental water supply during droughts, EBMUD signed a contract in 1970 with the Federal government for a supplemental supply from the Central Valley Project (CVP). In 2001, EBMUD certified the environmental documentation amending its CVP contract 14-06-200-5183A, reducing EBMUD's contract from 150,000 acre-feet (AF)/year to an annual entitlement not to exceed 133,000 AF. In 2002, EBMUD signed a Memorandum of Agreement with the City of Sacramento, the County of Sacramento and the U.S. Bureau of Reclamation to study a joint regional water project on the Sacramento River near Freeport. The Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) of the Freeport Regional Water Project identifies several regulatory permits and approvals required for the implementation of the project alternatives. These are listed in Table 2-6 of the Freeport Regional Water Project Draft EIR/EIS, July 2003.

Chapter 2 of the UWMP also describes other supplemental water projects, including the development of groundwater storage within EBMUD's service area. EBMUD is studying the environmental impacts of these proposed projects. Specific capital outlay and financing information for these projects are included in EBMUD's FY02-03 Capital Improvement Program and Five-Year Plan. The Freeport project would also allow for a future groundwater conjunctive use component and, along with the proposed local groundwater projects, emergency interties and planned water recycling and conservation efforts, would ensure a reliable water supply to meet projected demands for current and future EBMUD customers within the current service area. Without a supplemental water supply source, continued conservation efforts and further use of recycled water, deficiencies in supply are projected as noted above.

The Oak to Ninth Avenue Mixed Use Development Project presents an opportunity to incorporate many water conservation measures. We appreciate that the City of Oakland has a Article Section, Article 10 of Chapter 7, covering landscape water conservation. Conditions of approval for the implementation of the Oak to Ninth Avenue Mixed Use Development Project should require that the project comply with the Landscape Water Conservation Section of the Municipal Code of the City of Oakland, Article 10 of Chapter 7. EBMUD staff would like the opportunity to meet with staff to discuss water conservation programs and best management practices applicable to the project area. A key objective of this discussion will be to explore timely opportunities to expand conservation via early consideration of EBMUD's conservation programs and best management practices applicable to the project.

The Oak to Ninth Avenue Mixed Use Development Project area is located within the service area boundary of the District's East Bayshore Recycled Water Project. The District anticipates recycled water delivery to the project area by the year 2005 and recommends that the developer of this project discuss with the District the installation of dual plumbing for use of recycled water where feasible.

The project sponsor should contact David J. Rehnstrom, Senior Civil Engineer, at (510) 287-1365 for further information.

Sincerely,

WILLIAM R. KIRKPATRICK
Manager of Water Distribution Planning Division

sb04_265.doc.doc

Enclosures:
1. Letter of Request for Water Supply Assessment dated June 3, 2004
2. EBMUD's 2000 Urban Water Management Plan Area
3. EBMUD's Projected Demand and Available Supply Table

cc: Board of Directors w/o Enclosure 2

Enclosure 1

CITY OF OAKLAND

Community and Economic Development Agency, Planning & Zoning Services Division
250 Frank H. Ogawa Plaza, Suite 3330, Oakland, California, 94612-2032

June 3, 2004

RECEIVED
JUN 7 2004
WATER SERVICE PLANNING

Mr. William Kirkpatrick
East Bay Municipal Utility District
Manager, Water Distribution Planning Division
P.O. Box 24055, MS 701
Oakland, CA 94607

RE: Request for Confirmation of Water Supply Assessment for the proposed Oak-to-Ninth Mixed Use Project, Oakland

Dear Mr. Kirkpatrick:

Per amendments to Section 10912 of the Water Code implemented by Senate Bill 610, the City of Oakland is submitting this request to the East Bay Municipal Utility District (EBMUD) to prepare a water supply assessment. The assessment is required in order to determine whether adequate water supply is available to meet the projected water demand of the proposed Oak-to-Ninth Mixed Use Project. A Notice of Preparation for an Environment Impact Report (EIR) was sent to you on June 1, 2004 with a request for similar information.

The project is proposed on approximately 62 acres of waterfront property owned by the Port of Oakland. It includes up to 3,100 residential units, 200,000 square feet of ground-floor commercial space, 3,500 structured parking spaces, approximately 27 acres of public open space, two renovated marinas, and a wetlands restoration area. The project is proposed to be constructed in phases over approximately ten years.

The City respectfully requests that EBMUD immediately prepare a water supply assessment for the proposed project as on the description in the Notice of Preparation mailed to you earlier. The City acknowledges that this request for an assessment is a required part of the environmental documental for the project. We appreciate your prompt response to this request.

Please contact me if you need additional information. I can be reached at (510) 238-4932 or by email at mstanzione@oaklandnet.com.

Sincerely,

Margaret Stanzione

Margaret Stanzione, Project Manager
Strategic Planning

cc: Patrick Van Ness, Oakland Harbor Partners
Katrina Koh, ESA

Enclosure 3

PROJECTED DEMAND AND AVAILABLE SUPPLY
EAST BAY MUNICIPAL UTILITY DISTRICT
(million gallons per day - mgd)

	2000	2005	2010	2015	2020
Customer Demand[1]	230	242	257	267	277
Adjusted for Conservation[2]	(8)	(14)	(20)	(27)	(34)
Adjusted for Recycled Water[3]	(6)	(9)	(11)	(12)	(14)
Planning Level of Demand	216	219	226	228	229
Available Supply & Need for Supplemental Supply					
Normal Year	>216	>219	>226	>228	>229
Supplemental Supply Need	*0*	*0*	*0*	*0*	*0*
Single Dry Year (Multiple Dry Years - Year 1) Moderate Stage (approximately 7% deficiency)[4]	200	203	210	212	213
Supplemental Supply Need	*0*	*0*	*0*	*0*	*0*
Multiple Dry Years - Year 2 Severe Stage (approximately 25% deficiency)[4]	162	164	169	171	172
Supplemental Supply Need	*0*	*0*	*0*	*0*	*0*
Multiple Dry Years - Year 3					
Available Supply	125	114	95	84	77
Deficiency	42%	48%	58%	63%	67%
Supplemental Supply Need[5] (to limit deficiency to 25%)	*87*	*102*	*128*	*142*	*154*

1. *Demand taken from the 2000 Demand Study.*
2. *Conservation water savings goals from the WCMP 1999 Annual Report, 2 mgd in 1999 and 34 mgd for year 2020, linearly interpolated into five-year increments.*
3. *Chapter 5 of UWMP.*
   Note: Conservation and Reclamation savings reported are those attributed to programs which are a part of the 1993 WSMP. Reference Chapter 6 of UWMP.
4. *Drought conditions per Table 3-1, UWMP.*
5. *The supplemental supply need is calculated from modeling studies and is the amount of water needed to limit customer deficiency to 25 percent and to implement all provisions of the 1998 Joint Settlement Agreement.*

APPENDIX F

Applicable Oakland General Plan and Other Agency/Jurisdiction Policies

Oak-to-Ninth Avenue District Policies (*Estuary Policy Plan* excerpt)

APPENDIX F: Applicable Oakland General Plan and Other Agency/Jurisdiction Policies / Oak-to-Ninth Avenue District Policies (*Estuary Policy Plan* excerpt)

The following goals, objectives, and policies in the Oakland General Plan, Redevelopment Plans, and other applicable documents apply to the Oak to Ninth Avenue Project. Additionally, policies that appropriately would be implemented by the City of Oakland or other agencies/jurisdictions, but that pertain to issues or conditions of the project are also included. Inclusion of such policies here is not intended to suggest that the project sponsor would be solely responsible for implementing those policies.

I. Oakland General Plan and Applicable Redevelopment Plans

Land Use and Transportation Element of the Oakland General Plan

The LUTE includes objectives and policies that pertain to five policies areas: Industry and Commerce (I/C), Transportation and Transit-Oriented Development (T), Downtown (D), Waterfront (W), and Neighborhoods (N). Objectives and policies in the Land Use and Transportation Element that apply to the project are stated below. (The project site is not considered to be part of "Downtown Oakland.")

LUTE Industry and Commerce Policies

- Retail uses should be focused in "nodes" of activity, characterized by geographic clusters of concentrated commercial activity, along corridors that can be accessed through many modes of transportation. *(LUTE Policy I/C3.3, Clustering Activity in "Nodes")*

- Existing industrial, residential, and commercial activities and areas which are consistent with long term land use plans for the City should be protected from the intrusion of potentially incompatible land uses. *(LUTE Policy I/C4.1, Protecting Existing Activities)*

- Adequate public infrastructure should be ensured within existing and proposed industrial and commercial areas to retain viable uses, improve the marketability of existing vacant or underutilized sites, and encourage future use and development of these areas with activities consistent with the goals of this Plan. *(LUTE Policy I/C1.9, Locating Industrial and Commercial Area Infrastructure)*

LUTE Transportation and Transit-Oriented Development Policies

- "A key challenge for Oakland is to encourage commuters to carpool or use alternative modes of transportation, including bicycling or walking. The Policy Framework proposes that congestion be lessened by promoting alternative means of transportation, such as transit, biking, and walking, providing facilities that support alternative modes, and implementing street improvements. The city will continue to work closely with local and regional transit providers to increase accessibility to transit and improve intermodal transportation connections and facilities. Additionally, policies support the introduction of light rail and trolley buses along appropriate arterials in heavily traveled corridors, and

expanded use of ferries in the bay and estuary." *(LUTE Policy Framework: Encouraging Alternative Means of Transportation)*

- The City should include bikeways and pedestrian walks in the planning of new, reconstructed, or realized streets, wherever possible. *(Policy T3.5, Including Bikeways and Pedestrian Walks)*

- The City will require new development, rebuilding, or retrofit to incorporate design features in their projects that encourage use of alternative modes of transportation such as transit, bicycling, and walking. *(Policy T4.1, Incorporating Design Features for Alternative Travel)*

- The waterfront should be made accessible to pedestrians and bicyclists throughout Oakland. *(Policy T6.3, Making the Waterfront Accessible)*

LUTE Waterfront Policies

- All recreational activity sites along the waterfront should be connected to each other to create continuous waterfront access. Safe and direct automobile, bicycle, pedestrian and waterway access between the waterfront and adjacent neighborhoods should be created and strengthened. *(Policy W2.1, Linking Neighborhoods with the Waterfront)*

- Public access improvements to the waterfront and along the water's edge should be implemented as projects are developed. The access improvement should conform to the requirements of the Bay Conservation and Development Commission. *(Policy W2.3, Providing Public Access Improvements)*

- To create safe access to the water, pedestrian, bicycle, and automobile railroad crossings should be provided where feasible. Crossings could include grade separations, at-grade crossings, skyway bridges, or connections between buildings. *(Policy W2.5, Improved Railroad Crossings)*

- Public Transportation to the waterfront should be encouraged, coordinated, and strategically located. Waterfront transportation should be marketed to enhance ease of access both locally and regionally. *(LUTE Policy W2.7, Encourage Public Transportation)*

- Parking should be developed at key points generally set back from the waterfront to minimize the impact of private automobile use in high-activity areas. Parking structures that incorporate ground floor uses, are available for day and night activities, and allow for shared use, are preferred. *(Policy W2.9, Parking at Key Points)*

- Physical improvements to improve the aesthetic qualities of the waterfront, and increase visitor comfort, safety, and enjoyment should be incorporated in the development of projects in the waterfront area. These amenities may include landscaping, lighting, public art, comfort stations, street furniture, picnic facilities, bicycle racks, signage, etc. These facilities should be accessible to all persons and designated to accommodate elderly and physically disabled persons. *(Policy W2.10, Making Public Improvements as a Part of Projects)*

- Waterfront development should incorporate public, educational and interpretive information for waterfront activities to encourage public knowledge and understanding of the historic, cultural, economic, and environmental context. *(Policy W2.11, Disseminating Public Information)*

- Preserve the high quality and uniqueness of the natural and built environment of the waterfront. *(Objective W3)*

- Waterfront objectives, policies, and actions regarding geology, land stability, erosion, soils, water quality, flood hazards, wetland plant and animal habitats, and air quality and pollutants, shall be consistent and in compliance with the 1996 Open Space, Conservation, and Recreation Element of the City's General Plan. *(Policy W3.1, Requiring Consistency with Conservation Objectives and Policies)*

- The function, design and appearance, and supplementary characteristics of all uses, activities, and facilities should enhance, and should not detract from or damage the quality of, the overall natural and built environment along the waterfront. *(Policy W3.2, Enhancing the Quality of the Natural and Built Environment)*

- Native plant communities, wildlife habitats, and sensitive habitats should be protected and enhanced. *(LUTE Policy W3.3, Protecting and Preserving Wetland Plant and Animal Habitats)*

- Buildings and facilities should respect scenic viewsheds and enhance opportunities for visual access of the waterfront and its activities. *(Policy W3.4, Preserving Views and Vistas)*

- Develop and encourage mixed use areas along the estuary shoreline, while enhancing and promoting economic opportunities in Oakland which take advantage of the waterfront's unique character to attract public uses and activities. *(Objective W9)*

- Mixed use areas are areas or developments where residential uses are integrated with other non-residential uses such as commercial, recreation, and industrial areas. Live/work units are appropriate mixed use developments and unique residential opportunities for the waterfront. *(Policy W9.1, Defining Mixed-use Along the Estuary)*

- Mixed land uses should be encouraged in areas where the integration of housing with other compatible uses will add to the overall environmental, social, and economic vitality of the waterfront, and will create a safe environment. *(Policy W9.2, Encouraging Mixed Land Uses Along the Estuary)*

- Mixed use and residential developments should be sensitive to adjacent properties and designed to enhance the existing and unique characteristics of the waterfront and immediate surroundings. Individual properties should be designed to encourage and provide sufficient public access to the waterfront and designed to avoid the feeling of "gated" or private communities. *(Policy W9.3, Defining Development Characteristics Along the Estuary)*

- Development along the estuary shore should reflect higher intensity mixed use activities and areas at Jack London Square. The balance of development along the estuary should be of lower intensity than at Jack London Square; however, higher density nodes of

development may be appropriate at key locations. Access to transportation corridors and transit should be provided. The development intensity should significantly decrease adjacent to Martin Luther King Jr. Regional Shoreline. *(Policy W9.5, Defining Development Intensity Along the Estuary)*

- Housing quality, type, and services should be developed in a manner that is consistent with the policies and requirements of future detailed plans created for the Waterfront; the Housing Element of the General Plan; the City's Building Code; and/or other appropriate codes or regulations. *(Policy W9.6, Developing Housing Along the Estuary: Quality, Type, and Service)*

- The existing residential communities within and adjacent to the waterfront should be supported and enhanced. *(Policy W9.7, Supporting Existing Residential Communities Along the Estuary)*

- Programmed events and activities that take advantage of the unique waterfront setting should be encouraged. Appropriately scaled conference and convention facilities, hotels, etc., and businesses that benefit from the close proximity to the seaport and airport should be encouraged and be consistent with City economic development strategies. These uses may include retail, restaurants, destination entertainment, waterfront related commercial, and recreational services (boat tours, water taxis, etc.). *(Policy W9.8, Taking Advantage of the Unique Waterfront Along the Estuary)*

- Public access along the estuary should be facilitated by commercial and active recreational uses. It is important to have physical access to and between uses and activities along the waterfront, particularly along the shoreline. Opportunities for landscaped and signed linkages along Broadway, Webster, Harrison, and Oak Streets, as well as the Lake Merritt Channel, should be developed for (land and water) auto, bicycle, pedestrian, and public transportation. *(Policy W10.6, Specifying Public Access and Linkages)*

- Enhance and promote economic opportunities in Oakland which take advantage of the waterfront's unique character to attract public uses and activities. *(LUTE Objective W11)*

- The area should reflect its current variety of uses in areas with distinct characteristics. The area around Inner Harbor and 9th Street [sic] Terminal has an artists community mixed with some industrial uses that should be supported. Other uses such as commercial/service uses (restaurants, retail, office, hotel/motel, etc.) may be appropriate as well as marina with support services. *(LUTE Policy W11.2, Defining Embarcadero Cove Land Uses)*[1]

- The development intensity of the area should be moderate with lower use intensity and density than Jack London Square; however, nodes of higher intensity development may be appropriate. Access to transportation corridors and transit should be provided. Development intensity should be sensitive to the open feeling of the marina and view opportunities. Overall development of the area must be sensitive to the close proximity of the water's edge. Properties along the shoreline should be planned, developed, and operated with

[1] The Embarcadero Cove area defined in the LUTE (p.91) spans from Estuary Park to Dennison Street, which includes the project site. The Embarcadero Cove area defined in the Estuary Policy Plan (p.106) spans from the Ninth Avenue Terminal to Con-Agra (approx. 29th Avenue), which does not include the project site.

particular sensitivity to public access. *(LUTE Policy W11.3, Defining Embarcadero Cove Development Intensity and Characteristics)*

- The mixed use character for this area should incorporate a variety of uses throughout, including artist residential use, where appropriate. *(LUTE Policy W11.4, Defining Embarcadero Cove Mixed Use Characteristics)*

- Public access and linkages should be provided from the San Antonio neighborhoods to the Embarcadero Cove. Signage, landscaping, and gateways should be provided, where necessary, to access points and pathways. *(LUTE Policy W11.5, Specifying Public Access and Linkages)*

- Development in this area should be designed to enhance direct access to and along the water's edge, to maximize the waterfront views and vistas, and to make the public pedestrian access and spaces inviting. Development and amenities must be sensitive to immediate surroundings. *(LUTE Policy W11.6, Defining Embarcadero Cove Design Criteria)*

- Develop and encourage mixed use areas along the estuary shoreline. *(LUTE Objective W12)*

LUTE Neighborhood Policies

- Provide for healthy, vital, and accessible commercial areas that help meet local consumer needs in the neighborhoods. *(LUTE Objective N1)*

- Encourage the construction, conservation, and enhancement of housing resources in order to meet the current and future needs of the Oakland community. *(LUTE Objective N3)*

- Facilitating the construction of housing units should be considered a high priority for the City of Oakland. *(Policy N3.1, Facilitating Housing Construction)*

- In order to facilitate the construction of needed housing units, infill development that is consistent with the General Plan should take place throughout the City of Oakland.*(LUTE Policy N3.2, Encouraging Infill Development*)

- High quality design standards should be required of all new residential construction. Design requirements and permitting procedures should be developed and implemented in a manner that is sensitive to the added costs of those requirements and procedures. *(LUTE Policy N3.8, Requiring High Quality Design*)

- Residential developments should be encouraged to face the street, and orient their units to desirable sunlight and views, while avoiding unreasonably blocking sunlight and views for neighboring buildings, respecting the privacy needs of residents of the development and surrounding properties, providing for sufficient conveniently located on-site open space, and avoiding undue noise exposure. *(LUTE Policy N3.9, Orienting Residential Development*)

- Off-street parking for residential buildings should be adequate in amount and conveniently located and laid out, but its visual prominence should be minimized. *(LUTE Policy N3.10, Guiding the Development of Parking)*

- Residential areas should be buffered and reinforced from conflicting uses through the establishment of performance-based regulations, the removal of non-conforming uses, and other tools. *(LUTE Policy N5.2, Buffer Residential Areas)*

- The City will generally be supportive of a mix of projects that provide a variety of housing types, unit sizes, and lot sizes which are available to households with a range of incomes. *(LUTE Policy N6.1, Mixing Housing Types)*

- Housing developments that increase home ownership opportunities for households of all incomes are desirable. *(LUTE Policy N6.2, Increased Home Ownership)*

- Infrastructure availability, environmental constraints and natural features, emergency response and evacuation times, street width and function, prevailing lot size, predominant development type and height, scenic values, distance from public transit, and desired neighborhood character are among the factors that could be taken into account when developing and mapping zoning designations or determining "compatibility". These factors should be balanced with the citywide need for additional housing. *(LUTE Policy N7.2, Defining Compatibility)*

- Local Streets should be designed to create an intimate neighborhood environment and not support high speed nor large volumes of traffic. Providing on-site parking for cars and bicycles, planting and maintaining street trees, and landscaping, minimizing the width of driveway curb cuts, maintaining streets, bike routes, and sidewalks, and orienting residential buildings toward the street all contribute to the desired environment. *(LUTE Policy N7.4, Designing Local Streets)*

- Direct urban density and mixed use housing development to locate near transit or commercial corridors, transit stations, the Downtown, waterfront, underutilized properties where residential uses do not presently exist but may be appropriate, areas where this type of development already exists and is compatible with desired neighborhood character, and other suitable locations. *(LUTE Objective N8)*

- The height of development in urban residential and other higher density residential areas should step down as it nears lower density residential areas to minimize conflicts at the interface between the different types of development. *(LUTE Policy N8.2, Making Compatible Interfaces between Densities)*

- Identify locations of interest and historic significance by markers, signs, public art, landscape, installations, or by other means. *(LUTE Policy N9.5, Marking Significant Site).*

- Diversity in Oakland's built environment should be as valued as the diversity in population. Regulations and permit processes should be geared toward creating compatible and attractive development, rather than "cookie cutter" development. *(LUTE Policy N9.7, Creating Compatible but Diverse Development)*

- Locations that create a sense of history and community within the City should be identified and preserved where feasible. *(LUTE Policy N9.8, Preserving History and Community)*

- Provide adequate infrastructure to meet the needs of Oakland's growing community. *(LUTE Objective N12)*

- The development of public facilities and staffing of safety related services, such as fire stations, should be sequenced and timed to provide a balance between land use and population growth and public services at all times. *(LUTE Policy N12.1)*

- Adequate public school capacity should be available to meet the needs of Oakland's growing community. The City and the Oakland Unified School District (OUSD) should work together to establish a continuing procedure for coordinating residential and commercial development and exploring residential and commercial development and exploring the imposition of mutually agreed upon reasonable and feasible strategies to provide for adequate school capacity. The City and OUSD should jointly consider where feasible and appropriate, finding mechanisms such as assessment districts, Redevelopment Agency funding (AB 1290), use of surplus, City-owned land, bond issues, and adjacent or shared use of land or school facilities with recreations, libraries, child care and other public uses. *(LUTE Policy N12.2)*

- Electrical, telephone, and related distribution lines should be undergrounded in commercial and residential areas, except where special local conditions such as limited visibility of the poles and wires make this unneeded. They should also be undergrounded in appropriate institutional, industrial, and other areas, and generally along freeways, scenic routes, and heavily traveled streets. Programs should lead systematically toward the eventual undergrounding of all existing lines in such places. Where significant utility extensions are taking place in these areas, such as in new subdivisions, utilities should be installed underground at the start. *(LUTE Policy N12.4, Undergrounding Utility Lines)*

Estuary Policy Plan – An Element of the General Plan[2]

The Estuary Plan contains the following overall objectives for Land Use, Shoreline Access and Public Space, and Regional Circulation and Local Street Network:

- Provide for a broad mixture of activities within the estuary area. *(EPP Land Use Objective 1)*

- Provide for public activities that are oriented to the water. *(EPP Land Use Objective 2)*

- Expand opportunities and enhance the attractiveness of the estuary shoreline as a place to live. *(EPP Land Use Objective 3)*

- Develop the estuary area in a way that enhances Oakland's long-term economic development. *(EPP Land Use Objective 4)*

- Provide for the orderly transformation of land uses while acknowledging and respecting cultural and historical resources when applicable and feasible. *(EPP Land Use Objective 5)*

- Create greater land use continuity between the Estuary waterfront and adjacent inland districts. *(EPP Land Use Objective 6)*

2 The complete text of the "Oak-to-Ninth District" chapter of the Estuary Policy Plan is provided at the end of this Appendix.

- Create a clear and continuous system of public access along the estuary shoreline.*(EPP Shoreline Access Objective 1)*
- Punctuate the shoreline promenade with a series of parks and larger open spaces. *(EPP Shoreline Access Objective 2)*
- Emphasize visual corridors and open space links to surrounding inland areas. *(EPP Shoreline Access* Objective 3)
- Develop opportunities for recreational activities that are oriented to the waterfront and serve identified neighborhood needs. *(EPP Shoreline Access Objective 4)*
- Enhance natural areas along the shoreline. *(EPP Shoreline Access Objective 5)*
- Encourage the development of educational and cultural programs and interpretive facilities the enhance understanding of the waterfront environment. *(EPP Shoreline Access Objective 6)*
- Improve and clarify regional access to Oakland's waterfront. *(EPP Circulation Objective 1)*
- Establish a continuous waterfront parkway; a safe promenade for pedestrians, bicycles, and slow-moving automobiles. *(EPP Circulation Objective 2)*
- Balance through movement with local access along the waterfront. *(EPP Circulation Objective 3)*
- Strengthen local circulation connections between Oakland neighborhoods and the waterfront. *(EPP Circulation Objective 4)*
- Promote transit service to and along the waterfront. *(EPP Circulation Objective 5)*
- Improve pedestrian and bicycle circulation. *(EPP Circulation Objective 6)*
- Provide adequate parking without diminishing the quality of the urban environment. *(EPP Circulation Objective 7)*

The Estuary Plan provides specific land use policies (OAK) for the Oak-to-Ninth Avenue District[3]:

- Protect and enhance the natural and built components that establish the waterfront's unique environment. *(EPP Policy OAK-1)*
  - Encourage the preservation and enhancement of wetland areas. *(Policy OAK-1.1)*

3 Various maps and text descriptions throughout the Estuary Policy Plan depict varying and generalized boundaries for the "Oak-to-Ninth Avenue" District, however the Oak Street-to-Ninth Avenue Terminal description initially stated in Section 1, Background (*Plan Organization*) of the Estuary Policy Plan is used for purposes of this EIR.

- Provide for continuous pedestrian and bicycle movements along the water's edge. *(EPP Policy OAK-1.2)*
- Undertake remediation of contaminants in conjunction with development and/or improvement of relevant sites. *(EPP Policy OAK-1.3)*

- Establish a well-structured, integrated system of major recreational facilities which accommodate a wide variety of activities and which take advantage of the unique waterfront setting. Promote a variety of recreational experiences. *(EPP Policy OAK-2):*
  - Expand Estuary Park. Encourage aquatic sports within the mouth of Lake Merritt Channel. *(EPP Policy OAK-2.1)*
    - Expand and Rehabilitate Estuary Park.
    - Develop the mouth of Lake Merritt Channel as a protected water space for aquatic sports.
  - Create a major new park on the east side of the mouth of the Lake Merritt Channel, at the Estuary. *(EPP Policy OAK-2.2)*
  - Clinton Basin: Enhance Clinton Basin. *(EPP Policy OAK-2.3)*
    - Rehabilitate the marina.
    - Establish a linear open space composed of a series of smaller parks around Clinton Basin.
    - Provide for a limited number of new recreational slips east of Fifth Avenue.
  - Ninth Avenue Terminal: Establish a large park in the area of the existing Ninth Avenue Terminal to establish a location for large civic events and cultural activities. *(EPP Policy OAK-2.4)*
    - The Port and City should investigate the facility the feasibility of keeping and reusing the building (or portions thereof). A Specific Plan for the entire District should be initiated prior to development.
    - Encourage the mooring of vessels adjacent to the Ninth Avenue Terminal.

- Lake Merritt Channel: Link the Estuary to Lake Merritt by enhancing the Lake Merritt Channel. *(EPP Policy OAK-3)*
  - Create a system of public open spaces that connects Lake Merritt Channel to the Estuary. *(EPP Policy OAK-3.1)*
  - Work with public agencies in the area to extend the open space system inland from the Channel. *(EPP Policy OAK-3.2)*
- Provide for lively, publicly oriented activities that complement the adjacent waterfront parks and open spaces. *(EPP Policy OAK-4)*
  - Preserve and expand the existing Fifth Avenue Point community as a neighborhood of artists and artisan studios, small businesses, and water-dependent activities. *(EPP Policy OAK-4.1)*
  - Promote development of educational and cultural interpretive facilities. *(EPP Policy OAK-4.2)*

    - The Oakland Museum is investigating options to expand and develop the 'Treasure House' concept. An appropriate location for this use would be adjacent to the planned waterfront open space flanking Clinton Basin and the Estuary.
  - Facilitate the relocation of break-bulk cargo operations from the Ninth Avenue Terminal. *EPP Policy OAK-4.3)*
  - Promote the development of commercial-recreational uses in the vicinity of the Crescent Park and Clinton Basin. *(EPP Policy OAK-4.4)*
- Initiate more specific planning of the entire Oak-to-Ninth District. *(EPP Policy OAK-5)*
- Explore the future potential for a new BART station and major parking facility on BART property at Fifth Avenue and East Eighth Street. *(EPP Policy OAK-6)*
- Coordinate with Caltrans on the upgrade of the I-880 Freeway to improve regional access to the waterfront. *(EPP Policy OAK-7)*
- Enhance the Fifth Avenue as the principal pedestrian and vehicular linkage to the public open space surrounding the mouth of the Lake Merritt Channel. *(EPP Policy OAK-8)*
- Improve the Embarcadero east of Oak Street as a multimodal landscaped parkway with bicycle, pedestrian and vehicular facilities. *(EPP Policy OAK-9)*
- Create a network of pedestrian-friendly streets that opens up views and access to the water. *(EPP Policy OAK-10)*
- Design parking to be convenient and complementary to the public orientation of uses within the area. *(EPP Policy OAK-11)*
- Establish a management program for special events access and parking. *(EPP Policy OAK-12)*

Historic Preservation Element (HPE) Goals and Policies

- To preserve, protect, enhance, perpetuate, use, and prevent the unnecessary destruction or impairment of properties or physical features of special character or special historic, cultural, educational, architectural or aesthetic interest or value. Such properties or physical features include buildings, building components, structures, objects, districts, sites, natural features related to human presence, and activities taking place on or within such properties or physical features. *(HPE Goal 2)*

- Landmark and Preservation District Regulations *(HPE Policy 2.4)*

  (a) Demolitions and removal involving Landmarks or Preservation Districts will generally not be permitted or be subject to postponements unless certain findings are made. Demolition or removal of more important Landmarks and of Preservation District properties will normally not be permitted without the required findings, while demolition or removal of less important Landmarks will be subject only to postponement.

  (b) Alterations or new Construction involving Landmarks or Preservation Districts will normally be approved if they are found to meet the Secretary of the Interior's Standards for the Treatment of Historic Properties or if certain other findings are made.

(c) Findings for approval of demolitions, removals or alterations, or New Construction involving Landmarks or Preservation Districts will seek to balance preservation of these properties with other concerns.

- *Avoid or Minimize Adverse Historic Preservation Impacts Related to Discretionary City Actions.* The City will make all reasonable efforts to avoid or minimize adverse effects on the Character-Defining Elements of existing or Potential Designated Historic Properties which could result from private or public projects requiring discretionary City actions. *(HPE Policy 3.1)*

- For any project involving complete demolition of Heritage Properties or Potential Designated Historic Properties requiring discretionary City permits, the City will make a finding that: (1) the design quality of the proposed project is at least equal to that of the original structure and is compatible with the character of the neighborhood; or (2) the public benefits of the proposed project outweigh the benefit of retaining the original structure; or (3) the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood. *(HPE Policy 3.5)*

- *Property Relocation Rather than Demolition.* As a condition of approval for all discretionary projects involving demolition of existing or Potential Designated Historic Properties, the City will normally require that reasonable efforts be made to relocate the properties to an acceptable site. *(HPE Policy 3.7)*

- *Definition of "Local Register of Historical Resources" and Historic Preservation "Significant Effects" for Environmental Review Purposes.* For purposes of environmental review under the California Environmental Quality Act, the following properties will constitute the City of Oakland's Local Register of Historic Resources:

  1) All Designated Historic Properties, and

  2) Those Potential Designated Historic Properties that have an existing rating of "A" or "B" or are located within an Area of Primary Importance.

  3) Until complete implementation of Action 2.1.2 (Redesignation), the "Local Register" will also include the following designated properties: Oakland Landmarks, S-7 Preservation Combining Zone properties, and Preservation Study List properties. *(HPE Policy 3.8)*

Open Space, Conservation and Recreation Element (OSCAR) Policies

Objectives and policies in the OSCAR address recreation (REC), open space (OS), and conservation (CO).

- Use level of service standards of 10 acres of total parkland and four acres of local-serving parkland per 1,000 residents as a means of determining where unmet needs exist and prioritizing future capital investments. *(OSCAR Policy REC-3.1)*

- Increase the amount of urban parkland in the seven flatland planning areas, placing a priority on land in areas with limited public open space, land adjacent to existing parks, land with the potential to provide creek or shoreline access, land with historical or visual significance, land that can be acquired at no cost or reduced cost, land in areas with dense concentrations of people or workers, and land that is highly visible from major streets or adjacent to public buildings. *(OSCAR Policy OS-2.5)*

- Continue to require new multi-family development to provide useable outdoor open space for its residents. *(OSCAR Policy OS-4.1)*

- To develop a system of linear parks and trails which (a) links existing parks together; (b) provides safe, convenient access to open space from residential areas and employment centers; (c) provides places to hike, bike, and experience Oakland's scenery; and (d) provides a means of moving from one place to another without an automobile. *(OSCAR Objective OS-5)*

- Improve trail connections within Oakland, emphasizing connections between the flatlands and the hill and shoreline parks; lateral trail connections between the hill area parks; and trails along the waterfront. *(OSCAR Policy OS-5.1)*

- Require land uses along the shoreline which promote the beneficial uses of the Estuary and Bay waters, including a balanced mix of commercial shipping facilities; water-dependent industry, commerce, and transportation; recreation; water-oriented services and housing; and resource conservation. *(OSCAR Policy OS-7.1)*

- Support the BCDC requirements which mandate that all new shoreline development designate the water's edge as publicly accessible open space where safety and security are not compromised, and where access can be achieved without interfering with waterfront industrial and maritime uses. Where such conflicts or hazards would result, support the provision of off-site access improvements in lieu of on-site improvements. In such cases, the extent of off-site improvements should be related to the scale of the development being proposed. *(OSCAR Policy OS-7.2)*

- Promote a greater appreciation of the Oakland waterfront by preserving and enhancing waterfront views, promoting its educational value, and, exploring new and creative ways to provide public access to the shoreline without interfering with transportation and shipping operations or endangering public safety. *(OSCAR Policy OS-7.3)*

- Improve lateral access along the Oakland shoreline and linkages between the shoreline and nearby neighborhoods by creating a "Bay Trail" along the length of the Oakland waterfront. Where an alignment immediately along the waterfront is not possible, site the trail as close to the water as possible, with spur trails leading to the water's edge. In the transitional areas between Jack London Square and High Street, interim alignments may be designated along local streets but the ultimate goal should be an unbroken trail along the water's edge between Jack London Square and Martin Luther King, Jr. Regional Shoreline. *(OSCAR Policy OS-7.5)*

- On an on-going basis work with the Port, the EBRPD, the State Coastal Conservancy, and the Association of Bay Area Governments to coordinate construction of the Bay Trail on its adopted alignment through Oakland. Wherever feasible, the on-site segments for the Trail should be constructed as part of site development. *(OSCAR Action OS-7.5.2)*

- Particular attention should be paid to (a) views of the Oakland Hills from the flatlands; (b) views of downtown and Lake Merritt; (c) views of the shoreline; and (d) panoramic views from Skyline Boulevard. *(OSCAR Policy OS-10.1)*

- New development should minimize adverse visual impacts and take advantage of opportunities for new vistas and scenic enhancement. *(OSCAR Policy OS-10.2)*

- Oakland's underutilized visual resources, including the waterfront, creeks, San Leandro Bay, architecturally significant buildings or landmarks, and major thoroughfares should be enhanced. *(OSCAR Policy OS-10.3)*

- Regulate new development in a manner which protects soil from degradation and misuse or other activities which significantly reduce its ability to support plant and animal life. Design all construction activities to ensure that soil is well secured so that unnecessary erosion, siltation of streams, and sedimentation of water bodies does not occur. *(OSCAR Policy CO-1.1)*

- Consider soil constraints such as shrink-swell and low soil strength in the design of buildings and roads. Suitable base materials and drainage provisions should be incorporated where necessary. *(OSCAR Action CO-1.1.3)*

- Minimize hazards associated with soil contamination through appropriate storage and disposal of toxic substances, monitoring of dredging activities, and clean up of contaminated sites. In this regard, require soil testing for development of any site (or dedication of any parkland or community garden) where contamination is suspected due to prior activities on the site. *(OSCAR Policy CO-1.2)*

- Development on Filled Soils. Require development on fill soils to make special provisions to safeguard against subsidence and seismic hazards. *(OSCAR Policy CO-2.3)*

- Require the use of drought tolerant plants to the greatest extent possible and encourage the use of irrigation systems which minimize water consumption. *(OSCAR Policy CO-4.2)*

- Promote the use of reclaimed wastewater for irrigating landscape medians, cemeteries, parks, golf courses, and other areas requiring large volumes of non-potable water. *(OSCAR Policy CO-4.3)*

- Encourage groundwater recharge by protecting large open space areas, maintaining setbacks along creeks and other recharge features, limiting impervious surface where appropriate, and retaining natural drainage patterns within newly developing areas. *(OSCAR Policy CO-5.1)*

- Support efforts to improve groundwater quality, including use of nontoxic herbicides and fertilizers, enforcement of anti-litter laws, cleanup of sites contaminated by toxics, and ongoing monitoring by the Alameda County Flood Control and Water Conservation District. *(OSCAR Policy CO-5.2)*

- Control of Urban Runoff. Employ a broad range of strategies, compatible with the ACCWP, to: (a) reduce water pollution associated with stormwater runoff; (b) reduce water pollution associated with hazardous spills, runoff from hazardous material areas, improper disposal of household hazardous wastes, illicit dumping, and marina "live-aboards" and (c) improve water quality in Lake Merritt to enhance the lake's aesthetic, recreational, and ecological functions. *(OSCAR Policy CO-5.3)*

- Continue to use the environmental review process to ensure that the future road construction and dredging projects incorporate measures to ensure water quality in potentially impacted lakes, creeks, wetlands, and nearshore waters. Consider developing

standard mitigation measures for future road improvements and dredging projects in collaboration with Caltrans and the Port. *(OSCAR Policy CO-5.3.5)*

- Reduce water pollution from sanitary sewer collection and treatment systems, including wastewater collection lines and the regional treatment plant. Continue the systemwide improvement program to correct infiltration and inflow problems in the East Bay Municipal Utility District and City sewer systems. *(OSCAR Action CO-5.3.11)*

- Protect the surface waters of the San Francisco estuary system, including San Francisco Bay, San Leandro Bay, and the Oakland Estuary. Discourage shoreline activities which negatively impact marine life in the water and marshland areas. *(OSCAR Policy CO-6.5)*

- Prohibit bay fill unless there is compelling evidence that its benefits will outweigh the environmental and other costs. In such instances, support compliance with the mitigation requirements of BCDC and other regulatory agencies. *(OSCAR Policy CO-6.6)*

- Discourage the removal of trees on already developed sites unless removal is required for biological safety, or public works reasons. *(OSCAR Policy CO-7.4)*

- Work with federal, state, and regional agencies on an on-going basis to determine mitigation measures for development which could potentially impact wetlands. Strongly discourage development with unmitigatable adverse impacts. *(OCSCAR Policy CO-8.1)*

- Protect rare, endangered, and threatened species by conserving and enhancing their habitat and requiring mitigation of potential adverse impacts when development occurs within habitat areas. *(OSCAR Policy CO-9.1)*

- Protect wildlife from the hazards of urbanization, including loss of habitat and predation from domestic animals. *(OSCAR Policy CO-11.1)*

- Protect and enhance migratory corridors for wildlife. Where such corridors are privately owned, require new development to retain native habitat or take other measures which help sustain local wildlife population and migratory patterns. *(OSCAR Policy CO-11.2)*

- Promote land use patterns and densities which help improve regional air quality conditions by: a) minimizing dependence on single passenger autos; (b) promoting projects which minimize quick auto starts and stops, such as live-work development, and office development with ground-floor retail space; (c) separating land uses which are sensitive to pollution from the sources of air pollution; and (d) supporting telecommuting, flexible work hours, and behavioral changes which reduce the percentage of people in Oakland who must drive to work on a daily basis. *(OSCAR Policy CO-12.1)*

- Maintain a coordinated bus, rail, and ferry transit system which provides efficient service to major destinations and promotes alternatives to the single passenger auto. *(OSCAR Policy CO-12.2)*

- Expand existing transportation systems management and transportation demand management strategies which reduce congestion, vehicle idling, and travel in single-passenger autos. *(OSCAR Policy CO-12.3)*

- Require that development projects be designed in a manner which reduces potential adverse air quality impacts. This may include: (1) the use of vegetation and landscaping to absorb

carbon monoxide and to buffer sensitive receptors; (b) the use of low-polluting energy sources and energy conservation measures; (c) designs which encourage transit use and facilitate bicycle pedestrian travel. *(OSCAR Policy CO-12.4)*

- Require construction, demolition and grading practices which minimize dust emissions. *(OSCAR Policy CO-12.6)*

- Encourage site plans for new development which maximize energy efficiency. *(OSCAR Policy CO-13.3)*

Oakland Safety Element Policies

- Continue, enhance or develop regulations and programs designed to minimize seismically related structural hazards from new and existing buildings. (*Safety Policy GE-3*)

- Maintain and enhance the city's capacity to prepare for, mitigate, respond to, and recover from disasters and emergencies. *(Safety Policy PS-1)*

- Minimize the potential risk to human and environmental health and safety associated with the past and present use, handling, storage and disposal of hazardous materials. (*Safety Policy HM-1*)

- Continue to strengthen city programs that seek to minimize the storm-induced flooding hazards. *(Safety Policy FL-2)*

- Minimize further the relatively low risks from non storm-related forms of flooding. *(Safety Policy FL-4)*

Housing Element Policies

- The City of Oakland will strive to meet its fair share of housing needed in the region. (*Housing Element Policy 1.7*)

- Seek voluntary agreements with private developers of market rate housing to include units affordable to lower-income households, especially those projects involving Redevelopment Agency support or requiring major planning approvals. (*Housing Element Policy 2.4*)

- The City will undertake a number of efforts to distribute assisted housing widely throughout the community and avoid the over-concentration of assisted housing in any particular neighborhood, in order to provide a more equitable distribution of households by income and by race and ethnicity. (*Housing Element Policy 2.11*) **[NOTE TO REVIEWER: City recommended addition of this policy. Confirm its applicability.]**

- Develop and promote programs to foster the incorporation of sustainable design principles, energy efficiency and Smart Growth principles into residential developments. *Housing Element Policy 7.1*)

- Continue to direct development toward existing communities and encourage infill development at densities consistent with the surrounding communities. (*Housing Element Policy 7.3*)

- Work with developers to construct new housing that reduces the footprint of new construction, preserves green spaces, and supports the use of public transit. (*Housing Element Policy 7.4*)

- Encourage a mix of land uses in the same zoning district or on the same site in certain zoning districts. (*Housing Element Policy 7.5*)

Noise Element Policies

The Noise Element contains two types of policy statements: policies and actions:

- Ensure the compatibility of existing and, especially, of proposed development projects not only with neighboring land uses but also with their surrounding noise environment. *(Noise Element Policy 1)*
- Use the noise-land use compatibility matrix (Figure 6) in conjunction with the noise contour maps (especially for roadway traffic) to evaluate the acceptability of residential and other proposed land uses and also the need for any mitigation or abatement measures to achieve the desired degree of acceptability. *(Noise Element Action 1.1)*
- Reduce the community's exposure to noise by minimizing the noise levels that are received by Oakland residents and others in the City. *(Noise Element Policy 3)*
- Demand that Caltrans implement sound barriers, building retrofit programs and other measures to mitigate to the maximum extent feasible noise impacts on residential and other sensitive land uses from any new, widened or upgraded roadways; any new sound barrier must conform with City policies and standards regarding visual and aesthetic resources and quality. *(Noise Element Action 3.3)*

Bicycle Master Plan Policies

- Seize opportunities to improve bicycle access to the Oakland waterfront through completion and implementation f 1) the Estuary Policy Plan, 2) the Bay Trail alignment, and 3) joint City, Port, and BCDC's Public Access Plan. (BMP Action 4.4, *The Waterfront*)

- Upgrade the existing path along the Lake Merritt Channel from Lake Merritt to the Bay Trail… (BMP Action 4.6, *Channel Pathway*)

Pedestrian Master Plan Policies

- Improve pedestrian crossings in areas of high pedestrian activity where safety is an issue (PMP Policy 1.1, *Crossing Safety*).

- Use traffic signals and their associated features to improve pedestrian safety at dangerous intersections (PMP Policy 1.2, *Traffic Signals*).

- Strive to maintain a complete sidewalk network free of broken or missing sidewalks or curb ramps (PMP Policy 1.3, *Sidewalk Safety*).

- Create and maintain a pedestrian route network that provides direct connections between activity centers (PMP Policy 2.1, *Route Network*).

- Implement pedestrian improvements along major AC Transit lines and at BART stations to strengthen connections to transit (PMP Policy 2.3, *Safe Routes to Transit).*

- Encourage the inclusion of street furniture, landscaping, and art in pedestrian improvement projects (PMP Policy 3.1, *Streetscaping*).

- Promote land uses and site designs that make walking convenient and enjoyable (PMP Policy 3.2, *Land Use*).

Scenic Highways Element Policies

- Urban development should be related sensitively to the natural setting. *(Scenic Highways Element Policy 2)*

- Overhead utilities should be undergrounded along all freeways, scenic routes, and major streets...*(Scenic Highways Element Policy 6)*

Central City East Redevelopment Plan Goals

Central City East Redevelopment Plan goals:

- Stimulating in-fill development and land assembly opportunities on obsolete, underutilized and vacant properties within the Project Area
- Stimulating opportunities for adaptive re-use and preservation of existing building stock in the Project Area
- Attract new businesses and retain existing businesses in the Project Area, providing job training and employment opportunities for Project Area residents
- Improve transportation, open space, parking, and other public facilities and infrastructure throughout the Project Area
- Stimulate home ownership opportunities in the Project Area
- Improve the quality of the residential environment by assisting in new construction, rehabilitation and conservation of living units in the Project Area, including units affordable to low and moderate income households
- Revitalize neighborhood commercial areas and strengthen retail in the Project Area

Central District Urban Renewal Plan Goals

Central City East Redevelopment Plan goals:

- To strengthen the Project Area's role as an office center and historically a major regional retail center;

- To establish the Project Area as a cultural entertainment center;

- To re-establish residential areas for all economic levels, providing employment and other economic benefits for Project Area residents;

- To restore historically-significant structures; and
- To improve environmental design; to provide adequate infrastructure; and to support transit-oriented development.

II. Other Applicable Policies

San Francisco Bay Plan and *San Francisco Bay Area Seaport Plan Policies*

- To assure the benefits of fish, other aquatic organisms and wildlife for future generations , to the greatest extent feasible, the Bay's tidal marshes, tidal flats, and subtidal habitat should be conserved, restored and increased. *(Fish, Other Aquatic Organisms and Wildlife,* Policy #1*)*
- New projects should be sited, designed, constructed and maintained to prevent or, if prevention is infeasible, to minimize the discharge of pollutants into the Bay by: (a) controlling pollutant sources at the project site; (b) using construction materials that contain non-polluting materials; and (c) applying appropriate, accepted and effective best management practices, especially where water dispersion is poor and near shellfish beds and other significant biotic resources. *(Water Quality,* Policy #3*)*
- Whenever practicable, native vegetation buffer areas should be provided as part of a project to control pollutants from entering the Bay, and vegetation should be substituted for rock riprap, concrete, or other hard surface shoreline and bank erosion control methods where appropriate and practicable. *(Water Quality,* Policy #7*)*
- To minimize the potential hazard to Bay fill projects and bayside development from subsidence, all proposed developments should be sufficiently high above the highest estimated tide level for the expected life of the project. *(Safety of Fills* Policy #5*)*
- Dredging and dredged material disposal should be conducted in an environmentally and economically sound manner... *(Dredging,* Policy #1*)*
- The following general standards have been used in determining locations for each type of recreational facility (and should be used as a guide in allowing additional ones):

  > Marinas. Marinas should be allowed at any suitable site on the Bay. Unsuitable sites are those that tend to fill up rapidly with sediment; have insufficient upland; contain valuable marsh, mudflat, or other wildlife habitat...At suitable sites, the Commission should encourage new marinas, particularly those... not containing valuable wetlands. (2) Fill should be permitted for marina facilities that must be in or over the Bay, such as breakwaters, shoreline protection, boat berths, ramps, launching facilities, pumpout and fuel docks, and short-term unloading areas. Fill for marina support facilities may be permitted at sites with difficult land configurations provided that the fill in the Bay is the minimum necessary and any unavoidable loss of Bay habitat, surface area, or volume is offset to the maximum amount feasible, preferably at or near the site. (3) No new marina or expansion of any existing marina should be approved unless water quality and circulation will be adequately protected and, if possible, improved, and an adequate number of vessel sewage pumpout facilities that are convenient in location and time of operation to recreational boat users should be provided free of charge or at a reasonable fee, as well as receptacles to dispose of waste oil. (4) In addition, all projects approved should provide public amenities such as viewing areas, restrooms, and public parking; substantial physical and visual

access; and maintenance for all facilities. Frequent dredging should be avoided. *(Excerpt from Recreation On and Around the Bay,* Policy #4a*)*

Water-oriented commercial-recreation. Water-oriented commercial-recreational establishments, such as restaurants, specialty shops, theaters, and amusements, should be encouraged in urban areas adjacent to the Bay. Some suggested locations for this type of activity are indicated on the Plan maps. Effort should be made to link commercial-recreation centers (and major shoreline parks) by a fleet of small, inexpensive ferries similar to those operating on some European lakes and rivers. *(Excerpt from Recreation On and Around the Bay,* Policy #4b*)*

- To assure optimum use of the Bay for recreation, the following facilities should be encouraged in shoreside parks and in or near yacht harbors or commercial ferryboat facilities:

  In waterfront parks. (2) To capitalize on the attractiveness of their bayfront location, parks should emphasize hiking, bicycling, riding trails, picnic facilities, viewpoints, beaches, and fishing facilities... (4) Public launching facilities for a variety of boats and other water-oriented recreational craft, such as kayaks, canoes and sailboards, should be provided in waterfront parks where feasible...(7) Trails that can be used as components of the San Francisco Bay Trail...should be developed in waterfront parks...(8) Bus stops, kiosks and other facilities to accommodate public transit should be provided in waterfront parks to the maximum extent feasible. Public parking should be provided in a manner that does not diminish the park-like character of the site. Traffic demand management strategies and alternative transportation systems should be developed where appropriate to minimize the need for large parking lots and to ensure parking for recreation uses is sufficient...(9) Interpretive information describing natural, historical and cultural resources should be provided in waterfront parks where feasible. *(Excerpt of Recreation On and Around the Bay* Policy #5a*).*

  In all recreation facilities. Access to marinas, launch ramps, beaches, fishing piers, and other recreation facilities should be clearly signed and easily available from parking reserved for the public or from public streets. *(Excerpt from Recreation On and Around the Bay,* Policy #5b*).*

  In addition to the major recreational facilities indicated on the Plan maps, public access should be included wherever feasible in any shoreline development, as described in the policies for Public Access to the Bay. That policy is intended to result in much more access to the Bay than can be provided by public parks alone, especially in urban areas, and to encourage private development of the shoreline. (*Recreation On and Around the Bay,* Policy #7)

  Because of the need to increase the recreational opportunities available to Bay Area residents, small amounts of Bay filling may be allowed for shoreline parks and recreational areas that provide substantial public benefits and that cannot be developed without some filling. (*Recreation On and Around the Bay,* Policy #9)

- In addition to the public access to the Bay provided by waterfront parks, beaches, marinas, and fishing piers, maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline, whether it be for housing, industry, port, airport, public facility, wildlife area,

or other use, except in cases where public access would be clearly inconsistent with the project because of public safety considerations or significant use conflicts, including unavoidable, significant adverse effects on Bay natural resources. *(Excerpt from Public Access,* Policy 2*).*

- Access to and along the waterfront should be provided by walkways, trails, or other appropriate means and connect to the nearest public thoroughfare where convenient parking or public transportation may be available. Diverse and interesting public access experiences should be provided which would encourage users to remain in the designated access areas to avoid or minimize potential adverse effects on wildlife and their habitat. (*Public Access*, Policy #8)

- The Public Access Design Guidelines should be used as a guide to siting and designing public access consistent with a proposed project. The Design Review Board should advise the Commission regarding the adequacy of the public access proposed. (*Public Access*, Policy #11)

- To enhance the visual quality of development around the Bay and to take maximum advantage of the attractive setting it provides, the shores of the Bay should be developed in accordance with the Public Access Design Guidelines. (*Appearance, Design, and Scenic Views,* Policy #1)

- All bayfront development should be designed to enhance the pleasure of the user or viewer of the Bay. Maximum efforts should be made to provide, enhance, or preserve views of the Bay and shoreline, especially from public area, from the Bay itself, and from the opposite shore...(*Appearance, Design, and Scenic Views,* Policy #2)

- Structures and facilities that do not take advantage of or visually complement the Bay should be located and designed so as not to impact visually on the Bay and shoreline. In particular, parking areas should be located away from the shoreline...(*Appearance, Design, and Scenic Views,* Policy #4)

- Shoreline developments should be buil[t] in clusters, leaving open area around them to permit more frequent views of the Bay...(*Appearance, Design, and Scenic Views,* Policy #2)

- Views of the Bay from vista points and from roads should be maintained by appropriate arrangements and heights of all developments and landscaping between the view areas and the water. In this regard, particular attention should be given to all waterfront locations, areas below vista points, and areas along roads that provide good views of the Bay for travelers, particularly areas below roads coming over ridges and providing a "first view" of the Bay (shown in Bay Plan Maps). (*Appearance, Design, and Scenic Views,* Policy #14)

- Shore areas not proposed to be reserved for a priority use should be used for any purpose (acceptable to the local government having jurisdiction) that uses the Bay as an asset and in no way affects the Bay adversely. This means any use that does not adversely affect enjoyment of the Bay and its shoreline by residents, employees, and visitors within the site area itself or within adjacent areas of the Bay or shoreline. *(Other Bay and Shoreline Uses,* Policy #1)

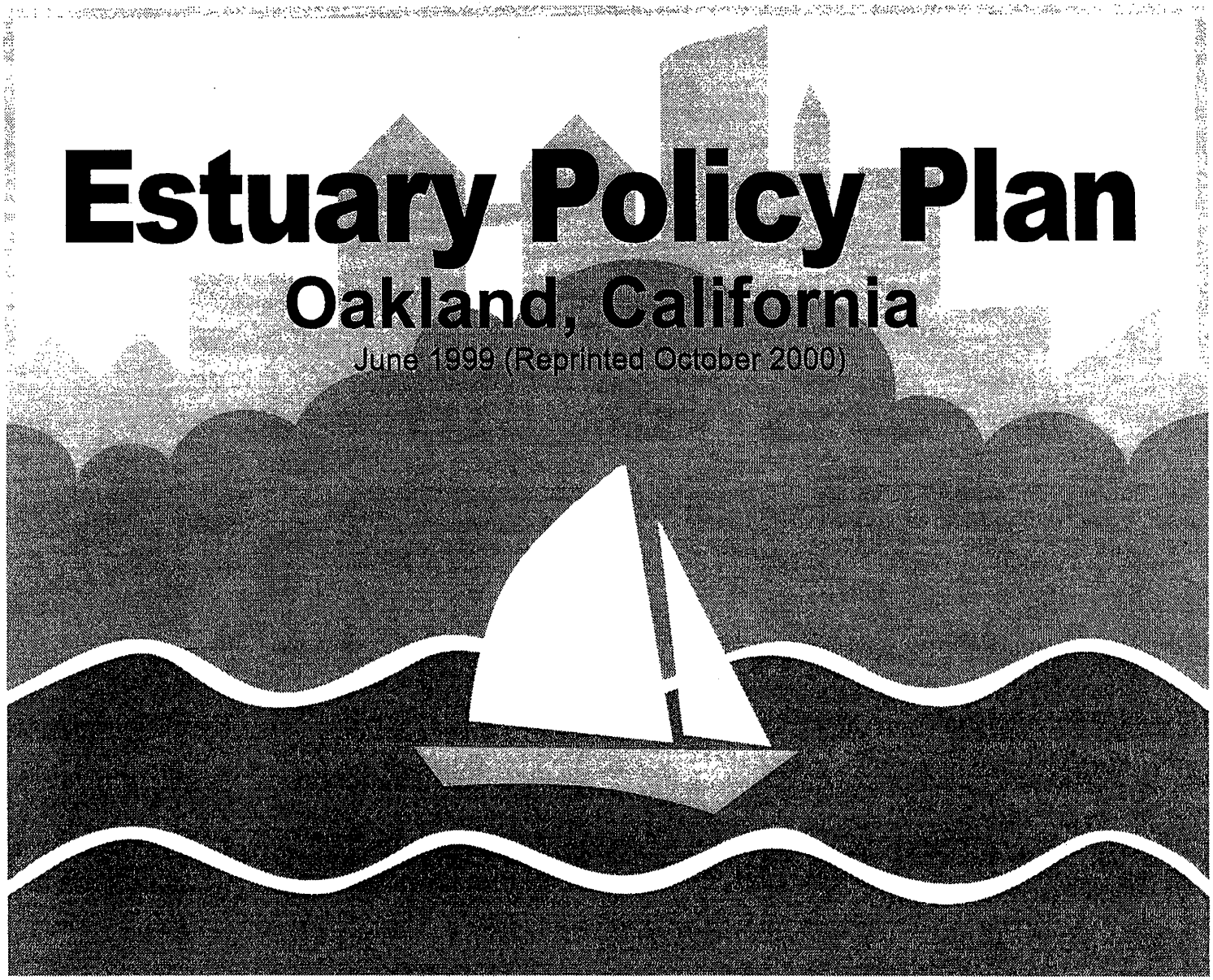
- Wherever waterfront areas are used for housing, whenever feasible, high densities should be encouraged to provide the advantages of waterfront housing to larger numbers of people. *(Other Bay and Shoreline Uses,* Policy #3)

- Power distribution and telephone lines should either be placed underground (or in an attractive combination of underground lines with streamlined overhead facilities) in any new residential, commercial, public, or view area near the shores of the Bay. *(Other Bay and Shoreline Uses,* Policy #6)

Estuary Policy Plan

Oakland, California

June 1999 (Reprinted October 2000)



CITY OF OAKLAND

PORT OF OAKLAND

Oak - to - Ninth Avenue District

The "Oak - to - Ninth Avenue" District of the Estuary planning area is situated south of I-880, east of Oak Street, and west of Embarcadero Cove. Encompassing approximately 120 acres, the district includes two distinct subareas separated by the Embarcadero and the main line rail corridor. They are the properties between Fifth and Ninth Avenues, projecting into the Estuary south of the Embarcadero. The district includes Estuary Park, the landside areas between Oak Street and Lake Merritt Channel, and the Ninth Avenue Terminal.

Although the Oak - to - Ninth District does not appear markedly different than it did several years ago, it has, in fact, undergone a number of changes. Historically, this portion of the Estuary waterfront primarily served as an industrial and warehousing support district, oriented to and served by the Union Pacific main line rail tracks and the cargo handling facilities at the Ninth Avenue Terminal. As such, it is isolated from the surrounding urban community, perhaps more than other reaches of the study area. The district is criss-crossed by rail tracks, the freeway, and the Lake Merritt Channel, all of which have become barriers to movement.

Today, the Oak-to-Ninth District is still dominated by warehousing, manufacturing, distribution , storage and transportation activities. However, historic waterfront industries have declined, and waterfront properties have begun the process of industrial conversion. New, smaller scale and nontraditional uses have also emerged within existing underutilized warehouse and industrial buildings to create a lively enclave of artist studios and artisan workshops.

Changes in transportation will create new opportunities for reuse and revitalization. With the consolidation of the Southern Pacific and Union Pacific railroads, the rail tracks along Third Street have been abandoned, providing the opportunity to extend Third Street eastward near West Oakland and will improve bicycle and pedestrian accessibility from the Estuary to Mandela Parkway.

Caltrans' planned seismic upgrade project for the Fifth Avenue interchange at I-880 could be designed to improve local accessibility and help achieve a better alignment for Fifth Avenue as well as an improved interchange. Finally, the prospect of consolidating maritime activities in the Outer Harbor provides a tremendous opportunity to improve the Ninth Avenue Terminal for greater public access and use.

Several unique circumstances within this district afford opportunities for positive changes that could benefit the entire community.

First, there is a considerable amount of public land. For example, Estuary Park is a significant public asset which can and should be upgraded. It has a historic relationship with nearby Lake Merritt and the Lake Merritt Channel, and there is now a chance to finally reconnect Lake Merritt with the Estuary. These opportunities offer the distinct opportunity to realize long-held community objectives for the creation of a major open space of citywide scale and significance.

With ambitious plans to change land use, this area of the shoreline could be converted into a large-scale network of open spaces and economic development that extend for over 60 acres from Estuary Park to Ninth Avenue. The assemblage of parkland would create the major open space resource in Oakland and, at the same time, establish a recreation asset of regional significance. In areas adjacent to the open spaces, additional development of hotels, cultural activites, and other attractions that take advantage of the unique setting, could help to energize the entire district. And, the

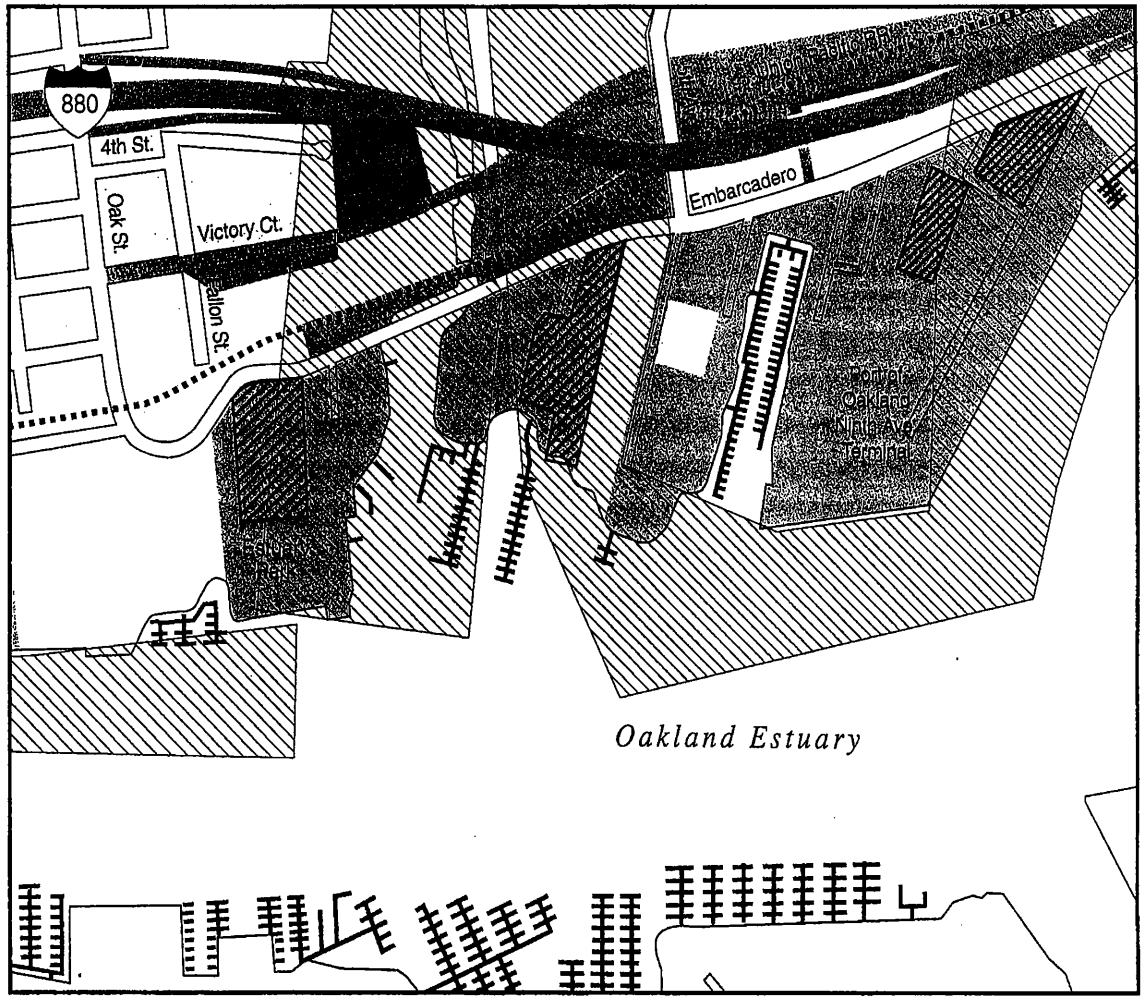


FIGURE III-8: **Oak to 9th District Current Ownership**

Port of Oakland
City of Oakland
Alameda County
Public/Quasi Public Utilities
Port Leases Beyond 2000
Private
Railroad
Tidelands Trust

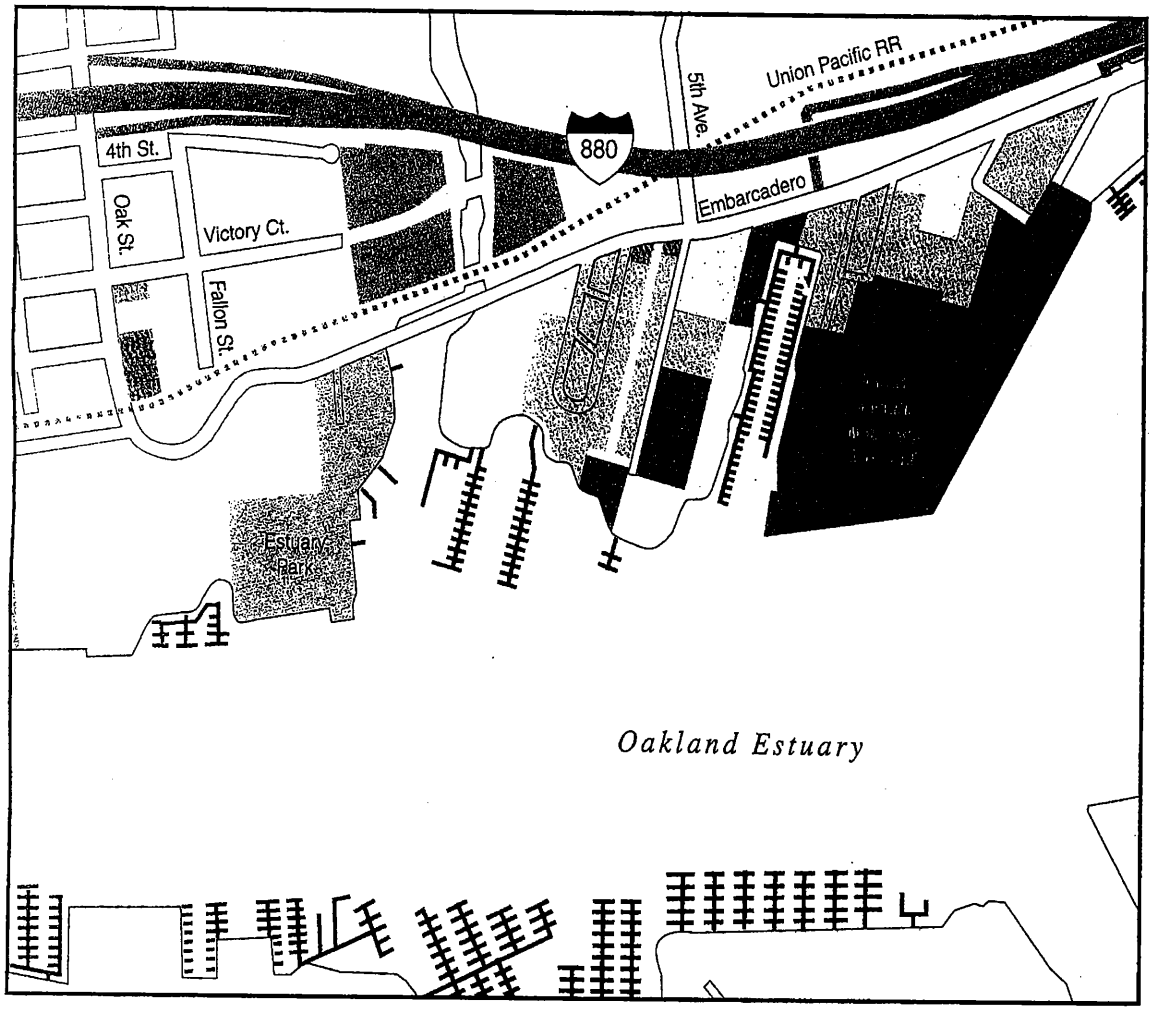


FIGURE III-9: **Oak to 9th District Existing Land Use**

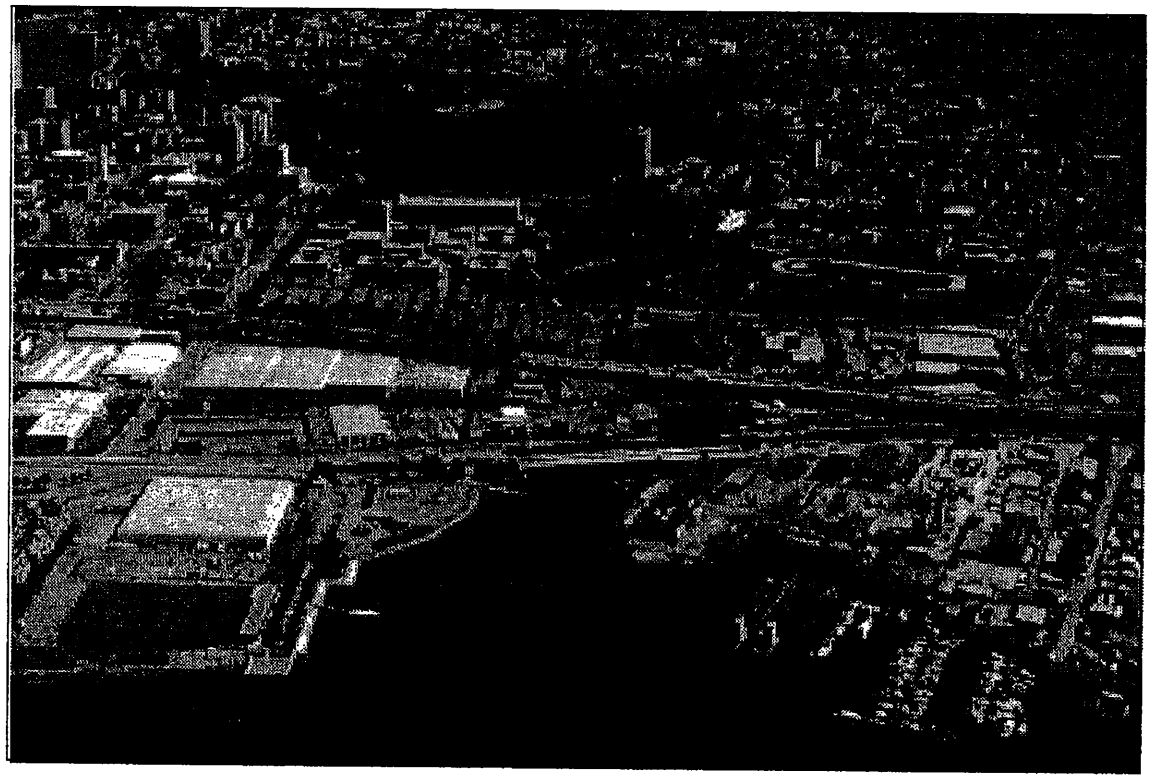
- RDE - Retail, Dining and Entertainment
- Wholesale and Off Price Retail
- Office
- Hotel/Motel
- Mid to High density Residential above 20 du/acre
- Low Density Residential up to 20 du/acre
- Public/Quasi-Public Institution
- Warehousing
- Light Industrial
- Heavy Industrial
- Open Space
- Tidal Marsh
- Vacant

artisan community that currently exists in the area can continue to play a valuable role in the life of the area, and the City.

SHORELINE ACCESS & PUBLIC SPACES

Shoreline access and public space policies are intended to establish this area of the Estuary as the major recreational destination in the city. The Estuary Policy Plan recommends a series of large open spaces, intended to provide for a wide variety of recreational experiences. Developing a series of well-defined open spaces would change the entire nature of the waterfront in this area, transforming it from an industrial backwater into a recreational centerpiece of the city. In total, these sites would represent one of the most significant additions of urban parkland within the entire Bay Area. They would create both a regional and local asset of major proportions.

These spaces are intended to be connected to each other and to a larger city-wide system of trails and parks. Policies recommend strong links to inland communities, Lake Merritt, and Lakeside Park, by enhancing the Lake Merritt Channel. Furthermore, the policies recognize the importance of preserving the area's wetlands, wildlife habitat and other natural features.



A continuous open space and public access link is planned between Lake Merritt and the Estuary.

POLICY OAK-1: PROTECT AND ENHANCE THE NATURAL AND BUILT COMPONENTS THAT ESTABLISH THE WATERFRONT'S UNIQUE ENVIRONMENT.

The Oak-to-Ninth reach of the waterfront has the potential to offer many recreational experiences, in both natural and developed settings. Given the scale and variety of environments encompassed by this segment of the waterfront, many kinds of recreational activity can take place. While it is advantageous to promote recreationaly activities, the sites' waterfront location is unique. It is important to focus first on preserving the intrinsic qualities of the shoreline, and to insure that the envi-

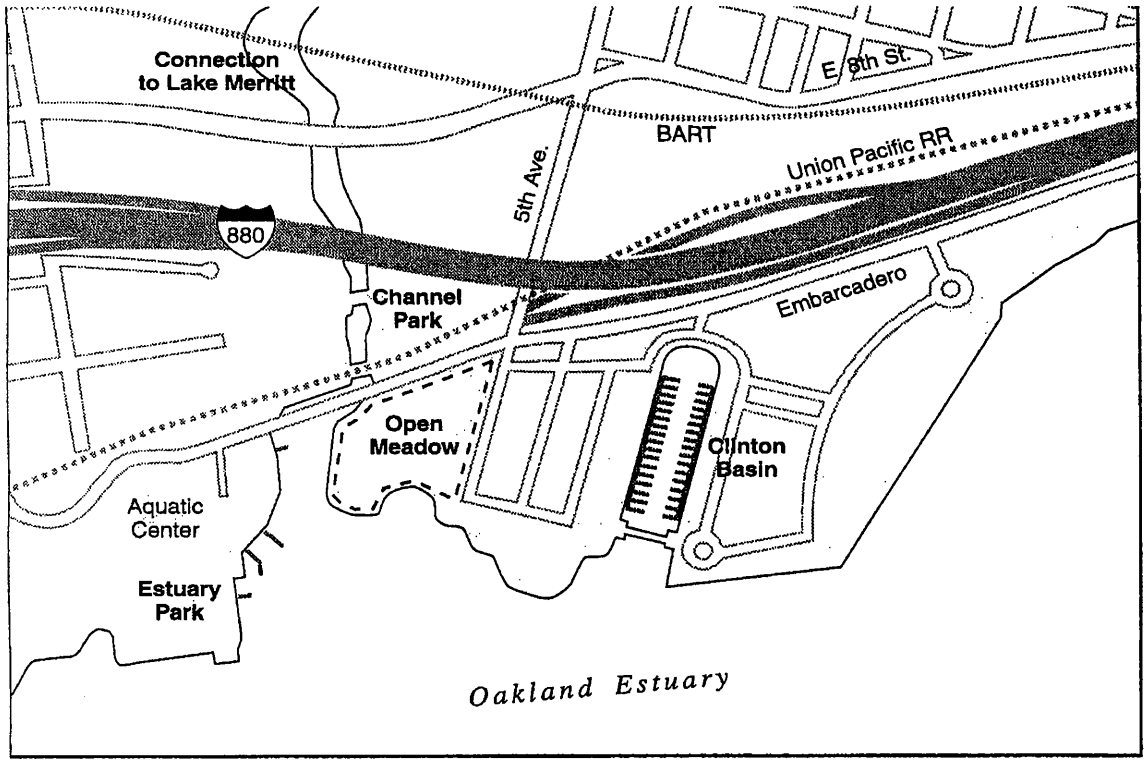


FIGURE III-10: Oak to 9th District Illustrative Open Space Key Map

ronmental values of the site are not compromised.

OAK-1.1: Encourage the preservation and enhancement of wetland areas. The waterfront should be improved in a manner that maintains and enhances the ecological value of the area in general and the Lake Merritt Channel in particular. In some locations, tidelands function as tidal wetlands, providing marsh habitat for fish, migratory waterfowl, and other animals.

Improvements should be encouraged that restore wetland and marsh habitat. Wetlands should be protected by such treatments as setting back trails from the shoreline, installing suitable buffer planting to prevent disruption to nesting and resting areas, seasonal routing of pedestrians to avoid sensitive habitats, etc. As improvements and projects are considered, the City and Port should work with interested groups and organizations to ensure appropriate treatments along the shoreline, particularly along the channel on the eastern bank between I-880 and Embarcadero.

OAK-1.2: Provide for continuous pedestrian and bicycle movement along the water's edge. In this and other areas of the Estuary, continuous bicycle and pedestrian movement is essential to achieving goals for access and implementation of the Bay Trail.

In this district, pedestrian and bicycle movement should be emphasized on all local streets. A network of facilities should provide for pedestrian and bicycle routes as close to the shoreline as possible. It should offer a range of experiences that take advantage of the varying water spaces along the shoreline.

To reduce the barrier effect of channels and waterways that penetrate the land in this area, the existing Embarcadero bridges should be improved across the Lake Merritt Channel on the

south side of the Embarcadero, to provide for pedestrian and bicycle routes.

*OAK-1.3: **Undertake remediation of contaminants in conjunction with development and/or improvement of relevant sites.*** Typical of many waterfront areas that have historically been in intensive industrial use, contamination has been documented within this district. It will be a consideration in redevelopment of the sites identified.

To date, parties have undertaken initial efforts to characterize surface soil, subsurface soil and groundwater within the Oak to Ninth area. Further investigations should be undertaken to more accurately characterize contamination, and to determine the most appropriate and cost-effective remediation methods that can achieve reuse objectives for this area in a timely and coordinated fashion.

The level and type of soil and groundwater cleanup should be commensurate with the recommended re-use of the affected sites.

POLICY OAK-2: ESTABLISH A WELL-STRUCTURED, INTEGRATED SYSTEM OF MAJOR RECREATIONAL FACILITIES WHICH ACCOMMODATE A WIDE VARIETY OF ACTIVITIES AND WHICH TAKE ADVANTAGE OF THE UNIQUE WATERFRONT SETTING. PROMOTE A VARIETY OF RECREATIONAL EXPERIENCES.

There are opportunities to create several new public spaces and facilities, as discussed below. In keeping with their size, location and regional significance, they should not be developed as isolated elements. Rather, they should be developed as an integrated system extending along the shoreline and inland to Lake Merritt and other parts of the city. Looking at them from west-to-east:

Estuary Park & Mouth of Lake Merritt Channel

*OAK-2.1: **Expand Estuary Park. Encourage aquatic sports within the mouth of Lake Merritt Channel.*** Currently, the 5.5-acre Estuary Park is the only public open space within the Oak-to-Ninth area, and one of the few parks on the entire waterfront that is close to activity centers. Although it provides access to the water and is used intensively, it also suffers from a lack of accessibility and visibility.

- *Expand & Rehabilitate Estuary Park.* If Estuary Park is to fulfill its potential, it is important to make it more visible from the Embarcadero. It should be expanded and extended to the street, adding to the total amount of useable public space and improving park security.

  The entire park (including the expansion area) should be improved. It should be designed and programmed so that it can accommodate the planned Aquatic Center (see below) and a large space suitable for a wide range of informal and organized field sports such as soccer.

  The existing fishing pier, shoreline seating area, and boat launch provide opportunities to use and appreciate the water as a recreational resource. They should be maintained. Consideration should be given to providing places to observe major civic celebrations and water related festivals (e.g., the lighted yacht parade, rowing races, etc.).

- *Develop the Jack London Aquatic Center.* The new Jack London Aquatic Center is currently planned for Estuary Park to pro-

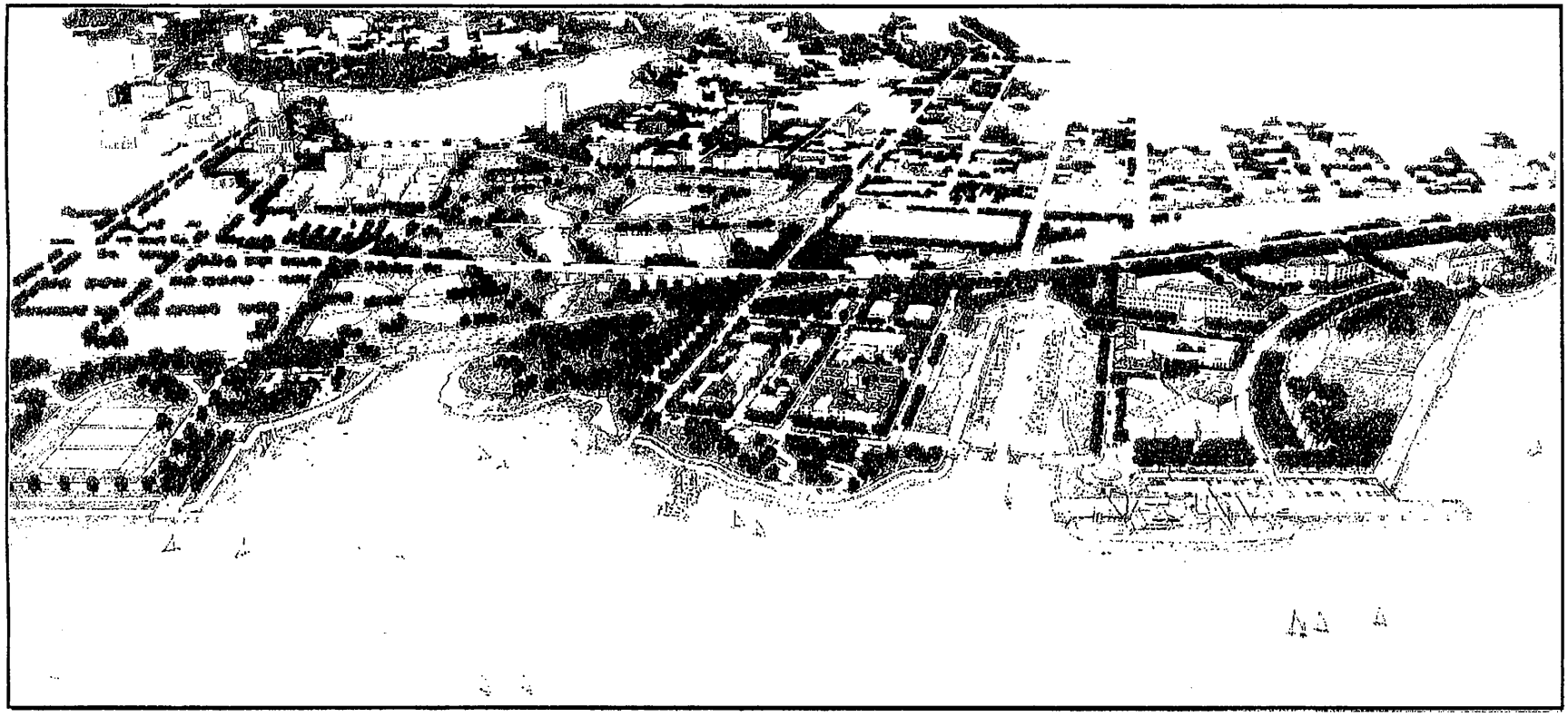


FIGURE III-11: **Oak to 9th Bird's-eye Perspective**

vide city residents a place to learn boating skills and gain proficiency in sailing, rowing, and kayaking. Like the programs now offered in the summer at Lake Merritt, the new Aquatic Center will be oriented to youth, but will focus on boating in the Estuary.

- ❑ *Develop the mouth of Lake Merritt Channel as a protected water space for aquatic sports.* A "no wake" zone or maximum speed limit for motorized vessels should be established within the U.S. Pierhead Line to recognize the environmental sensitivity of the mouth of Lake Merritt Channel.

OAK-2.2: Create a major new park on the east side of the mouth of the Lake Merritt Channel, at the Estuary. To complement Estuary Park to the west, the former Crowley site on the east side of the channel, between the water, a realigned Fifth Avenue (See Policy OAK-4.1) and the Embarcadero, should be converted into a major park suitable for pas-

sive recreation. Promenading, viewing and other contemplative activities should be emphasized. Shoreline edges should be restored to tidal wetlands.

Clinton Basin

OAK-2.3: Enhance Clinton Basin. Clinton Basin is a marina that recalls the maritime slipways and boat-building activities of a past age. While it has been used as a recreational marina for many years, it has fallen into disrepair, and has become functionally obsolete.

- ❑ *Rehabilitate the marina.* If economically feasible, the marina should be upgraded to contemporary standards. In addition to extending the life of the marina, improving the physical condition would provide an interesting focus for waterfront activities. Provisions in the marina for boat rentals and launches, fishing charters, water taxi/ferry services, a limited amount of food services, etc., would all contribute to to the liveliness of the area, and should be accommodated.

- ❑ *Establish a linear open space composed of a series of smaller parks around Clinton Basin.* The basin is hidden behind buildings and not highly accessible. In order to improve access to the water and visibility of the boating activities, a series of public spaces should be developed on both sides of the basin and at the head of the basin adjacent to the Embarcadero. This network of public spaces should be composed of a series of smaller connected parks, connected by a continuous promenade along the edge of the basin that connects the open spaces.

To improve accessibility around the basin and to reduce its barrier effect, consideration should be given to developing a pedestrian bridge at the bayward end of the basin. Views into Clinton Basin from the Embarcadero should be maintained and enhanced.

- ❑ *Provide for a limited number of new recreational slips east of Fifth Avenue.* A small number of slips for the mooring of recreational boats should be provided east of Fifth Avenue, with support facilities provided accordingly. An area for supply drop-off and the provisioning of vessels should be provided to create a high-quality mooring area, attractive to patrons and complementary to landside uses within the district.

Ninth Avenue Terminal

OAK-2.4: Establish a large park in the area of the existing Ninth Avenue Terminal to establish a location for large civic events and cultural activities. Maritime activities and support services that operate in and around the terminal shed should be relocated. (See Policies OAK-4.3)

The park is envisioned as primarily an open, unobstructed green field that is flexible in use. It should be large enough to accommodate large numbers of people associated with special events, cultural activities, city festivals, etc.; yet, at the same time be designed to be attractive to individuals or small groups of people on a more regular basis.

The park should be oriented to maximize access and views of the Estuary. It should be adjoined by commercial, hotels, and public uses, which can benefit from the civic events and cultural activity programming. (See Policy OAK-4.2)

Recognize that the Ninth Avenue Terminal shed, or portions thereof, may be suitable for rehabilitation and adaptive reuse. However, the terminal building impedes public access to and views of a key area of the Esstuary.

- ☐ The Port and City should investigate the feasibility of keeping and reusing the building (or portions thereof). A Specific Plan for the entire District should be initiated prior to development. (See Policy Oak 5)

- ☐ *Encourage the mooring of vessels adjacent to the Ninth Avenue Terminal.* Along the southern boundary of the Ninth Avenue Terminal, a limited amount of vessel mooring is encouraged to complement the recreational and cultural uses of the area.

The 9th Avenue Terminal provides an exciting opportunity for public-oriented activities and open spaces.

OAK-2.5: Provide for mooring of the ARTSHIP. The ARTSHIP Foundation has recently acquired the *Golden Bear,* a former naval training vessel, to serve as headquarters and primary program venue for the numerous community outreach and art programs run by the Foundation and other art and cultural organizations. An extensive renovation project is proposed to convert the ship into theaters, gallery space, classrooms, meeting space, studios, and other facilities necessary to support a major arts initiative.

It is envisioned that the ARTSHIP could be an integral part of the waterfront, and a major waterfront attraction. It is a project that achieves almost all of the identified objectives for the waterfront. Provisions should be made for its permanent mooring in the vicinity of the Ninth Avenue Terminal. Some landside facilities, including parking and servicing, should also be accommodated.

Lake Merritt Channel

POLICY OAK-3: LINK THE ESTUARY TO LAKE MERRITT BY ENHANCING THE LAKE MERRITT CHANNEL.

Although a pedestrian/bicycle path exists, the link between the Estuary and Lake Merritt is dominated by physical obstacles. Given the significant historical relationship between the Lake, the Channel and the Estuary, it is incongruous that a physical connection between them has not been completed.

The opportunity exists to achieve this long-standing community objective. Most of the properties north of the Embarcadero along the Lake Merritt Channel are publicly owned. In addition plans are under discussion to build a pedestrian and bicycle overpass between Estuary Park and the channel shoreline to the north.

To create the strongest possible connection between Lake Merritt and the Estuary, two measures should be undertaken:

*OAK-3.1: **Create a system of public open spaces that connects Lake Merritt Channel to the Estuary.*** The existing path on the Eastern side of the channel should be completed and enhanced. It should be developed to allow unimpeded movement between the Estuary and Lake Merritt. Where feasible, the path should be widened and fully integrated into adjacent public spaces that are currently underutilized.

Efforts to expand public uses in this area must be carried out in a manner that respects the wildlife habitat value of the wetland areas within and along the channel. Restoration of tidal wetlands along the shoreline edges should be included as part of the facility development programs that would extend through this area.

Surface parking should be relocated away from the channel's edge.

*OAK-3.2: **Work with public agencies in the area to extend the open space system inland from the Channel.*** Much of the land inland of the Embarcadero which is recommended to be enhanced as publicly-accessible space is owned by railroads, public agencies and institutions, including the City of Oakland, the Union Pacific Railroad, Laney College, Peralta College District, and EBMUD. The City should work with these entities to assemble or otherwise gain access to these properties (as necessary) to extend areas available for public use.

LAND USE

Public space is planned to be the primary new use within the Oak-to-Ninth District, occupying all of the land along the shoreline and extending inland at Lake Merritt Channel, Clinton Basin, and a new 'Crescent Park'. (See Policy OAK-2.4). Recreational use of the shoreline will be the most significant agent of change within the district. It will create a series of extraordinary amenities and recreational resources for the community, as well as an attractive setting for new and existing development.

Within the larger framework of a major waterfront open space system, development should be guided by the following policies:

POLICY OAK-4: PROVIDE FOR LIVELY, PUBLICLY ORIENTED ACTIVITIES THAT COMPLEMENT THE ADJACENT WATERFRONT PARKS AND OPEN SPACES.

Development adjacent to the open recreational spaces should complement them, and should provide public attractions which add to the variety of activities and experiences found on the waterfront. Development should be encouraged on both sides of Clinton Basin, and in areas close to the Embarcadero, as follows.

Fifth Avenue Point

*OAK-4.1: **Preserve and expand the existing Fifth Avenue Point community as a neighborhood of artists and artisan studios, small businesses, and water-dependent activities.*** West of Clinton Basin, the Fifth Avenue Point community is one of Oakland's most unique neighborhoods. It has nestled among declining waterfront industrial uses, creating a spark of life and activity. The artisan work that takes place there is an economic asset which is valuable for local residents. In addition, the existing work/live units within the Fifth Avenue artisan village contribute to the inventory of affordable studio spaces within Oakland. These units should be maintained and reinforced through the provision of additional units, including artist and artisan work/live studios and small light industrial and water-dependent businesses. A limited amount of retail and restaurant use, such as the existing Seabreeze Cafe, should also be promoted within the area.

It should be noted that enclaves such as this are rarely planned. Rather, they develop through the spontaneous vision and dedication of creative, entrepreneurial property owners and residents. By their very nature and character, these enclaves are economically fragile. Policies that promote preservation and expansion of the Fifth Avenue Point community should be carefully applied, so as not to adversely affect property values, or inadvertently change the very essence of what makes it unique.

*OAK-4.2: **Promote development of educational and cultural interpretive facilities.*** The Oak-to-Ninth reach of the waterfront is an ideal location for cultural attractions and other development. (See Policy OAK-4.4) In addition to the recreational benefits associated with festivals, etc. (See Policy OAK-2.4 & 2.5), facilities housing museums, educational and cultural programs, etc. can be major waterfront attractions. Such facilities should be located and developed to add to the atmosphere established by the Fifth Avenue Point community and Clinton Basin (See Policies OAK-2.3, 2.5 & 4.1). Requisite parking and servicing should also be accommodated and, where feasible, consolidated.

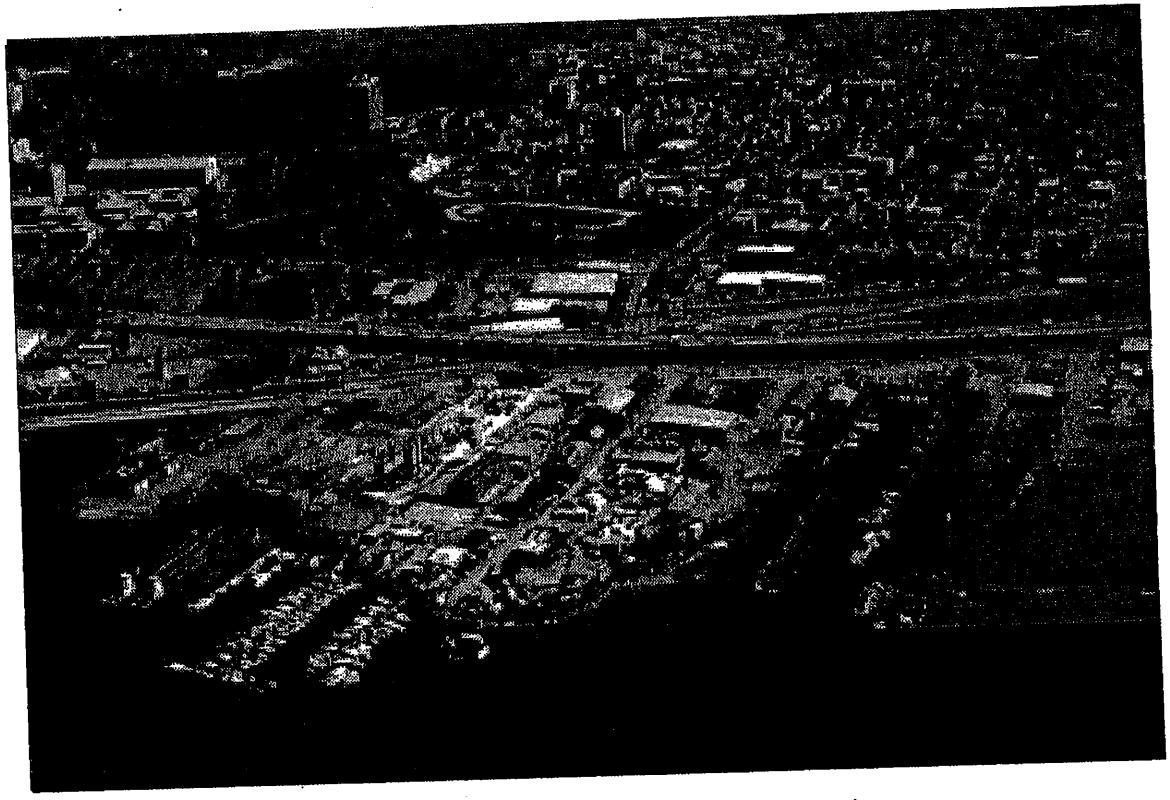
- ❑ The Oakland Museum is investigating options to expand and develop the 'Treasure House' concept. An appropriate location for this use would be adjacent to the planned waterfront open space flanking Clinton Basin and the Estuary.

- ❑ The ARTSHIP Foundation has recently acquired the *Golden Bear,* a former naval training vessel, to serve as headquarters and primary program venue for the numerous community outreach and art programs run by the Foundation and other art and cul-

The 5th Avenue Point community includes a synergistic grouping of artists, artisans and small industrial businesses.

tural organizations. Under an extensive renovation project, the ship will be converted into theaters, gallery space, classrooms, meeting space, studios, and other facilities necessary to support a major arts initiative.

*OAK-4.3: **Facilitate the relocation of break-bulk cargo operations from the Ninth Avenue Terminal.*** East of Clinton Basin, a major existing use within the district is the Ninth Avenue marine terminal, which is owned and operated by the Port of Oakland. In order to achieve the vision for the waterfront in the Oak-to-Ninth area, it is necessary that the existing terminal operations and those related maritime and warehousing activities adjacent to the terminal be accommodated elsewhere; thus enabling reuse of the Ninth Avenue Terminal site.



The 5th Avenue Point community will be retained as a unique mixed-use district with work-live units, studios, small businesses and water-dependent activities.

Mixed Use Development

*OAK-4.4: **Promote development of commercial-recreational uses in the vicinity of the Crescent Park and Clinton Basin.*** Relocation of cargo handling and clearance of the Ninth Avenue Terminal creates potential development parcels between the proposed Crescent Park (See Policy OAK-2.4), the Embarcadero and Clinton Basin (See Figure 10). Development of these sites should be planned and carried out in a comprehensive manner, and include possible hotel, conference, restaurant, retail, and similar commercial-recreational uses. A recreational 'resort' orientation, along with cultural and social programs, should be encouraged as an integral component of the development programs of hotel and other uses. Recreational elements could be developed as a part of the projects. Accommodating tennis, swimming, etc., could add another dimension to the recreational experience of the area.

New development within this area should be

promoted along the Embarcadero Parkway, with "windows" to the water at intermittent points. It should be set back from the shoreline promenade. (See Policy OAK-5)

OAK-4.5: North of the Embarcadero, encourage a mixed-use district while maintaining viable industrial uses. In the more traditional warehouse and industrial area north of the Embarcadero between the Lake Merritt Channel and Oak Street, a mixed-use district is encouraged. Emphasis should be placed on maintaining the existing industrial and manufacturing uses, as well as providing for nontraditional higher density housing (work/live and artist studios). This area is essentially an extension of a larger mixed-use district to the west, extending to Webster Street in the Jack London District.

POLICY OAK-5: INITIATE MORE SPECIFIC PLANNING OF THE ENTIRE OAK-TO-NINTH DISTRICT.

The Oak-to-Ninth district is large and diverse, with several unique, complicated issues that dominate its real development potential. It should be planned in sufficient detail to identify all potential issues, and to understand the options available to address these issues in a timely manner.

A Specific Plan should be prepared prior to development. Planning should be based on a strategy which analyzes the area comprehensively and which accounts for the constraints imposed by subsoil environmental conditions. Transformation of the district will require that several outstanding issues be resolved simultaneously. Development feasibilities should be analyzed, phasing of improvements should be identified, and a funding strategy to finance and implement recommended open space should be addressed. These require that a realistic development program and site plan be developed.

REGIONAL CIRCULATION & LOCAL STREET IMPROVEMENTS

The Oak-to-Ninth area is isolated from other parts of the city by regional transportation facilities, all of which run parallel to the waterfront. The following policies are recommended to reduce the effect of these barriers and improving access to, and circulation through, the area.

Regional Access

POLICY OAK-6: EXPLORE THE FUTURE POTENTIAL FOR A NEW BART STATION AND MAJOR PARKING FACILITY ON BART PROPERTY AT FIFTH AVENUE AND EAST EIGHTH STREET.

As the waterfront develops as a major destination, opportunities for the creation of a new BART station east of Fifth Avenue should be explored. In addition to improving regional transit service, easy BART connections would enhance the potential of the nearby waterfront as a major destination, and reduce parking problems associated with special events. The site might also include a significant parking facility for commuter parking, replacement parking for Laney College surface lots, and special events parking for the waterfront.

In addition to serving the waterfront area, a BART station at this location could have positive impacts on the revitalization of adjacent neighborhoods.

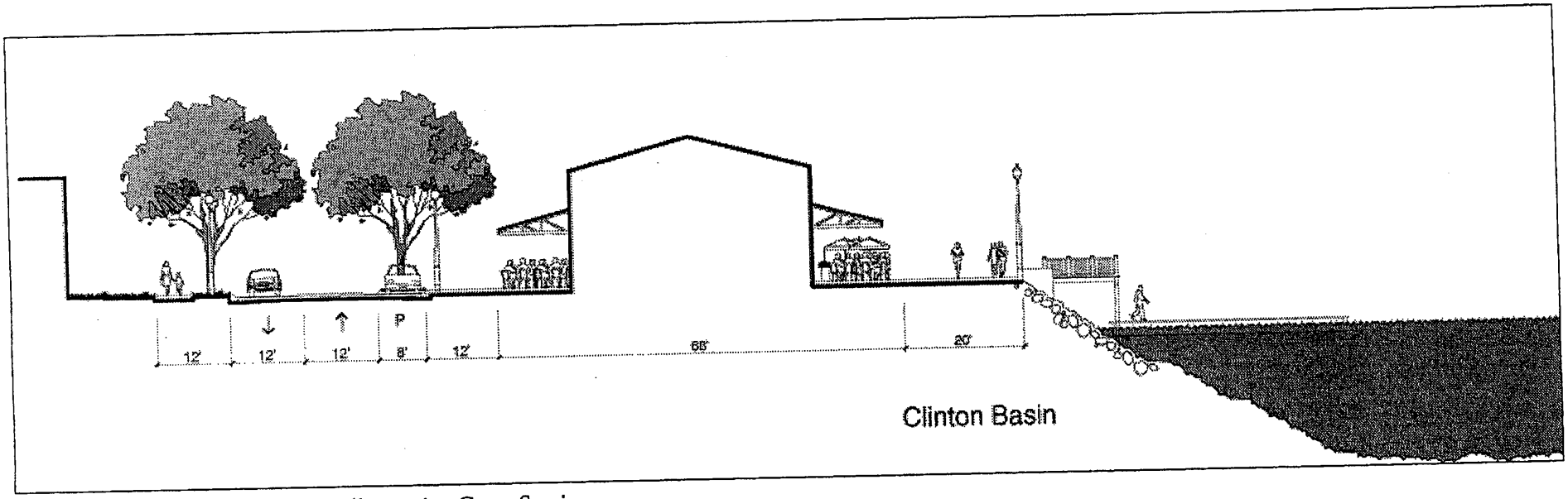


FIGURE III-12: Clinton Basin Illustrative Cross Section

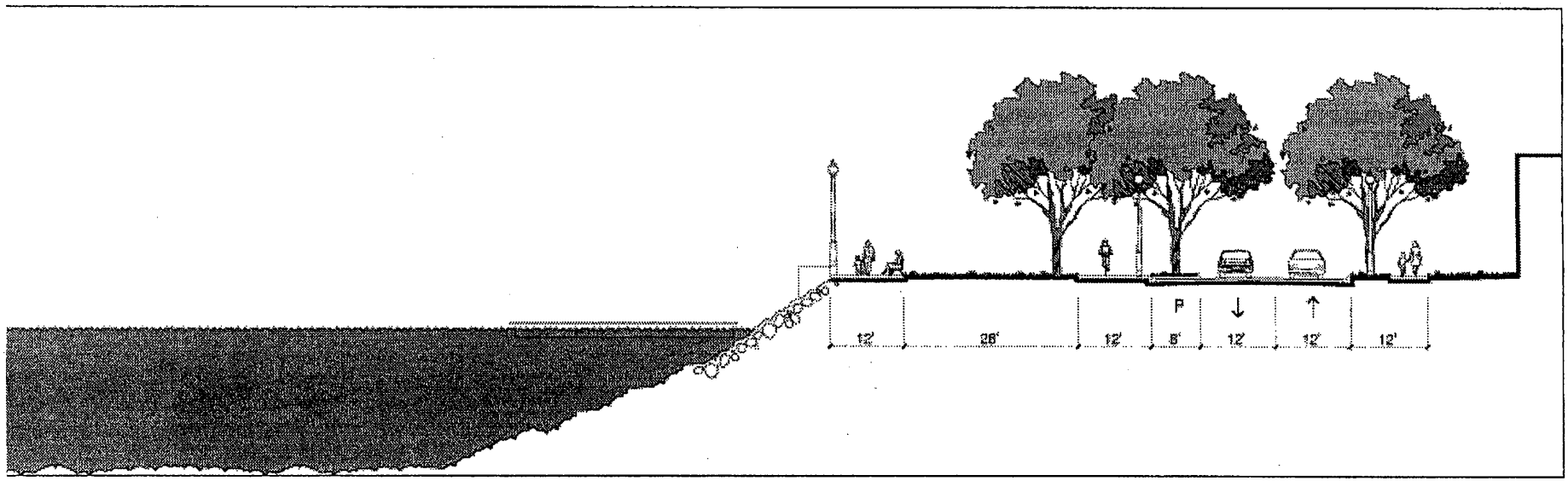
POLICY OAK-7: COORDINATE WITH CALTRANS ON THE UPGRADE OF THE I-880 FREEWAY TO IMPROVE REGIONAL ACCESS TO THE WATERFRONT.

As it passes through Oakland, I-880 is substandard. On and off-ramps occur in a random manner, creating short merging distances and associated safety problems. This is particularly true in the Oak-to-Ninth District. As the area evolves and becomes more of a regional attraction, the highway network that serves the district will become a busier and more dangerous place for drivers and pedestrians.

However, with the current seismic upgrade program for the freeway, this situation could be remedied to promote highway safety and to provide clear, safe and convenient access to the waterfront. The City should work with Caltrans to develop retrofit plans for the Fifth Avenue Interchange which also include a more direct way to the waterfront. At a minimum, the existing on and off-ramps along the Embarcadero between Fifth and Ninth Avenues should be removed and replaced with a configuration that provides both eastbound on-ramp and westbound off-ramp connecting to Fifth Avenue.

Local Street Improvements

POLICY OAK-8: ENHANCE FIFTH AVENUE AS THE PRINCIPAL PEDESTRIAN AND VEHICULAR LINKAGE TO THE PUBLIC OPEN SPACE SURROUNDING THE MOUTH OF THE LAKE MERRITT CHANNEL.



Fifth Avenue is a significant north-south street, connecting to Park Boulevard and linking the waterfront to downtown neighborhoods and the Oakland Hills. As such, it is important that Fifth Avenue be improved south of the Embarcadero as the principal pedestrian and vehicular connection to this segment of the waterfront. It should be realigned and straightened to become the edge of the open space and to establish a direct driving route that circumvents the Fifth Avenue Point community.

In order to enhance the pedestrian environment along Fifth Avenue, landscaping, lighting, and sidewalk improvements should be undertaken along its entire distance.

Policy OAK-9: Improve the Embarcadero East of Oak Street as a Multimodal Landscaped Parkway with Bicycle, Pedestrian and Vehicular Facilities.

A key objective of the Estuary Policy Plan is to create a continuous multimodal parkway to improve access along the waterfront and enhance the continuity and identity of the Estuary within the city. Consistent with recommendations to develop segments of the parkway in other sections of this plan, the Embarcadero Parkway concept should be implemented between Ninth Avenue, Lake Merritt Channel and Embarcadero Cove, beyond.

A three-lane roadway (two moving lanes and a center left-turn lane) should be built, wherever feasible, with an adjacent landscaped corridor to accommodate a continuous bicycle trail and pedestrian promenade on the Estuary side.

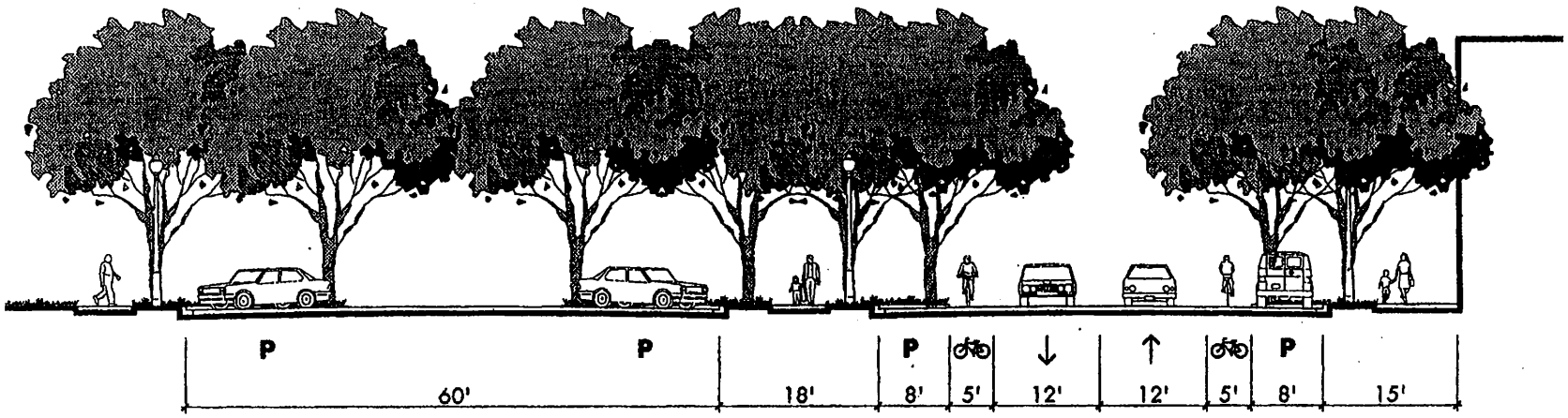


FIGURE III-13: 5th Avenue Illustrative Cross Section
(With one vehicular lane in each direction.)

POLICY OAK-10: CREATE A NETWORK OF PEDESTRIAN-FRIENDLY STREETS THAT OPENS UP VIEWS AND ACCESS TO THE WATER.

Within the Fifth Avenue Point area and the commercial-recreational district east of Clinton Basin, a network of local streets should be provided to serve individual properties.

In future planning (See Policy OAK-5) this network should be designed in a block configuration to allow for a diversity of ways through the district and a comfortable and safe pedestrian environment. The configuration of streets should be aligned to promote views and access to the shoreline, provide convenient access to and parking for open spaces, and discourage fast-moving through traffic. Streets should include generous provisions for pedestrians and be landscaped in a manner that extends the open space amenity inland from the shoreline.

New local streets should continuously follow the Estuary and Clinton Basin open space, in order to create a more public and open feeling along the water and increase accessibility. Connections should be made from this area across the head of Clinton Basin to the Fifth Avenue Point community to ensure that both sides of the basin are tied together by local streets.

Parking

OAK-11: DESIGN PARKING TO BE CONVENIENT AND COMPLEMENTARY TO THE PUBLIC ORIENTATION OF USES WITHIN THE AREA.

Convenient and visible parking is important in ensuring the success of open space improvements as well as new development. In future planning (See Policy OAK-5) parking should be provided in a manner that complements the open space character of the area. Large expanses of asphalt should be avoided in favor of landscaped roadways with parking alongside them. Such an approach will minimize the visual impact of parking while maximizing access and visibility to adjacent activities. Parking areas should be well lit and linked to pedestrian trails.

Development projects should provide all of their parking requirements onsite, and be generously landscaped to promote continuity with open space areas. Parking should be screened from predominant public view with landscaping and/or encapsulated and architecturally integrated within buildings. Parking that serves private uses should be made available to the public during nonpeak periods.

Permanent onsite parking along roadways can only satisfy a small percentage of the overall parking needs. Additional opportunities for events parking north of I-880 such as the existing railyards, existing parking facilities at

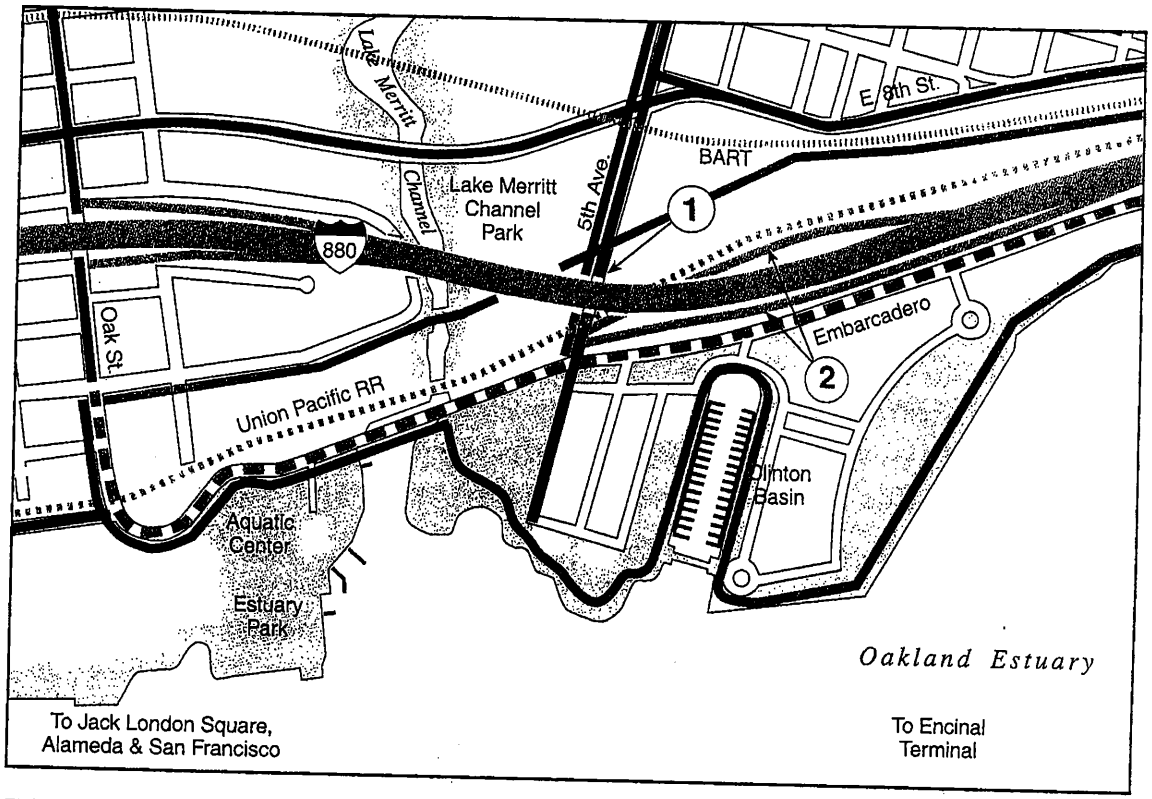


FIGURE III-14: **Oak to 9th District: Illustrative Circulation**

- (1) Realigned 5th Avenue
- (2) Rebuilt half diamond interchange at 5th Ave.
- Estuary Parkway
- Open Space and Public Access
- Interstate 880
- Major Linking Streets
- Local Streets
- Passenger/Freight Rail
- BART - Bay Area Rapid Transit
- Waterborne Transit (Ferry, Water Taxi)
- Class I Bikeways/Pathways
- Class II Bikeways/Pathways
- Class III Bikeways/Pathways

Laney College, and private parking facilities within the waterfront area should be pursued and programmed.

OAK-12: Establish a management program for special events access and parking.

A major event at the waterfront (See Policy OAK-2.4) could attract several thousand people. As a result, transportation and parking will be significant issues. Events planning should include a comprehensive transportation management program that includes shuttles, vans, and special transit vehicles providing service to the downtown, the Jack London District, and key regional transit providers (e.g., BART, Amtrak, Transbay ferries). Events' parking should also be provided within walking distance of the planned celebration space.

APPENDIX G

Historic Resources Evaluation and Memorandum Regarding Landmark Boundary

CAREY & CO. INC.
ARCHITECTURE

Oak Street to 9th Avenue Redevelopment Project
Oakland, California

Historic Resources Evaluation

August 15, 2005

INTRODUCTION

Report Summary

This report provides Oakland Harbor Partners and the City of Oakland with a description of the proposed Oak Street to 9th Avenue Redevelopment Project, summary of the project site's history, physical and historical descriptions of each architectural resource on the project site, discussion of the regulatory setting for historic architectural resources, analysis of adverse impacts on historic architectural resources, and provision of mitigation measures to avoid or reduce these impacts to a less-than-significant level for California Environmental Quality Act (CEQA) environmental review purposes.

There is one historic resource as defined by CEQA located within the survey boundaries (project site), the 9th Avenue Terminal. This resource, which includes "a five-berth quay wharf, a transit shed, paved storage yards, and land for industrial tenants,"[1] appears to be individually eligible for listing on the NRHP and CRHR. Additionally, on May 10, 2004 the City of Oakland's Landmark Preservation Advisory Board recommended designation as a City Landmark and assigned the 9th Avenue Terminal a rating of "A" (highest importance). As a result of this "A" rating, the building is considered listed on Oakland's Local Register of Historic Resources. The next step in the process is for the Oakland Landmark and S-7 Preservation Combining Zone Application to be presented to the Oakland Planning Commission and for the Planning Commission to recommend designation to the City Council. Landmark designation would then be accomplished through adoption of an ordinance by the City Council. To date, neither the Planning Commission nor the City Council have met to consider the designation of the resource as a City Landmark. Regardless, the 9th Avenue Terminal is considered a historic resource under CEQA and its partial demolition resulting from the proposed project would a significant impact that could not be fully mitigated by retaining and reusing only the "Head House" portion of the building or through Historic American Building Survey (HABS) documentation or historical exhibits. As such, the impact would be significant and unavoidable.

Project Description

The Oak to Ninth Avenue project site is approximately 62 acres located along the Oakland Estuary and the Embarcadero, east of Jack London Square and south of Interstate 880 (I-880). Generally, the project area is located south of I-880, north of the Oakland Estuary (Inner Harbor), west of 10th Avenue, and east of Fallon Street. The project site includes Estuary Park, Clinton Basin, the southern portion of Lake Merritt Channel (also referred to throughout as "the

Channel"), but excludes approximately six acres of privately held property on two sites along 5th Avenue.

The proposed project would redevelop an underutilized, maritime and industrial area on the Oakland Estuary into a mixed-use neighborhood with residential, commercial/retail, open space, and marina uses. A total of 3,100 residential dwelling units would be developed, with up to 200,000 square feet of active ground-floor retail uses. The majority of existing structures and uses on the project site would be demolished, and about 28 acres (or 45 percent) of the project site would be developed with a system of new or improved parks and open spaces, including a continuous waterfront trail.

Shoreline Park would be a new nine-acre open space along the waterfront shoreline where a large section of the Ninth Avenue Terminal currently exists, and approximately 20,000 square feet of the 1929 portion of the Terminal would be saved and reused with the intent to develop it for public benefit. The remainder of the Terminal would be demolished to accommodate the nine acres of new public open space. In addition, a portion of the pile-supported pier along the southernmost edge of the site would be removed, and a portion of the area that is currently covered by the pile-supported pier would remain as public open space and utilized as a waterfront, landscaped plaza.

SETTING

Overall Project Site

Light industrial buildings and warehouses characterize the Oak Street to 9th Avenue neighborhood. The area contains large paved sections and numerous temporary structures. Smaller warehouses, clad in corrugated metal, are concentrated with high density along 6th Avenue. Fewer buildings, but of greater size, occupy the large space east of 8th Avenue to the harbor. The small portion of the neighborhood east of Oak Street to the Lake Merritt channel is equally dominated by light industrial use and open parkland. The majority of structures in the area were constructed in the middle of the 20th century or later. Overall, the architectural style of these simple, functional structures can be classified as industrial vernacular. The majority lack ornamentation and were built to serve light industrial purposes.

The geography of the area has been altered over the last century through both man-made changes in the form of dredging and by annexation. The 9th Avenue Terminal is located at Brooklyn Basin, but this was formerly called San Antonio Creek. Similarly, the Brooklyn Basin is located in the Oakland Inner Harbor, also known as the Oakland-Alameda Estuary, but which was formerly called the Estuary of San Antonio. These older names date back to the time before 1872 when this area was considered part of the town of Brooklyn, prior to annexation that year by Oakland.[2]

The construction of the railroad and the reclamation of the waterfront drove the development of the Oak Street to 9th Avenue area along Oakland's inner harbor. The transcontinental railroad was completed from Sacramento to the San Francisco Bay along the so-called Niles Route in 1869.[3] It is this route that currently runs along the north side of Embarcadero, bordering the Oak to 9th neighborhood.[4] The route was initially started under the Western Pacific Railroad Company, then completed by the Central Pacific Railroad, which later became part of the Southern Pacific Railroad.[5]

Reclamation of the waterfront occurred in stages during the decades following completion of the transcontinental railroad. In 1878 the area to the south of the tracks and east of the entrance into Lake Merritt was still separated from the mainland by water and marshes.[6] By 1893, this area had been formed to create the Brooklyn Basin and was connected to the shore.[7] Further work by the Army Corps of Engineers in the 1910s created a wider channel, making it more accessible to large merchant ships.[8] Harbor improvements ultimately resulted in creation of the 9th Avenue Terminal building in 1930.[9] As a result of its location between both the railroad and waterfront, the Oak to 9th neighborhood developed into an area dominated by buildings with industrial and warehouse uses, serving the shipping needs of both.[10] The lumber industry was well served by this, and through 1951 wholesale lumber distribution and manufacturing yards further characterized the area.[11]

A bond to fund harbor improvements, approved by voters in 1925, also stimulated action by The Port of Oakland.[12] Control of the port area was transferred to the Board of Port Commissioners in 1926, and the swearing in of the first permanent Board of Port Commissioners occurred in 1927.[13] This was the same bond that funded the construction of the 9th Avenue Terminal, and in 1929 the Port of Oakland requested bids for its construction.[14] In 1935 further waterfront improvements were made using over 500 laborers supplied through the Public Works Administration (PWA) and Works Progress Administration (WPA), both of which were work-relief programs created under Franklin Delano Roosevelt's New Deal policies during the Great Depression.[15] More improvements followed during the 1930s, including the purchase of 20 acres of waterfront land adjacent to the 9th Avenue Terminal (1936), a 506-foot wharf extension and other additional projects completed by the WPA with a PWA grant (1937), and more improvements funded by the PWA in 1938 such as construction of roadways and installation of sewer lines.[16] During World War II in 1943, the 9th Avenue Terminal was used in the war effort for shipping and was controlled by the Pacific Naval Air Base Command.[17]

Since World War II the 9th Avenue Terminal area has undergone changes, but the building itself continues to be used. The first freeway in Oakland, known as the Nimitz (after Admiral Chester W. Nimitz who commanded the Pacific Fleet during the War), was opened to traffic from Oak Street to 23rd Avenue in 1949.[18] The Terminal building received an addition in 1951, and in 1956 management of the Oakland's municipal maritime terminals, including 9th Avenue, was subcontracted to private firms.[19] Today, as mentioned above, the area is dominated by light industrial and warehouse buildings.

Individual Project Site Buildings and Structures

<u>9th Avenue Terminal (Port of Oakland Bldg # H-309)</u>. Carey & Co. concurs with the description and history as written in the Oakland Landmark and S-7 Preservation Combining Zone Application Form for this structure, prepared by Cynthia L. Shartzer and accepted by the City of Oakland's Landmark Preservation Advisory Board on 10 May 2004. This description states that the "Ninth Avenue Terminal consists of a five-berth quay wharf, transit shed, paved storage yards and land for industrial tenants."[20] The landmark application goes on to quote from the description originally included in a 1997 Oakland Cultural Heritage Survey report:

> The 9th Avenue Terminal, located in Brooklyn Basin at the foot of 9th Avenue, is a Beaux-Arts derivative freight wharf and warehouse. It is high one story, long rectangular plan, with a curved and angled far end. It is about 1000' long, with the transit shed about

> 180' wide, railroad spur tracks on either side, and extensive open platform space along the west side. It has long bands of steel windows along the sides and a metal awning over a series of loading doors on the side, and a vast open interior. The outer 500' appears to have been added after 1951. The head house at the inland end, containing a small office, has a stepped and peaked parapet highest in the middle, and a monumental entry with tall paneled concrete pilasters and massive plain cornice. Exterior walls are concrete and steel-sash. Roof is composition. Structure is reinforced concrete with steel trusses. Designed for break-bulk cargo, the building is now little used. Visible alterations include some windows covered. The building is in good condition; its integrity is excellent. Its preliminary rating of B+3 reflects its interest as a fine and rare surviving example of a Beaux Arts derivative pier from the Port of Oakland's harbor improvement program of the 1920s: the similar Grove Street and Outer Harbor Terminals no longer exist.[21]

The landmark application also includes a verbal description of the wharf, "[The] marginal type wharf has a lower side in Clinton Basin of 312 feet, a main channel face of 952 feet and a Brooklyn Basin north channel face of 1,100 feet."[22] Port of Oakland documentation indicates that the wharf's type of construction is concrete pile and decking with a "timber pile fender system." A "concrete bulkhead with asphalt-surfaced solid fill" is also noted.[23]

Construction began on the 9th Avenue Terminal in 1929 and it was completed in October of 1930.[24] It was one of three municipal terminals funded under a 1925 voter-approved harbor bond; the others were the Grove Street Terminal and Outer Harbor Terminal, both of which have since been demolished.[25] Initially the terminal was 504 feet long, then an addition in 1951 added 500 feet, bringing the total length to 1004 feet.[26] The interior floor space is measured at 178,530 square feet (about four acres), and the ceiling rises to a height of 47 feet at the center and 27 feet at the sides.[27]

Design of the terminal has been attributed to Arthur A. Abel, who served as Assistant Chief Engineer and Assistant Port Manager from 1926 to May 1932, and Chief Engineer and Port Manager from May 1932 to 1952.[28] According to Shartzer:

> The Beaux-Arts style of the building, while very simple stylistically, represents an important phase in Oakland architecture and city planning during this period. The City Beautiful Movement, originating with the Classic Revival buildings constructed at the World's Columbian Exposition held in 1893 at Chicago, gave rise to the construction of [Beaux-Arts style] buildings in many cities across the country. The designers of these buildings, often municipally owned or related to public uses, such as power plants, used the Classic Revival style architectural vocabulary to convey the ideals of beauty, public benefit, and sound planning principals that would enhance the appearance of the city. The Ninth Avenue Terminal in its simple paneled

9th Avenue Terminal (Port of Oakland Bldg #H-309)
Carey & Co., October 2004

> pilasters, symmetrical façade, and other detailing represents these ideals very well. Other notable examples of this style and movement are Oakland City Hall, the bulkhead buildings along San Francisco's waterfront, and the Courthouse on St. James Park in San Jose.[29]

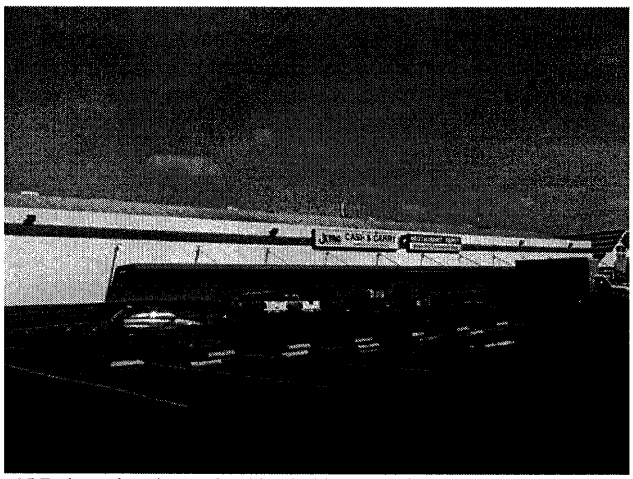
Shartzer notes that the terminal is an "amalgamation of water, rail and land transportation capability in one facility" and "an early example of an inter-modal transportation complex."[30] With its location at the waterfront, proximity to the railroad, and easy road access, the terminal was well-suited to its purpose. As further elaborated by Shartzer, "Significant features of the Terminal's operation were easy, twenty-four hour access by water, land, and rail and a facility tailor-made to enhance the Port of Oakland's ability to load, unload, and store cargo in the most efficient manner, in the least amount of time, with the least amount of damage."[31]

The following significant dates were identified in the landmark application form:[32]

November 1925 – Bond approval
August 5, 1929 – Bids due for Ninth Avenue Pier
October 1930 – Construction completed
June 1936 – Land purchase and WPA wharf extension
May 1943 – Pacific Naval Air Bases Command control
1951 – Terminal addition; January 1952 – addition opened
February 1956 – Encinal Terminals, Alameda manages terminal
1998 – Break-bulk operations moved from Ninth Avenue Terminal to Burma Road Terminal
2003 – Seaport Plan Amendment process completed to delete Port priority use area/marine terminal designation (as bulk cargo marine terminal)
December 8, 2003 – LPAB agrees to proceed with the landmark nomination

The 9th Avenue Terminal is still used today by the Transmeridian Cotton Warehouse.

<u>105 Embarcadero (Port of Oakland Bldg # G-203)</u>. This one-story light industrial building is rectangular in plan with a multi-barrel vault roof covered in roll asphalt. It is of concrete construction and the exterior walls are painted concrete. The primary (south) facade is characterized by a mid-height projecting awning and a ramp at the west end. This facade also contains two automatic sliding doors, with the primary entry at the east end and the primary exit at the center. Eight loading docks are present on the west facade and infilled loading dock openings can be seen on the east facade. The building's only windows are a series of roof-mounted skylights.



105 Embarcadero (Port of Oakland Bldg #G-203)
Carey & Co., October 2004

The large, square building located at 105 Embarcadero was originally constructed in the mid-to-late

1950s.[33] In the early 1970s it served as a tractor parts warehouse for Ford Motor Company's Tractor Division.[34] Currently it is a restaurant supply warehouse and store under occupant Jetro Cash & Carry. With its painted concrete walls, loading docks, and roll asphalt roof, this can be classified as a mid-20th Century industrial vernacular style building.

351 Embarcadero (Port of Oakland Bldg # G-309). This one-story light industrial building is rectangular in plan with a gable roof covered in composition shingles. It is of wood-frame construction with primarily vertical wood siding. Portions of the facade, including awnings over doors, a narrow band under the eaves, and a vertical section on the north elevation, are clad in wood shingles. The north facade – the gable end – is angled outward and comes to a point at the center; it is the east side of this formation, toward the center, that displays the aforementioned shingle-clad vertical section. Doors are visible at the east and west facades, topped by hip-shaped shingle-clad awnings. Two roll-up doors are also located on the east facade. Windows are primarily large vertical one-lite fixed set into wood sash.

351 Embarcadero (Port of Oakland Bldg #G-309)
Carey & Co., October 2004

The building at 351 Embarcadero was constructed in the 1950s.[35] In the early 1970s a wood working business used the south end and a barricade manufacturer used the north end.[36] By 1992, three businesses occupying the property were Continental Glass Repair, Golden State Diesel Marine, and Marine Surveyors.[37] With its roll-up doors and large fixed modern windows, this can be classified as a mid-20th Century industrial vernacular style building.

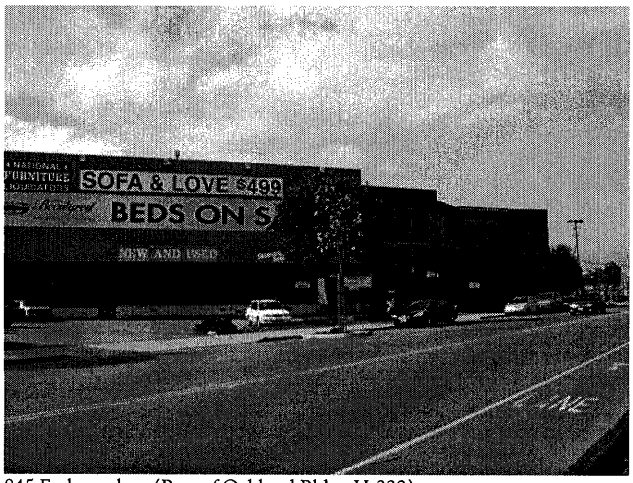
603 Embarcadero (Port of Oakland Bldg # H-103). This one-story light industrial building is rectangular in plan with a gable roof covered in corrugated metal. It is of wood-frame construction with corrugated metal siding. The primary (north) facade is the gable end, which also displays wood cladding at the base of the elevation. The wood entry door at the center of the primary facade is covered by a wood awning and a set of wood stairs with one rail leads to the door. Of the three visible windows on the north facade, one is six-lite wood fixed while the other two are covered by wire mesh. A wood fence surrounds the building and obscures the other facades.

603 Embarcadero (Port of Oakland Bldg #H-103)
Carey & Co., October 2004

The building at 603 Embarcadero dates to approximately 1947.[38] It has been

operated as a boat works under Philbrick Boat Works since soon after its construction, and continues in that use currently.[39] With its corrugated metal siding and small, mesh-filled windows, this can be classified as a mid-20th Century industrial vernacular style building.

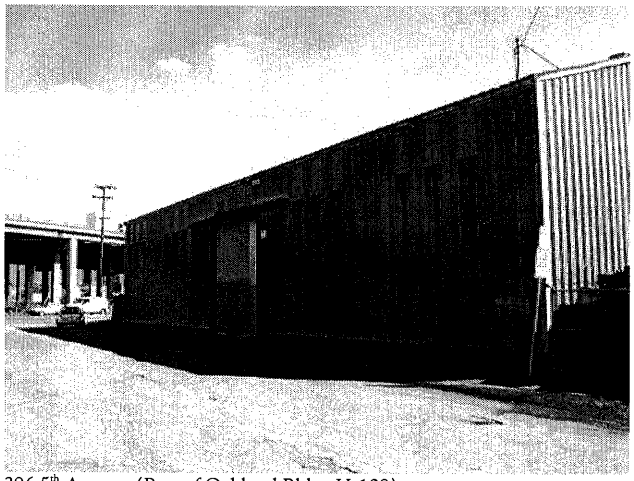
845 Embarcadero (Port of Oakland Bldg # H-232). This two-story light industrial and retail building is rectangular in plan with a flat roof. It is clad in brick veneer and metal paneling. The primary (north) facade is characterized by angled sections, wall projections, and wall recessions. The east portion of the facade is dominated by an overhanging metal bay that covers an elevated concrete walkway with a metal railing. This walkway gives access to the retail portion of the building. A garage is also present at the east end of the primary facade. The west portion of the primary facade angles back to the south and out toward the west and contains a receded entry. Metal-sash fixed windows are present at this section, separated by flat metal panels. This configuration of windows, brick and metal continues around to the north part of the west facade where two truck loading docks are located. This northwest portion of the building projects off of the main west facade. The south portion of the west facade is covered with plain corrugated metal siding with no openings. The east facade is clad in corrugated metal and contains three roll-up doors. The south facade was inaccessible during the site visit.



845 Embarcadero (Port of Oakland Bldg #H-232)
Carey & Co., October 2004

The original building located at 845 Embarcadero was constructed sometime between 1911 and 1947 (c.1930).[40] It was dramatically altered in 1979, and so visual observation cannot be employed to ascertain a more precise original date of construction.[41] From approximately 1952 through 1956 the building served as a produce and packing warehouse operated by Rexford Pre-pakt Co.[42] In the early 1970s it served as a warehouse for ladders, appliances and hardware.[43] Alterations in 1979 changed the footprint of the building by eliminating the angled northeast corner, creating a flat northern facade. An addition was also made to the west side.[44] Currently the building is occupied by National Furniture Liquidators, Inc. With its corrugated metal siding, roll-up doors and modern windows, this can be classified as a late-20th Century industrial vernacular style building.

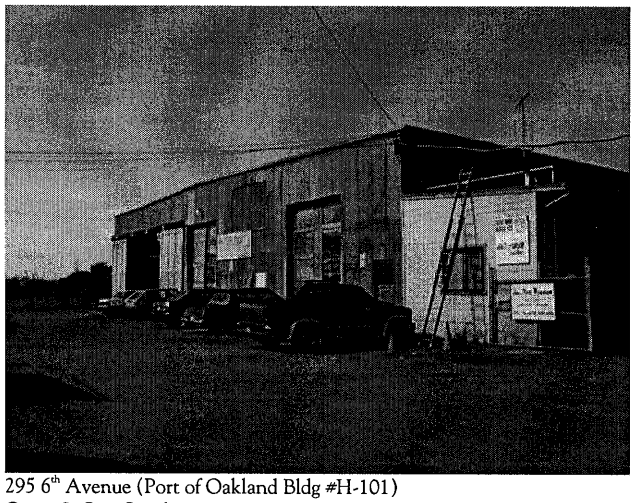
296 5th Avenue (Port of Oakland Bldg # H-108). This one-story warehouse building is rectangular in plan with a north-south oriented gable roof covered in metal. It is clad in corrugated metal and sits on a concrete foundation. The west facade contains a roll-up door with a metal door adjacent to it. A


296 5th Avenue (Port of Oakland Bldg #H-108)
Carey & Co., October 2004

surrounding fence obscures other facades, however no windows are visible.

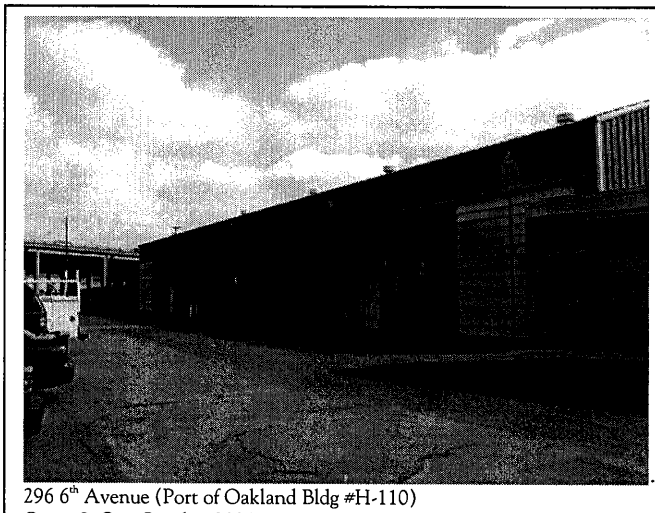
The building at 296 5th Avenue was constructed in the mid-to-late 1950s.[45] In the early 1970s it was operated as a carton warehouse.[46] With its corrugated metal siding and roll-up door, this can be classified as a mid-20th Century industrial vernacular style building.

295 6th Avenue (Port of Oakland Bldg # H-101). This one-story light industrial building is square in plan with two adjoining sections. The south section is clad in corrugated metal siding and has a flat roof. The east facade of this section is dominated by three tall garage-style openings with wood doors; the southern doors are sliders and the other two are hinged. A wood door with upper glass paneling is also located on the section. Windows are primarily industrial mult-lite with pivoting center sections, viewed on the south facade. A horizontal band of windows is also visible above the shed-roof addition on the north facade. This addition section is clad in horizontal wood siding. Projecting rafter tails support the overhanging roof and a fabric awning covers the entry on the north facade of this section. Windows on the north addition section are metal sliders.


295 6th Avenue (Port of Oakland Bldg #H-101)
Carey & Co., October 2004

The original building at 295 6th Avenue was constructed sometime between 1911 and 1951.[47] Based on visual observation, in Carey & Co's professional opinion the building was constructed circa 1925. An addition was made to the north facade in the mid-to-late 1950s.[48] From 1958 through at least 1960 the building was occupied by two packaging/carton companies, AAA Export Packaging Co. and Ajax Container Co.[49] The building continued to be used as both an export packaging warehouse and a carton warehouse in the early 1970s.[50] By 1992, the building was occupied by a window manufacturer, Jal Vue Glass, which continues to occupy the site currently as Jal-Vue Window.[51] With its corrugated metal siding, large wood garage doors, and industrial type windows, this can be classified as an early-to- mid-20th Century industrial vernacular style building.

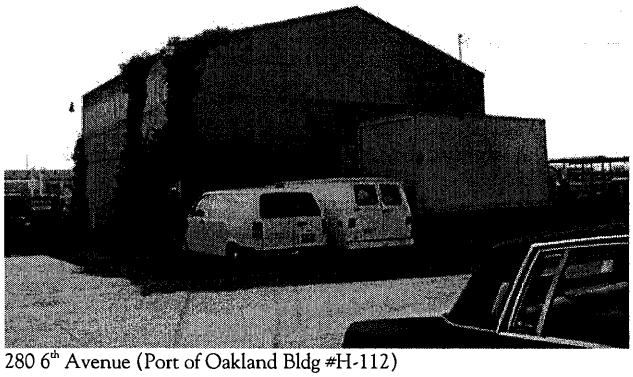
296 6th Avenue (Port of Oakland Bldg # H-110). This one-story light industrial building is rectangular in plan with a north-south oriented gable roof clad in metal. It is clad in corrugated metal siding. Two horizontal sliding metal doors are located on the west facade, one at either end. A fabric awning projects over a metal door near the center of this facade, and a wood door is located at the north end. The south


296 6th Avenue (Port of Oakland Bldg #H-110)
Carey & Co., October 2004

facade is unarticulated with no openings and the other facades are obscured by fencing; no windows were visible during the site visit.

The building at 296 6th Avenue was constructed in 1966 by CSB Const. Inc. for the Port of Oakland.[52] In the early 1970s it served as a carton stock warehouse.[53] By 1992, it was occupied by Chuck's Marine Repair.[54] With its corrugated metal siding and horizontal sliding metal doors, this can be classified as a mid-20th Century industrial vernacular style building.

<u>280 6th Avenue (Port of Oakland Bldg # H-112)</u>. This one-story light industrial building is square in plan with an east-west oriented gable roof covered in metal. It is clad in corrugated metal siding. The west facade contains two six-lite fixed metal windows and a metal door is located at the west end of the north facade. The south facade is unarticulated with no openings and the east facade was inaccessible during the site visit.


280 6th Avenue (Port of Oakland Bldg #H-112)
Carey & Co., October 2004

The square building at 280 6th Avenue was constructed in 1948 for owner L. LaBruzzi.[55] In 1952 it served as a boat works.[56] From 1965 through at least 1981 it was operated as Seabreeze Yacht Center and Boat Repair.[57] With its corrugated metal siding and industrial-style windows, this can be classified as a mid-20th Century industrial vernacular style building.

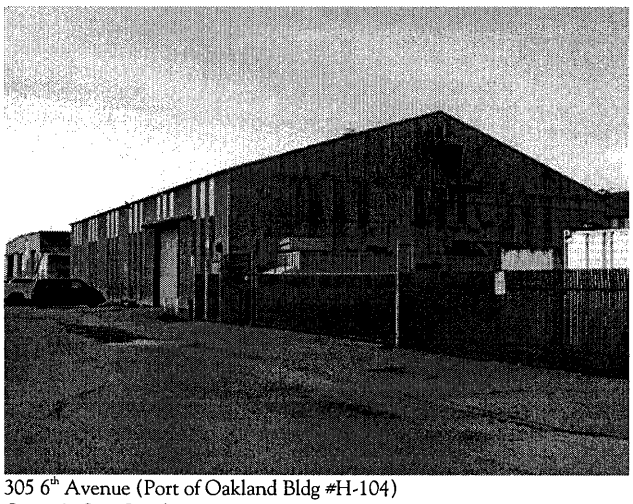
<u>280 6th Avenue (Port of Oakland Bldg # H-113)</u>. This one-story restaurant building is rectangular in plan with a flat roof. It is clad in metal siding. A projecting fabric awning and parapet extends across the primary (west) facade. These are supported on wood posts wrapped with rope. The awning covers an elevated walkway accessed by a ramp to the south and stairs to the north. A wood railing accented with rope decoration encloses the walkway. The primary entry, located toward the center of the primary facade, is infilled with plywood and a secondary wood door is located at the north end of the facade. Windows are metal sliders with screens and the center window at the south end of the west facade is covered by a metal grille. Other facades were obscured by fencing.

280 6th Avenue (Port of Oakland Bldg #H-113)
Carey & Co., October 2004

The small, rectangular building at 280 6th Avenue, also known as Port of Oakland

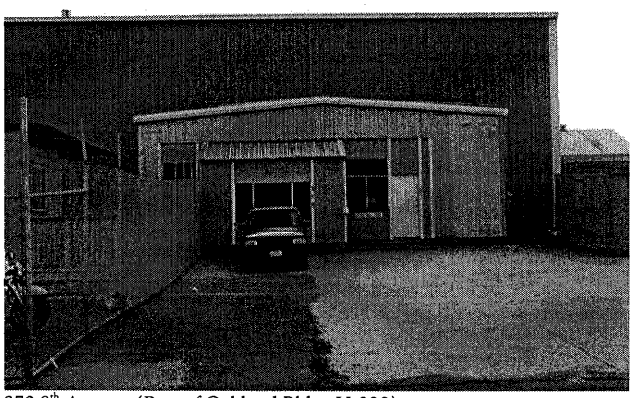
Building #H-113, was erected at this location in the 1980s or early 1990s.[58] Based on visual observation, in Carey & Co's professional opinion the building was constructed circa 1985. In 1992 it was operated as the Seabreeze Cafe, and based on visual observation it appears to have continued in that operation until recently.[59] With its metal siding and modern windows, this can be classified as a late-20th Century pre-fabricated vernacular style building.

305 6th Avenue (Port of Oakland Bldg # H-104). This one-story light industrial building is rectangular in plan with a north-south oriented gable roof covered in metal. It is clad in corrugated metal, with lighter colored metal at the upper portions of the facade for light penetration. The building sits on a concrete foundation. Two roll-up doors are visible, one at the north end of the east facade and on at the west end of the south facade. The north facade is unarticulated with no openings and the west facade was inaccessible during the site visit.


305 6th Avenue (Port of Oakland Bldg #H-104)
Carey & Co., October 2004

The building currently listed as 305 6th Avenue was constructed in 1962 with the address 91 6th Avenue; it was built by Calif. Steel Bldgs. Inc. for the Port of Oakland.[60] This building appears to have been constructed for use by an export packaging company operating out of 295 6th Avenue (Port of Oakland Building # H-101), located just to the south.[61] In the early 1970s it served as a carton manufacturing building.[62] With its corrugated metal siding and roll-up doors, this can be classified as a mid-20th Century industrial vernacular style building.

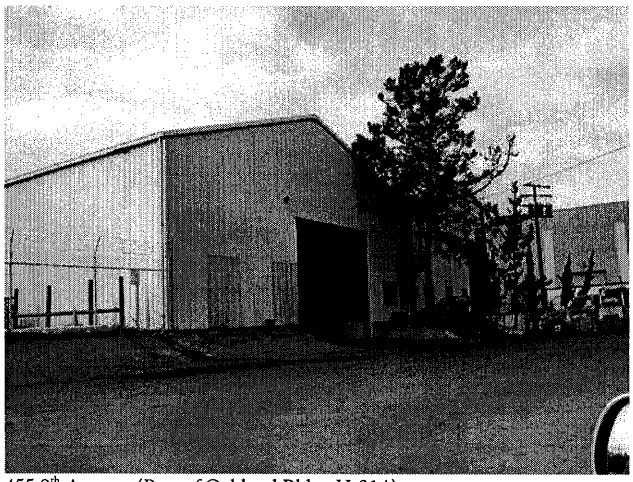
370 8th Avenue (Port of Oakland Bldg # H-228). This one-story office building is rectangular in plan and sits on a concrete foundation. It is clad in metal with portions of the west (primary) facade clad in stucco. The low-pitch gable roof is oriented on an east-west axis and a shed roof bay projects from the primary facade. A metal door is located to the south of the bay, set into the stucco section. The primary facade also contains fixed three-lite windows. The other facades were inaccessible during the site visit.


370 8th Avenue (Port of Oakland Bldg #H-228)
Carey & Co., October 2004

The small, corrugated metal building currently listed as 370 8th Avenue was constructed in the late 1960s or early 1970s (c.1970).[63] It was used as an office in the early 1970s.[64] In the past this address was associated with a large building that was constructed in 1929 and demolished in

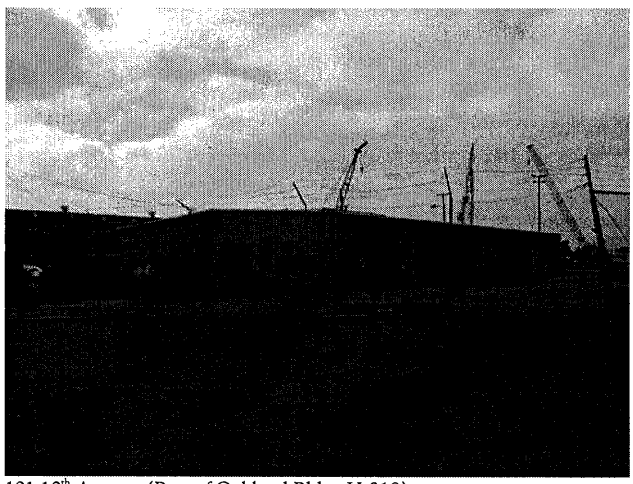
1997.[65] With its metal siding and modern windows this can be classified as a late-20th Century industrial vernacular style building.

455 9th Avenue (Port of Oakland Bldg # H-314). This one-story light industrial building is rectangular in plan with a double-gable-roof covered in corrugated metal. The building form is characterized by two north-south oriented gable-roof sections that are joined along their long sides to form one building. It is clad in corrugated metal siding and displays a number of roll-up doors – one on the east facade, one on the south, and two on the north. An entry door and metal windows are visible at the north facade. A few trees and ground shrubs further define the entry on the north facade.


455 9th Avenue (Port of Oakland Bldg #H-314)
Carey & Co., October 2004

The building at 455 9th Avenue was constructed in 1965 for Sam Kalman & Co.[66] In the early 1970s it served as a metal working building.[67] With its corrugated metal siding, roll-up doors and modern windows, this can be classified as a late-20th Century industrial vernacular style building.

101 10th Avenue (Port of Oakland Bldg # H-318). This one-story light industrial building is rectangular in plan with a low-pitch gable roof oriented on a north-south axis. It is clad in corrugated metal siding and sits on a concrete block foundation. Three roll-up doors are visible on the west facade and one on the east. Two entry doors and metal windows are located on the west facade. The north facade also contains a window. The south facade was inaccessible during the site visit.

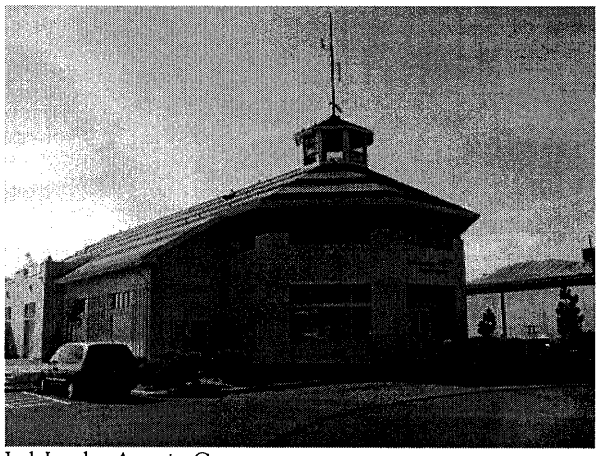

101 10th Avenue (Port of Oakland Bldg #H-318)
Carey & Co., October 2004

The building at 101 10th Avenue was constructed circa 1960.[68] In the early 1970s it served as a tile warehouse.[69] With its corrugated metal siding, roll-up doors and modern windows, this can be classified as a late-20th Century industrial vernacular style building.

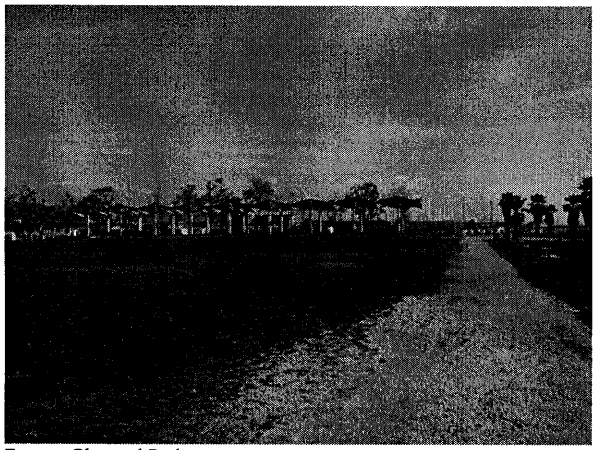
115 Embarcadero East/ Jack London Aquatics Center/Estuary Channel Park. This two-story boathouse building is rectangular in plan with a semi-octagonal northern section. The roof is gable at the south end and hip over the semi-octagonal portion on the north end. A cupola also projects above the octagonal section, topped by a decorative weathervane. The roof is covered in alternating bands of white and green composition shingles. It is located within Estuary Channel

Park. The park contains a field and a number of pieces of public art. A helix-style pergola covers a seating area and a dock projects out over the estuary. Seating and lines of trees are also located at the park.

Estuary Channel Park was created some time during the last quarter of the 20th century.[70] The building at 115 Embarcadero East, located in Estuary Channel Park, was constructed in 2000 and is known as the Jack London Aquatics Center (JLAC), or "The Boathouse."[71] It was designed by VBN Architects and Alan Dreyfuss AIA, and constructed by Hanson-Murikami-Eshima and J.H. Fitzmaurice, Inc. design-build team.[72] Waterside improvements were designed by Concept Marine Associates and constructed by Peak Engineering.[73] With its cupola, striped roof, and modern windows, this can be classified as a post-modern style building. The building is currently operated by the JLAC and owned by the City of Oakland.[74]



Jack London Aquatics Center
Carey & Co., October 2004



Estuary Channel Park
Carey & Co., October 2004

Regulatory Setting - Architectural and Historic Resource Designations

<u>The National Register of Historic Places (NRHP)</u>
The NRHP evaluates a property's historic significance based on the following four criteria:

- Criterion A (Event): Properties that are associated with events that have made a significant contribution to the broad patterns of our history.

- Criterion B (Person): Properties that are associated with the lives of persons significant in our past.

- Criterion C (Design/Construction): Properties that embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

- Criterion D (Information Potential): Properties that have yielded, or may be likely to yield, information important in prehistory or history.

In addition to historic significance, an NRHP evaluation includes a determination of physical integrity, or the property's ability to convey its historic significance. Integrity consists of seven aspects: location, design, setting, materials, workmanship, feeling, and association.

All evaluations prepared before August 15, 2003 assigned properties one of the following NRHP status codes (1 to 7), as described below:

1. Listed in the National Register
2. Determined eligible for the National Register in a formal process involving federal agencies
3. Appears eligible for the National Register in the judgment of those completing an evaluation of an historic resource
4. Might be eligible for listing
5. Ineligible for the National Register but of local interest
6. Not eligible for the National Register
7. Undetermined.

Within each of these codes were a series of subcategories, indicating a more detailed description of a resource's status. For example, a building rated "4S7" was considered possibly eligible for individual listing on the NRHP if its architectural integrity were to be restored.

On August 15, 2003 the State Historic Preservation Office prepared new California Historical Resource Status Codes generally based on the earlier NRHP status codes. The new codes also rate buildings 1-7 and include subcategory listings; however, the "4" status code has been effectively eliminated and new subcategories have been created that take into account the California Register of Historical Resources (see below).

<u>The California Register of Historical Resources (CRHR)</u>
The CRHR evaluates a resource's historic significance based on the following four criteria:

- Criterion 1 (Event): Resources associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

- Criterion 2 (Person): Resources associated with the lives of persons important to local, California or national history.

- Criterion 3 (Design/Construction): Resources that embody the distinctive characteristics of a type, period, region or method of construction, or that represent the work of a master or possess high artistic values.

- Criterion 4 (Information Potential): Resources that have yielded or have the potential to yield information important to the prehistory or history of the local area, California or the nation.

In addition to historic significance, a CRHR evaluation includes a determination of physical integrity, or the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Integrity consists of seven aspects: location, design, setting, materials, workmanship, feeling, and

association. Any resource listed in or determined eligible for listing in the NRHP is automatically eligible for listing in the CRHR.

California Environmental Quality Act (CEQA)
Generally, a resource is considered "historically significant" if it meets the following criteria for listing on the California Register of Historical Resources CEQA Guidelines section 15064.5:

1) A resource listed in, or determined to be eligible for listing in, CRHR.

2) A resource included in a local register of historical resources or identified as significant in an historical resource survey meeting the requirements of Section 5024.1 (g) of the Public Resources Code (PRC), unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

   [Section 5024.1(g) states that a resource may be listed in the CRHR if the survey meets all of the following criteria 1) the survey has been or will be included in the State Historic Resources Inventory, 2) the survey was prepared in accordance with office procedures and requirements, 3) the resource is evaluated and determined by the office to have a significance rating of Category 1 to 5 on DPR Form 523, and 4) the survey is over 5 years old and has been updated to identify historical resources which have since become eligible (or ineligible).]

3) A resource identified as significant (e.g., rated 1-5) in a historical resource survey (DPR Form 523), unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

4) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the determination is supported by substantial evidence in light of the whole record.

5) A resource that is determined by a lead agency to be historically or culturally significant even though it does not meet the other four criteria listed here.

CEQA allows a lead agency to determine that a resource may be a historic resource at its own discretion (Section 15064.5[a]D.4). Although a property may not be listed or determined eligible for listing in the CRHR, included in a local register of local resources, or identified as significant in a DPR Form 523 historical resources survey, the lead agency may still determine that the resource is a "historical resource" for purposes of CEQA.

City of Oakland Local Register of Historical Resources and CEQA
The City of Oakland's local register of historical resources is a list of properties officially designated or recognized as historically significant by the City pursuant to a local ordinance or resolution, unless the preponderance of evidence demonstrates otherwise.

In March 1994, the Oakland City Council adopted a Historic Preservation Element of the General Plan. The Historic Preservation Element (HPE), amended July 21, 1998, sets out a graduated system of ratings and designations resulting from the Oakland Cultural Heritage Survey (OCHS) and Oakland Zoning Regulations. The HPE provides the following policy related to identifying historic resources under CEQA:

- Policy 3.8 (Definition of "Local Register of Historical Resources" and Historic Preservation "Significant Effects" for Environmental Review Purposes): For purposes of environmental

review under the CEQA, the following properties will constitute the City of Oakland's Local Register of Historic Resources:

1) All Designated Historic Properties, and

2) Those Potential Designated Historic Properties that have an existing rating of "A" or "B" or are located within an Area of Primary Importance.

3) Until complete implementation of Action 2.1.2 (Redesignation), the "Local Register" will also include the following designated properties: Oakland Landmarks, S-7 Preservation Combining Zone properties, and Preservation Study List properties.

The HPE includes other policies that seek to encourage the preservation of Oakland's significant historic resources within the context of balanced development and growth. These policies are presented below:

- Policy 3.1. (Avoid or Minimize Adverse Historic Preservation Impacts Related to Discretionary City Actions). This City will make all reasonable efforts to avoid or minimize adverse effects on the Character-Defining Elements of Existing or Potential Designated Historic Properties (PDHPs) which could result from private or public projects requiring discretionary actions.

- Policy 3.4 (City Acquisition for Historic Preservation Where Necessary). Where all other means of preservation have been exhausted, the City will consider acquiring, by eminent domain if necessary, existing or PDHPs, or portions thereof, in order to preserve them. Such acquisition may be in fee, as conservation easements, or a combination thereof.

- Policy 3.5 (Historic Preservation and Discretionary Permit Approvals). For any project involving the complete demolition of Heritage properties or PDHPs requiring discretionary City permits, the City will make a finding that: 1) the design quality of the proposed project is at least equal to that of the original structure and is compatible with the character of the neighborhood; or 2) the public benefits of the proposed project outweigh the benefit of retaining the original structure; or 3) the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.

- Policy 3.7 (Property Relocation Rather than Demolition). As a condition of approval for all discretionary projects involving demolition of existing or PDHPs, the City will normally require that reasonable efforts be made to relocate the properties to an acceptable site.

<u>City of Oakland Historic Property Rating System</u>
The Oakland Cultural Heritage Survey (OCHS) uses a five-tier rating system for individual properties, ranging from "A" (highest importance), "B" (major importance), "C" (secondary importance), "D" (minor importance), and "E" (of no particular interest). This designation is termed the Individual Property Rating of a building and is based on the following criteria:

- Visual Quality/Design: Evaluation of exterior design, interior design, materials and construction, style or type, supporting elements, feelings of association, and importance of designer.

- History/Association: Association of person or organization, the importance of any event, association with patterns, and the age of the building.

- Context: Continuity and familiarity of the building within the district.
- Integrity and Reversibility: Evaluation of the building's condition, its exterior and interior alterations, and any structural removals.

Properties with conditions or circumstances that could change substantially in the future are assigned both an "existing" and a "contingency" rating. The existing rating describes the property under its present condition, denoted by an upper case letter, while the contingency rating denoted by a lower case letter, describes it under possible future circumstances, such as if the property were restored. For example, an property rated "E/b" is considered to be an "E" in its present condition (of no particular interest) but a possible "B" (major importance) if an altered property is restored in the future.

Properties generally appropriate for a "B" rating include those that are especially fine examples of an important style, type, or convention or that are intimately associated with a person, organization, event, or historical pattern of major importance, at the local level or of moderate importance at the state or national level.

District status is indicated as part of a property's rating by a number 1 = Area of Primary Importance, 2 = Area of Secondary Importance, 3 = not in an Area of Primary or Secondary Importance. Additional symbols after the district status indicates whether the property is a contributor to a district (+) or not (-). These symbols placed after the contingency ratings indicate higher (+) or lower (-) ratings. For example a building rated "Cb-2+" has an existing rating of C (secondary importance) but possibly a B (major importance) tending toward secondary importance (B-) if restored, and a contributor to an Area of Secondary Importance.

Existing Significance Ratings of Buildings on the Project Site and in the Project Vicinity
Neither the project site, nor the individual buildings and structures on the project site, have been previously evaluated for NRHP or CRHR status. The overall site has not been previously evaluated for local significance. However one resource, the 9th Avenue Terminal, has been assigned an "A" rating and therefore is considered listed on the City of Oakland's Local Register of Historic Resources. Seven of the buildings and structures on the project site have received "F" ratings by the OCHS (indicating that they are "less than 45 years old or modernized"). See the attached matrix for additional significance ratings and status information.

For this survey, the project vicinity was defined as approximately one city block surrounding the project site. The north boundary was the Union Pacific Railroad tracks, while the west boundary was Oak Street and the east boundary was the location of 12th Avenue if it were to be extended southward across the railroad tracks. The project vicinity also included the property bounded by First Street on the north, Madison Street on the west, and Fallon Street on the east as well as the "5th Avenue Artists Colony" area, a collection of mostly light industrial and residential buildings located along 5th Avenue that is also sometimes referred to as the "5th Avenue Point" or "5th Avenue Marina."

Within this project vicinity area, there are no buildings/structures listed or previously determined eligible for the NRHP, CRHR, or the City of Oakland's Local Register of Historic Resources. Excluding the 5th Avenue Artists Colony, whose status is described in more detail below, there are 16 buildings/structures that have been assigned ratings by the Oakland Cultural Heritage Survey: eight have an "F" rating (indicating that they are "less than 45 years old or modernized"), six have an "F3" rating (indicating that they are "less than 45 years old or

modernized" and not located in an Area of Primary or Secondary Importance), and two have a "D3" rating (indicating minor importance and not located in an Area of Primary or Secondary Importance).

The 5th Avenue Artists Colony is not listed on the City of Oakland's Local Register of Historic Resources. This collection of mostly light industrial and residential buildings has been assigned a preliminary district rating of "Area of Secondary Importance" and is considered by OCHS staff as potentially qualifying for a SHPO rating of "5S."[75] For the area's individual buildings, the OCHS has assigned one "C" rating (secondary importance), one "E" rating (of no particular importance), and an unspecified number of the area's buildings have received an "F" rating (indicating that they are "less than 45 years old or modernized").[76]

Overall Project Site Status under CEQA

The Oak to 9th Avenue survey area does not appear to be eligible for listing as a historic district on the NRHP or CRHR and does not appear to be eligible for inclusion on the Local Register of Historic Resources as a local Preservation District ("S-7 Zone"). Since it is not listed or eligible for inclusion on federal, state, or local lists, the area is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

For purposes of listing on the National Register of Historic Places (NRHP), a historic district is defined as a unified entity that "possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development."[77] To be potentially eligible for listing on the NRHP, a historic district must usually be over 45-50 years old, must have historic significance, and must retain its physical integrity. The Oak to 9th Avenue neighborhood possesses a concentration of light industrial style buildings, all built between 1930 and 1979. Because the period of significance for this area would be 1930 to 1979 (reflecting the age of the buildings), this group is considered less than 50 years old under NRHP procedures. Therefore it must be exceptionally significant to qualify for listing on the NRHP. In Carey & Co.'s opinion, archival research yielded no information indicating an association with exceptionally significant historic events or people (Criteria A & B). Moreover, while together these buildings are an example of 20th century industrial vernacular, the grouping does not exceptionally embody the distinctive characteristics of its style, type, or period (Criterion C). Archival research provided no indication that there is the potential to yield exceptionally important information (Criterion D). Since physical integrity is based on historic significance, and this collection of buildings does not appear to posses historic significance, its physical integrity can not be evaluated.

Because period of significance for the project site ends within the last 50 years, for the purposes of CRHR eligibility sufficient information must be known about the context history to provide a foundation for a valid evaluation. In Carey & Co.'s opinion, sufficient information is known regarding the neighborhood's lack of associations with historic events and people (Criteria 1 & 2), its 20th century industrial vernacular architectural style (Criterion 3), and its lack of potential to yield important information (Criterion 4) to conclude that the property is not CRHR eligible.

Finally, in Carey & Co.'s opinion the area does not qualify for inclusion on the Local Register of Historic Resources as a Preservation District because it does not exhibit historical, cultural, educational, aesthetic, or environmental value. The buildings have little in common except

their location, which is not in itself an appropriate basis for district designation, and their general light industrial use patterns, which is not unique or special in any way.

Individual Project Site Buildings and Structures Status under CEQA

9th Avenue Terminal. This resource, which includes "a five-berth quay wharf, a transit shed, paved storage yards, and land for industrial tenants,"[78] appears to be individually eligible for listing on the NRHP and CRHR. Additionally, on May 10, 2004 the City of Oakland's Landmark Preservation Advisory Board recommended designation as a City Landmark and assigned the 9th Avenue Terminal a rating of "A" (highest importance). As a result of this "A" rating, the building is considered listed on Oakland's Local Register of Historic Resources. Since the building is locally designated and eligible for inclusion on federal and state lists, the property is considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).[79]

To be potentially eligible for listing on the NRHP or CRHR, a resource must usually be over 45-50 years old, must have historic significance, and must retain its physical integrity. Since the latest section of the resource was constructed 54 years ago, it meets the age requirement. Carey & Co. concurs with the argument for significance included in the Oakland Landmark and S-7 Preservation Combining Zone Application Form for this structure, prepared by Cynthia L. Shartzer and accepted by the City of Oakland's Landmark Preservation Advisory Board on 10 May 2004. This document states that the building appears eligible for individual listing on the NRHP based on significance of the building in the areas of Architecture, Commerce, Maritime Commerce, and Harbor Terminal. These correspond to NRHP Criterion A/CRHR Criterion 1, indicating an association with significant historic events, and NRHP Criterion C/CRHR Criterion 3, indicating that it embodies the distinctive characteristics of the style, type, or period. In terms of integrity, Carey & Co. concurs with the opinions of Shartzer and the Landmark Preservation Advisory Board, which indicate that the resource retains an overall high level of integrity. Major additions to the transit shed structure are in keeping with the original design and intent and therefore both the 1930 and 1951 sections of the transit shed qualify as historic under federal, state, and local criteria. As stated above, the resource also includes a quay wharf, storage yards, and related land which also qualify as historic under federal, state, and local criteria.

105 Embarcadero (Port of Oakland Bldg # G-203). The property at 105 Embarcadero does not appear to be individually eligible for listing on the NRHP or CRHR. The Oakland Cultural Heritage Survey did not rate the building, and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

To be potentially eligible for listing on the NRHP or CRHR, a building must usually be over 45-50 years old, must have historic significance, and must retain its physical integrity. Since this building was constructed approximately 46-53 years ago, it meets the age requirement. However, it does not appear to possess sufficient historic significance for listing. In Carey & Co.'s opinion, under NRHP Criterion A/CRHR Criterion 1 archival research yielded no information indicating an association with significant historic events. Under NRHP Criterion B/CRHR Criterion 2, archival research yielded no information indicating an association with significant historic individuals or entities. Under NRHP Criterion C/CRHR Criterion 3, the building's mid-20th century industrial vernacular style does not sufficiently embody the distinctive

characteristics of the style, type, or period. Archival research provided no indication that the building has the potential to yield exceptionally important information (NRHP Criterion D/CRHR Criterion 4). Since physical integrity is based on historic significance, and the building does not appear to possess historic significance, its physical integrity can not be evaluated.

Similarly, in Carey & Co.'s opinion the property at 105 Embarcadero does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

351 Embarcadero (Port of Oakland Bldg # G-309). The property at 351 Embarcadero does not appear to be individually eligible for listing on the NRHP or CRHR. In 1987, the Oakland Cultural Heritage Survey assigned this property an "F" rating, indicating that it is "less than 45 years old or modernized." However, it is now over 45 years old, and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

To be potentially eligible for listing on the NRHP or CRHR, a building must usually be over 45-50 years old, must have historic significance, and must retain its physical integrity. Since this building was constructed approximately 46-53 years ago, it meets the age requirement. However, it does not appear to possess sufficient historic significance for listing. In Carey & Co.'s opinion, under NRHP Criterion A/CRHR Criterion 1 archival research yielded no information indicating an association with significant historic events. Under NRHP Criterion B/CRHR Criterion 2, archival research yielded no information indicating an association with significant historic individuals or entities. Under NRHP Criterion C/CRHR Criterion 3, the building's mid-20th century industrial vernacular style does not sufficiently embody the distinctive characteristics of the style, type, or period. Archival research provided no indication that the building has the potential to yield exceptionally important information (NRHP Criterion D/CRHR Criterion 4). Since physical integrity is based on historic significance, and the building does not appear to possess historic significance, its physical integrity can not be evaluated.

Similarly, in Carey & Co.'s opinion the property at 351Embarcadero does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

603 Embarcadero (Port of Oakland Bldg # H-103). The property at 603 Embarcadero does not appear to be individually eligible for listing on the NRHP or CRHR. The Oakland Cultural Heritage Survey did not rate the building, and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

To be potentially eligible for listing on the NRHP or CRHR, a building must usually be over 45-50 years old, must have historic significance, and must retain its physical integrity. Since this building was constructed approximately 58 years ago, it meets the age requirement. However, it does not appear to possess sufficient historic significance for listing. In Carey & Co.'s opinion, under NRHP Criterion A/CRHR Criterion 1 archival research yielded no information indicating an association with significant historic events. Under NRHP Criterion B/CRHR Criterion 2, archival research yielded no information indicating an association with significant

historic individuals or entities. Under NRHP Criterion C/CRHR Criterion 3, the building's mid-20th century industrial vernacular style does not sufficiently embody the distinctive characteristics of the style, type, or period. Archival research provided no indication that the building has the potential to yield exceptionally important information (NRHP Criterion D/CRHR Criterion 4). Since physical integrity is based on historic significance, and the building does not appear to possess historic significance, its physical integrity can not be evaluated.

Similarly, in Carey & Co.'s opinion the property at 603 Embarcadero does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

845 Embarcadero (Port of Oakland Bldg # H-232). The property at 845 Embarcadero does not appear to be individually eligible for listing on the NRHP or CRHR. In 1987, the Oakland Cultural Heritage Survey assigned this property an "F" rating, indicating that it is "less than 45 years old or modernized." As of 2005, this building is still considered "less than 45 years old or modernized," and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

Although this building was originally constructed more than 50 years ago, it was so radically altered in 1979 that it must by evaluated as a circa-1979 building. Because it is therefore less than 50 years old, it must be exceptionally significant to qualify for listing on the NRHP. In Carey & Co.'s opinion, archival research yielded no information indicating an association with exceptionally significant historic events or people (Criteria A & B). Moreover, while it is an example of a late-20th century industrial vernacular building, the building does not exceptionally embody the distinctive characteristics of its style, type, or period (Criterion C). Archival research provided no indication that the building has the potential to yield exceptionally important information (Criterion D).

Because the building is considered less than 50 years old, for the purposes of CRHR eligibility sufficient information must be known about the context history to provide a foundation for a valid evaluation. In Carey & Co.'s opinion, sufficient information is known regarding the building's lack of associations with historic events and people (Criteria 1 & 2), its late-20th century industrial vernacular architectural style (Criterion3), and its lack of potential to yield important information (Criterion 4) to conclude that the property is not CRHR eligible.

Similarly, in Carey & Co.'s opinion the property at 845 Embarcadero does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

296 5th Avenue (Port of Oakland Bldg # H-108). The property at 296 5th Avenue does not appear to be individually eligible for listing on the NRHP or CRHR. The Oakland Cultural Heritage Survey did not rate the building, and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

To be potentially eligible for listing on the NRHP or CRHR, a building must usually be over 45-50 years old, must have historic significance, and must retain its physical integrity. Since this building was constructed approximately 46-53 years ago, it meets the age requirement. However, it does not appear to possess sufficient historic significance for listing. In Carey & Co.'s opinion, under NRHP Criterion A/CRHR Criterion 1 archival research yielded no information indicating an association with significant historic events. Under NRHP Criterion B/CRHR Criterion 2, archival research yielded no information indicating an association with significant historic individuals or entities. Under NRHP Criterion C/CRHR Criterion 3, the building's mid-20th century industrial vernacular style does not sufficiently embody the distinctive characteristics of the style, type, or period. Archival research provided no indication that the building has the potential to yield exceptionally important information (NRHP Criterion D/CRHR Criterion 4). Since physical integrity is based on historic significance, and the building does not appear to possess historic significance, its physical integrity can not be evaluated.

Similarly, in Carey & Co.'s opinion the property at 296 5th Avenue does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

295 6th Avenue (Port of Oakland Bldg # H-101). The property at 295 6th Avenue does not appear to be individually eligible for listing on the NRHP or CRHR. The Oakland Cultural Heritage Survey did not rate the building, and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

To be potentially eligible for listing on the NRHP or CRHR, a building must usually be over 45-50 years old, must have historic significance, and must retain its physical integrity. Since this building was constructed approximately 76 years ago, it meets the age requirement. However, it does not appear to possess sufficient historic significance for listing. In Carey & Co.'s opinion, under NRHP Criterion A/CRHR Criterion 1 archival research yielded no information indicating an association with significant historic events. Under NRHP Criterion B/CRHR Criterion 2, archival research yielded no information indicating an association with significant historic individuals or entities. Under NRHP Criterion C/CRHR Criterion 3, the building's early-to-mid-20th century industrial vernacular style does not sufficiently embody the distinctive characteristics of the style, type, or period. Archival research provided no indication that the building has the potential to yield exceptionally important information (NRHP Criterion D/CRHR Criterion 4). Since physical integrity is based on historic significance, and the building does not appear to possess historic significance, its physical integrity can not be evaluated.

Similarly, in Carey & Co.'s opinion the property at 295 6th Avenue does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

296 6th Avenue (Port of Oakland Bldg # H-110). The property at 296 6th Avenue does not appear to be individually eligible for listing on the NRHP or CRHR. In 1987, the Oakland Cultural Heritage Survey assigned this property an "F" rating, indicating that it is "less than 45 years old or modernized." As of 2005, this building is still less than 45 years old, and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark

quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

Because the building is less than 50 years old, it must be exceptionally significant to qualify for listing on the NRHP. In Carey & Co.'s opinion, archival research yielded no information indicating an association with exceptionally significant historic events or people (Criteria A & B). Moreover, while it is an example of a mid-20th century industrial vernacular building, the building does not exceptionally embody the distinctive characteristics of its style, type, or period (Criterion C). Archival research provided no indication that the building has the potential to yield exceptionally important information (Criterion D).

Because the building is less than 50 years old, for the purposes of CRHR eligibility sufficient information must be known about the context history to provide a foundation for a valid evaluation. In Carey & Co.'s opinion, sufficient information is known regarding the building's lack of associations with historic events and people (Criteria 1 & 2), its mid-20th century industrial vernacular architectural style (Criterion 3), and its lack of potential to yield important information (Criterion 4) to conclude that the property is not CRHR eligible.

Similarly, in Carey & Co.'s opinion the property at 296 6th Avenue does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

<u>280 6th Avenue (Port of Oakland Bldg # H-112)</u>. The property at 280 6th Avenue does not appear to be individually eligible for listing on the NRHP or CRHR. The Oakland Cultural Heritage Survey did not rate the building, and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

To be potentially eligible for listing on the NRHP or CRHR, a building must usually be over 45-50 years old, must have historic significance, and must retain its physical integrity. Since this building was constructed approximately 57 years ago, it meets the age requirement. However, it does not appear to possess sufficient historic significance for listing. In Carey & Co.'s opinion, under NRHP Criterion A/CRHR Criterion 1 archival research yielded no information indicating an association with significant historic events. Under NRHP Criterion B/CRHR Criterion 2, archival research yielded no information indicating an association with significant historic individuals or entities. Under NRHP Criterion C/CRHR Criterion 3, the building's mid-20th century industrial vernacular style does not sufficiently embody the distinctive characteristics of the style, type, or period. Archival research provided no indication that the building has the potential to yield exceptionally important information (NRHP Criterion D/CRHR Criterion 4). Since physical integrity is based on historic significance, and the building does not appear to possess historic significance, its physical integrity can not be evaluated.

Similarly, in Carey & Co.'s opinion the property at 280 6th Avenue does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

<u>280 6th Avenue (Port of Oakland Bldg # H-113)</u>. The property at 280 6th Avenue does not appear to be individually eligible for listing on the NRHP or CRHR. In 1987, the Oakland Cultural

Heritage Survey assigned this property an "F" rating, indicating that it is "less than 45 years old or modernized." As of 2005, this building is still less than 45 years old, and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

Because the building is less than 50 years old, it must be exceptionally significant to qualify for listing on the NRHP. In Carey & Co.'s opinion, archival research yielded no information indicating an association with exceptionally significant historic events or people (Criteria A & B). Moreover, while it is an example of a late-20th century pre-fabricated vernacular building, the building does not exceptionally embody the distinctive characteristics of its style, type, or period (Criterion C). Archival research provided no indication that the building has the potential to yield exceptionally important information (Criterion D).

Because the building is less than 50 years old, for the purposes of CRHR eligibility sufficient information must be known about the context history to provide a foundation for a valid evaluation. In Carey & Co.'s opinion, sufficient information is known regarding the building's lack of associations with historic events and people (Criteria 1 & 2), its late-20th century pre-fabricated vernacular architectural style (Criterion 3), and its lack of potential to yield important information (Criterion 4) to conclude that the property is not CRHR eligible.

Similarly, in Carey & Co.'s opinion the property at 280 6th Avenue does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

<u>305 6th Avenue (Port of Oakland Bldg # H-104)</u>. The property at 305 6th Avenue does not appear to be individually eligible for listing on the NRHP or CRHR. In 1987, the Oakland Cultural Heritage Survey assigned this property an "F" rating, indicating that it is "less than 45 years old or modernized." As of 2005, this building is still less than 45 years old, and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

Because the building is less than 50 years old, it must be exceptionally significant to qualify for listing on the NRHP. In Carey & Co.'s opinion, archival research yielded no information indicating an association with exceptionally significant historic events or people (Criteria A & B). Moreover, while it is an example of a mid-20th century industrial vernacular building, the building does not exceptionally embody the distinctive characteristics of its style, type, or period (Criterion C). Archival research provided no indication that the building has the potential to yield exceptionally important information (Criterion D).

Because the building is less than 50 years old, for the purposes of CRHR eligibility sufficient information must be known about the context history to provide a foundation for a valid evaluation. In Carey & Co.'s opinion, sufficient information is known regarding the building's lack of associations with historic events and people (Criteria 1 & 2), its mid-20th century industrial vernacular architectural style (Criterion 3), and its lack of potential to yield important information (Criterion 4) to conclude that the property is not CRHR eligible.

Similarly, in Carey & Co.'s opinion the property at 305 6th Avenue does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

370 8th Avenue (Port of Oakland Bldg # H-228). The Oakland Cultural Heritage Survey rating, "F" ("less than 45 years old or modernized"), and the OHP status code assigned to this address, "7R" ("Submitted as Part of a Reconnaissance Level Survey: NOT EVALUATED"), refers to a demolished building. The current property at 370 8th Avenue does not appear to be individually eligible for listing on the NRHP or CRHR. The Oakland Cultural Heritage Survey has not rated the building, and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

Because the building is less than 50 years old, it must be exceptionally significant to qualify for listing on the NRHP. In Carey & Co.'s opinion, archival research yielded no information indicating an association with exceptionally significant historic events or people (Criteria A & B). Moreover, while it is an example of a late-20th century industrial vernacular building, the building does not exceptionally embody the distinctive characteristics of its style, type, or period (Criterion C). Archival research provided no indication that the building has the potential to yield exceptionally important information (Criterion D).

Because the building is less than 50 years old, for the purposes of CRHR eligibility sufficient information must be known about the context history to provide a foundation for a valid evaluation. In Carey & Co.'s opinion, sufficient information is known regarding the building's lack of associations with historic events and people (Criteria 1 & 2), its late-20th century industrial vernacular architectural style (Criterion 3), and its lack of potential to yield important information (Criterion 4) to conclude that the property is not CRHR eligible.

Similarly, in Carey & Co.'s opinion the property at 370 8th Avenue does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

455 9th Avenue (Port of Oakland Bldg # H-314). The property at 455 9th Avenue does not appear to be individually eligible for listing on the NRHP or CRHR. In 1987, the Oakland Cultural Heritage Survey assigned this property an "F" rating, indicating that it is "less than 45 years old or modernized." As of 2005, this building is still less than 45 years old, and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

Because the building is less than 50 years old, it must be exceptionally significant to qualify for listing on the NRHP. In Carey & Co.'s opinion, archival research yielded no information indicating an association with exceptionally significant historic events or people (Criteria A & B). Moreover, while it is an example of a late-20th century industrial vernacular building, the building does not exceptionally embody the distinctive characteristics of its style, type, or period (Criterion C). Archival research provided no indication that the building has the potential to yield exceptionally important information (Criterion D).

Because the building is less than 50 years old, for the purposes of CRHR eligibility sufficient information must be known about the context history to provide a foundation for a valid evaluation. In Carey & Co.'s opinion, sufficient information is known regarding the building's lack of associations with historic events and people (Criteria 1 & 2), its late-20th century industrial vernacular architectural style (Criterion 3), and its lack of potential to yield important information (Criterion 4) to conclude that the property is not CRHR eligible.

Similarly, in Carey & Co.'s opinion the property at 455 9th Avenue does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

<u>101 10th Avenue (Port of Oakland Bldg # H-318)</u>. The property at 101 10th Avenue does not appear to be individually eligible for listing on the NRHP or CRHR. In 1987, the Oakland Cultural Heritage Survey assigned this property an "F" rating, indicating that it is "less than 45 years old or modernized." As of 2005, this building is equal to or less than 45 years old, and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

Because the building is less than 50 years old, it must be exceptionally significant to qualify for listing on the NRHP. In Carey & Co.'s opinion, archival research yielded no information indicating an association with exceptionally significant historic events or people (Criteria A & B). Moreover, while it is an example of a late-20th century industrial vernacular building, the building does not exceptionally embody the distinctive characteristics of its style, type, or period (Criterion C). Archival research provided no indication that the building has the potential to yield exceptionally important information (Criterion D).

Because the building is less than 50 years old, for the purposes of CRHR eligibility sufficient information must be known about the context history to provide a foundation for a valid evaluation. In Carey & Co.'s opinion, sufficient information is known regarding the building's lack of associations with historic events and people (Criteria 1 & 2), its late-20th century industrial vernacular architectural style (Criterion 3), and its lack of potential to yield important information (Criterion 4) to conclude that the property is not CRHR eligible.

Similarly, in Carey & Co.'s opinion the property at 101 10th Avenue does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

<u>115 Embarcadero East/ Jack London Aquatics Center/Estuary Channel Park</u>. The property at 115 Embarcadero East does not appear to be individually eligible for listing on the NRHP or CRHR. The Oakland Cultural Heritage Survey did not rate the building, and as of 2005 this building is less than 45 years old; it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).

Because the building is less than 50 years old, it must be exceptionally significant to qualify for listing on the NRHP. In Carey & Co.'s opinion, archival research yielded no information

indicating an association with exceptionally significant historic events or people (Criteria A & B). Moreover, while it is an example of a post-modern building, the building does not exceptionally embody the distinctive characteristics of its style, type, or period (Criterion C). Archival research provided no indication that the building has the potential to yield exceptionally important information (Criterion D).

Because the building is less than 50 years old, for the purposes of CRHR eligibility sufficient information must be known about the context history to provide a foundation for a valid evaluation. In Carey & Co.'s opinion, sufficient information is known regarding the building's lack of associations with historic events and people (Criteria 1 & 2), its post-modern architectural style (Criterion 3), and its lack of potential to yield important information (Criterion 4) to conclude that the property is not CRHR eligible.
Similarly, in Carey & Co.'s opinion the property at 115 Embarcadero East does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

IMPACTS AND MITIGATION MEASURES

One of the buildings on the project site, the 9th Avenue Terminal, is considered a historic resource under CEQA criteria because it is listed in the City of Oakland's Local Register of Historic Resources and also appears eligible for listing in the National Register of Historic Places as an individual resource.

The following section identifies the significance criteria for determining the level of impact to historic resources, a description of significant direct, indirect and cumulative impacts to historic resources, as well as mitigation measures to reduce impacts to a less-than-significant level, if available.

Significance Criteria

Demolition or substantial alterations to historical resources or their setting would be considered a significant impact under CEQA. Specifically, CEQA Section 15604.5(b) states:

> A project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. Substantial adverse change in the significance of an historical resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. The significance of an historical resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion on, or eligibility for inclusion on, a historical resource list (including the CRHR, a local register, and historical resources survey forms (DPR 523).
>
> Generally, a project that follows the *Secretary of the Interior's Standards for the Treatment of Historic Properties (Secretary's Standards)* shall be considered as mitigated to a level of less than significant impact to an historical resource.

Direct Impacts

The proposed project would demolish all but one of the existing buildings and the western end of the pier structure on the project site to accommodate the new mixed use development. The 9th Avenue Terminal would be substantially demolished. Of the approximately 180,000 total square feet, approximately 160,000 square feet would be demolished and about 20,000 square feet adaptively used for public benefit.

Impact 1. The 9th Avenue Terminal is a historic resource for CEQA purposes. It was constructed in two phases, following construction of the entire pier. In 1930, the original terminal was approximately 504 feet long by 183 feet wide. In 1951, the terminal building was extended by approximately another 500 feet over the open pier to the west. The entire building, including the later addition, is considered a historic resource. By removing approximately 80% of the building, its ability to convey its historic significance would be permanently altered and materially impaired and the structure would no longer be eligible for listing in federal, state and local registers. Although the portion to be saved is the key elevation with the most architectural design treatment, the retention of this portion alone would not be enough to offset the loss of physical characteristics that are the reason for its eligibility at federal, state and local levels. The impact would remain significant.

Implementation of the Mitigation Measure 1 would minimize this impact as much as feasible. However, because the demolition of all or portions of a historical resource represents an irreversible change to the historical resource, this impact would remain significant and unavoidable, even after mitigation. Partial preservation of the head house would fulfill some of the objectives of the following mitigation measure, but would still result in a significant unavoidable impact to these buildings, because it would still result in substantial material impairment.

Impact 2. The pier structure supporting the 9th Avenue Terminal was constructed as part of the initial construction of the Terminal. It was larger than the original transit shed offering open space for storage. The 1951 addition to the transit shed was constructed over a portion the formerly open portion of the pier. The pier is considered an integral part of the 9th Avenue Terminal and is a historic resource for CEQA purposes. The pier will be retrofitted to improve its structural capacity and its southern and western edges will be shaved off, thus reducing its current width and length. With the majority of the transit shed demolished, this portion of the pier will be used as green open space. A walkway will be constructed along the water's edge with new retaining walls, light standards, and pavement. The use of this space as a "shoreline park" will require the addition of new surfacing materials on the majority of the pier, including top soil. By removing the edge and western portion of the pier structure and transforming it into a park, the pier will lose its industrial character and the result will be a significant effect on the environment.

Implementation of Mitigation Measure 1A would minimize this impact, but would not reduce it to a level of less than a significant impact.

Impact 3. The remaining buildings on the proposed project site will be demolished. As these buildings do not possess historic significance, their removal would not a significant effect on the environment and no mitigation measures are necessary.

Extensive new construction of a type of use distinctly different than the existing uses, would diminish the industrial character of the area. However, since this area has not been found to possess historic significance, the proposed new construction would not have a significant impact. Also, the potential of effects any new construction would have on the 9th Avenue Terminal is

reduced to a level of less than significant given that the majority of the Terminal itself will be demolished and its standing a historic resource lost. No mitigation measures are necessary.

Impact 4. The project would construct a new mixed-use, multi-story development immediately adjacent to the remaining Bulkhead Building which may not be architecturally compatible with this structure as a potential future Oakland City Landmark.

As described in Mitigation Measure 1C, the City should consider landmark nomination of the Bulkhead Building. If designated as a landmark in the future, the proposed project may affect this building's historical significance through potentially incompatible or incongruous adjacent new construction. As the designs of the proposed mixed use, multi-story project have not been finalized, it is possible that the project could affect its historic setting as an Oakland City Landmark. This would be considered a significant and unavoidable impact.

Impact 5. The project would construct a new mixed-use, multi-story development, diminishing the industrial character of the project site and vicinity, and altering the existing setting of the Fifth Avenue Point neighborhood. The proposed project would be distinctly different than the existing uses on the project site and vicinity. The historic industrial character of the area would be diminished, but the previous and existing marina uses would be retained and improved. However, since no other historic resources have been identified on the project site or in the project vicinity, with the exception of the Ninth Avenue Terminal, the proposed new construction of residential and commercial retail uses would have a less-than-significant impact with regard to the loss of industrial character.

The project would appear as a new and visibly different building type immediately adjacent to Fifth Avenue Point, an artist's community of small industrial and commercial buildings. The project would change the setting of Fifth Avenue Point by replacing empty lots or light industrial uses in the immediate area with larger-scale mixed use residential and retail uses. Fifth Avenue Point has been assigned a preliminary rating as an Area of Secondary Interest (ASI) by OCHS. However, an ASI by definition does not qualify for listing in either the National Register or in the City of Oakland Local Register of Historical Landmarks, and is not considered an historic resource for CEQA purposes as defined by Policy 3.8. As a result, changes to the immediate setting of this neighborhood would have a less-than-significant impact on historic resources.

Mitigation Measure 1. The following measures would be implemented to preserve information about the resource for further study.

A. Photograph the affected historic resources through large-format, black and white photographs meeting the Photographic Specifications of the Historic American Building Survey (HABS). The documentary photographs would be archived locally at the Oakland History Room (OHR) of the Oakland Public Library along with a copy on archival paper of the Oakland Landmark and S-7 Preservation Combining Zone Application Form for the 9th Avenue Terminal. Xerographic copies of the photographs would be forwarded to the Oakland Cultural Heritage Survey.

   Even with extensive documentation, however, the demolition of a substantial portion of the building and pier would result in the permanent loss of the historic resource that is associated with Oakland's history. Therefore, this demolition would remain significant and unavoidable.

B. Although the historic resource would no longer retain its historic significance, adaptive use and rehabilitation of the Head House would comply with the Secretary of the Interior's

Standards for the Treatment of Historic Properties. The current concept depicts a design that appears to comply, although their conceptual nature precludes the ability to reach an informed conclusion. The project sponsor would be subject to submitting more detailed designs, including, but not limited to, proposed window treatments, materials palette, awnings, signage, and interior configurations for review. For the latter, particular attention would be paid to the significance of the interior's "Expansive, unimpeded space with exposed trusses",[80] and the statement "A key feature of the transit shed is its expansive interior with exposed trusses."[81] In addition, the first story of the existing office in the Head House, mentioned in Attachment 2 of the Oakland Landmark and S-7 Preservation Combining Zone Application Form for the 9th Avenue Terminal,[82] would be retained and rehabilitated.

The review would be conducted by a professional meeting the standards for Historic Architecture or Historic Preservation Planning as set forth in the Secretary of the Interior's Professional Qualification Standards, 1997 Proposed Changes (not adopted). The results of the review would be forwarded to the Secretary of the Landmarks Preservation Advisory Board, City of Oakland, for final approval.

The implementation of this mitigation would assure that the remaining portion of the historic resource would receive appropriate rehabilitation treatment despite losing its historic significance. Even so, the proposed demolition would remain significant and unavoidable.

C. The City of Oakland should consider landmark nomination of the Bulkhead Building and its associated structures. Even with a subsequent designation as a landmark, the impact of the proposed project would remain significant and unavoidable.

Cumulative Impacts

Impact 4. The 9th Avenue Terminal is the last remaining building from the Oakland Municipal Terminals built in the early 1920s. The Grove Street Terminal, Outer Harbor Terminal and 9th Avenue Terminal were custom- and purpose-built buildings "financed under a 1925 bond of $9,960,000." The partial demolition of the 9th Avenue Terminal would complete the loss of all of the buildings built as the Oakland Municipal Terminals and would result in significant, unavoidable cumulative impacts to historic resources.

Mitigation Measure 4

A. Previously, the demolition of the Grove Street Terminal was mitigated, in part, by the publication of a book on the history of the Port of Oakland, *Pacific Gateway: An Illustrated History of the Port of Oakland.*[83] This mitigation also can be used to partially mitigate the cumulative loss of historic resources, but not to the degree of lessening the impact. A significant adverse impact would still remain.

B. The implementation of Measure 1 also would mitigate the significant, cumulative impact associated with Impact 2, but not to a less-than-significant level. Even with the documentation recommended in Measure 1, the cumulative impact would remain significant and unavoidable.

C. Create a historical exhibit depicting the history of the Oakland Municipal Terminals. At a minimum, the exhibit would consist of the following:

1) Historic photographs of the Grove Street Terminal, Outer Harbor Terminal and 9th Avenue Terminal.

2) Contemporary photographs of the 9th Avenue Terminal taken as recommended in Mitigation A.

3) Examples of manifests, log books, invoices and other artifacts that may be in the possession of the Port of Oakland or private companies, if available. These may be reproductions.

4) Other displayable objects and narrative information.

5) An educative and documentary audio/visual history on the Oak to Ninth area and accessory areas as appropriate, including:

    a. Visual explanation of wharf design versus other types of pier design;

    b. Oral histories of people who worked at the building and/or other maritime industries in the area;

    c. Historic film clips.

    d. History of the development of the harbor;

    e. History of the development of the Port Board;

    f. PWA and WPA involvement at the Port;

    g. World War II uses;

    h. A visual film documentation of the existing warehouse/industrial character of the area, including views from the water to the City.

6) The proposed park design, to be located where the Ninth Avenue Terminal demolition is proposed, should incorporate landscaping, sculptural elements, paths, lighting, etc. that conceptually reference the expanse of the building's footprint and height.

7) The project sponsor would set aside a minimum of 200 square feet within the Head House for exhibit purposes.

Implementation of these mitigations would partially offset the cumulative adverse effect of partially demolishing the 9th Avenue Terminal, but the effect would remain as significant and unavoidable.

ENDNOTES

[1] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 3.

[2] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, page 1, and attachment 2, page 15.
[3] "Railroading History in Niles Canyon," in Niles Canyon Railway [online], cited 21 October 2004, available at: http://www.ncry.org/history.htm.
[4] Sanborn Fire Insurance Maps, "Oakland, California," 1911, 1952, c.1970; maps 174, 211, 212, 213, 214.
[5] "Railroading History in Niles Canyon," in Niles Canyon Railway [online], cited 21 October 2004, available at: http://www.ncry.org/history.htm.
[6] *Official and Historical Atlas Map of Alameda County, California.* (1878; reprint, Fresno, CA: Valley Publishers, 1976).
[7] Woodruff Minor, *Pacific Gateway: An Illustrated History of the Port of Oakland* (Oakland, CA: Port of Oakland, 2000), 6.
[8] Woodruff Minor, *Pacific Gateway: An Illustrated History of the Port of Oakland* (Oakland, CA: Port of Oakland, 2000), 24, 25.
[9] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 4.
[10] "Oak – to – Ninth Avenue District," in Complete Text of Estuary Policy Plan [online], cited 21 October 2004, available at: http://www.estuaryplan.com/wholetext.htm.
[11] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, attachment 2, page 5.
[12] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, attachment 2, page 2.
[13] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, attachment 2, page 2, 10.
[14] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, attachment 2, page 10.
[15] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, attachment 2, page 11.
[16] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, attachment 2, page 11, 12.
[17] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, attachment 2, page 12.
[18] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, attachment 2, page 12.
[19] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, attachment 2, page 12, 13.
[20] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 3.
[21] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 3.
[22] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 6.
[23] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 22.
[24] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 4.
[25] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 4.
[26] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 5.
[27] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 5.
[28] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 4.

[29] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 5.
[30] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 4.
[31] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, attachment 2, page 4.
[32] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 4.
[33] Oakland City Permit Records, City of Oakland Permit Center, Oakland, CA; Sanborn Fire Insurance Maps, "Oakland, California," 1911, 1952, map 174; "Port of Oakland" pamphlet, *Oakland, Port of Oakland 1950-1959 (other than clippings)* file, Oakland History Room, Oakland, CA; *Telephone Directory for Oakland* (Oakland, CA: The Pacific Telephone and Telegraph Company, 1954, 1956, 1957, 1958, 1960); files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.
[34] Sanborn Fire Insurance Map, "Oakland, California," c.1970, map 174.
[35] Oakland City Permit Records, 351 Embarcadero, City of Oakland Permit Center, Oakland, California; Sanborn Fire Insurance Maps, "Oakland, California," 1911, 1952, c.1970, map 213; "Port of Oakland" pamphlet, *Oakland, Port of Oakland 1950-1959 (other than clippings)* file, Oakland History Room, Oakland, CA; *Telephone Directory for Oakland* (Oakland, CA: The Pacific Telephone and Telegraph Company, 1954, 1956, 1957, 1958, 1960); "The 5th Avenue Peninsula Self-Guided Tour," (Center for Land Use Interpretation: Oakland, CA, 1992); files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.
[36] Sanborn Fire Insurance Map, "Oakland, California," c.1970, map 213.
[37] "The 5th Avenue Peninsula Self-Guided Tour," (Center for Land Use Interpretation: Oakland, CA, 1992).
[38] "The 5th Avenue Peninsula Self-Guided Tour," (Center for Land Use Interpretation: Oakland, CA, 1992); Sanborn Fire Insurance Maps 1911, 1952, c.1970, map 211.
[39] Oakland City Permit Records, 603 Embarcadero, City of Oakland Permit Center, Oakland, California; Sanborn Fire Insurance Maps 1911, 1952, c.1970, map 211; "The 5th Avenue Peninsula Self-Guided Tour," (Center for Land Use Interpretation: Oakland, CA, 1992); *Telephone Directory for Oakland* (Oakland, CA: The Pacific Telephone and Telegraph Company, 1954, 1956, 1957, 1958, 1960); files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.
[40] Oakland City Permit Records, 845 Embarcadero, City of Oakland Permit Center, Oakland, CA; Sanborn Fire Insurance Maps 1911, 1952, c.1970, map 211, 212; "Port of Oakland" pamphlet, *Oakland, Port of Oakland 1950-1959 (other than clippings)* file, Oakland History Room, Oakland, CA; "Aerial photographs of the San Francisco Bay Area 1968," in UC Berkeley Earth Sciences & Map Library [online], cited 21 October 2004, available at: http://sunsite.berkeley.edu:8085/AerialPhotos/airphotovbzj/vbzj-2-97.html; *Telephone Directory for Oakland* (Oakland, CA: The Pacific Telephone and Telegraph Company, 1954, 1956, 1957, 1958, 1960); files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.
[41] Oakland City Permit Records, 845 Embarcadero, City of Oakland Permit Center, Oakland, California; files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.
[42] Sanborn Fire Insurance Map, 1952, map 211, 212; *Telephone Directory for Oakland* (Oakland, CA: The Pacific Telephone and Telegraph Company, (1954, 1956, 1957, 1958, 1960).
[43] Sanborn Fire Insurance Map, c.1970, map 212.
[44] Oakland City Permit Records, 845 Embarcadero, City of Oakland Permit Center, Oakland, California; "Oakland, California, United States 27 Feb 2004," aerial photograph in TerraServer USA [online], cited 21 October 2004, available at: http://www.terraservert.microsoft.com; files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.; Sanborn Fire Insurance Map c.1970, map 212.
[45] Oakland City Permit Records, City of Oakland Permit Center, Oakland, CA; Sanborn Fire Insurance Maps 1911, 1952, c.1970, map 211; "Port of Oakland" pamphlet, *Oakland, Port of Oakland 1950-1959 (other than clippings)* file, Oakland History Room, Oakland, CA; "Aerial photographs of the San Francisco Bay Area 1968," in UC Berkeley Earth Sciences & Map Library [online], cited 21 October 2004, available at: http://sunsite.berkeley.edu:8085/AerialPhotos/airphotovbzj/vbzj-2-97.html; *Telephone Directory for*

Oakland (Oakland, CA: The Pacific Telephone and Telegraph Company, 1954, 1956, 1957, 1958, 1960); files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.
[46] Sanborn Fire Insurance Map, c.1970, map 211.
[47] Sanborn Fire Insurance Maps 1911, 1952, map 211; Oakland City Permit Records, 295 6th Avenue, City of Oakland Permit Center, Oakland, California.
[48] "Port of Oakland" pamphlet, *Oakland, Port of Oakland 1950-1959 (other than clippings)* file, Oakland History Room; "Aerial photographs of the San Francisco Bay Area 1968," in UC Berkeley Earth Sciences & Map Library [online], cited 21 October 2004, available at: http://sunsite.berkeley.edu:8085/AerialPhotos/airphotovbzj/vbzj-2-97.html
[49] *Telephone Directory for Oakland* (Oakland, CA: The Pacific Telephone and Telegraph Company, 1954, 1956, 1957, 1958, 1960).
[50] Sanborn Fire Insurance Map, c.1970, map 211.
[51] "The 5th Avenue Peninsula Self-Guided Tour," (Center for Land Use Interpretation: Oakland, CA, 1992); files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.
[52] Oakland City Permit Records, 296 6th Avenue, City of Oakland Permit Center, Oakland, California; "Aerial photographs of the San Francisco Bay Area 1968," in UC Berkeley Earth Sciences & Map Library [online], cited 21 October 2004, available at: http://sunsite.berkeley.edu:8085/AerialPhotos/airphotovbzj/vbzj-2-97.htm.
[53] Sanborn Fire Insurance Map, c.1970, map 211.
[54] "The 5th Avenue Peninsula Self-Guided Tour," (Center for Land Use Interpretation: Oakland, CA, 1992); files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.
[55] Oakland City Permit Records, 280 6th Avenue, City of Oakland Permit Center, Oakland, California.
[56] Sanborn Fire Insurance Map, 1952, map 211.
[57] Oakland City Permit Records, 280 6th Avenue, City of Oakland Permit Center, Oakland, California; Sanborn Fire Insurance Maps 1911, 1952, c.1970, map 211; "Aerial photographs of the San Francisco Bay Area 1968," in UC Berkeley Earth Sciences & Map Library [online], cited 21 October 2004, available at: http://sunsite.berkeley.edu:8085/AerialPhotos/airphotovbzj/vbzj-2-97.html; *Telephone Directory for Oakland* (Oakland, CA: The Pacific Telephone and Telegraph Company, 1954-1981); files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.
[58] Oakland City Permit Records, 280 6th Avenue, City of Oakland Permit Center, Oakland, California; Sanborn Fire Insurance Maps 1911, 1952, c.1970, map 211; "The 5th Avenue Peninsula Self-Guided Tour," (Center for Land Use Interpretation: Oakland, CA, 1992); *Telephone Directory for Oakland* (Oakland, CA: The Pacific Telephone and Telegraph Company, 1965, 1967, 1980, 1981); files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.
[59] "The 5th Avenue Peninsula Self-Guided Tour," (Center for Land Use Interpretation: Oakland, CA, 1992).
[60] Oakland City Permit Records, 295 6th Avenue, City of Oakland Permit Center, Oakland, California; files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA; Sanborn Fire Insurance Maps 1911, 1952, c.1970, map 211; "Aerial photographs of the San Francisco Bay Area 1968," in UC Berkeley Earth Sciences & Map Library [online], cited 21 October 2004, available at: http://sunsite.berkeley.edu:8085/AerialPhotos/airphotovbzj/vbzj-2-97.html. *Note:* Permit records for 295 6th Avenue contained information regarding 305 6th Avenue.
[61] Oakland City Permit Records, 295 6th Avenue, City of Oakland Permit Center, Oakland, California.
[62] Sanborn Fire Insurance Map, c.1970, map 211; *Telephone Directory for Oakland* (Oakland, CA: The Pacific Telephone and Telegraph Company, 1954, 1956, 1957, 1958, 1960).
[63] Oakland City Permit Records, 370 8th Avenue, City of Oakland Permit Center, Oakland, California; Sanborn Fire Insurance Maps 1911, 1952, c.1970, map 212; "Aerial photographs of the San Francisco Bay Area 1968," in UC Berkeley Earth Sciences & Map Library [online], cited 21 October 2004, available at: http://sunsite.berkeley.edu:8085/AerialPhotos/airphotovbzj/vbzj-2-97.html.
[64] Sanborn Fire Insurance Map, c.1970, map 212.
[65] Files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA; Oakland Cultural Heritage Survey, State of California Department of Parks and Recreation Historic Resources Inventory

form for "370 8th Ave/Port #H213," 1994. *Note:* Demolition of older building - that shared this address and had DPR form - in 1997 verified by Gail Lombardi at OCHS office.

[66] Oakland City Permit Records, 455 9th Avenue, City of Oakland Permit Center, Oakland, California; Sanborn Fire Insurance Maps 1911, 1952, c.1970, map 212; "Aerial photographs of the San Francisco Bay Area 1968," in UC Berkeley Earth Sciences & Map Library [online], cited 21 October 2004, available at: http://sunsite.berkeley.edu:8085/AerialPhotos/airphotovbzj/vbzj-2-97.html; files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.

[67] Sanborn Fire Insurance Map, c.1970, map 212.

[68] Sanborn Fire Insurance Maps 1911, 1952, c.1970, map 212, 214; "Aerial photographs of the San Francisco Bay Area 1968," in UC Berkeley Earth Sciences & Map Library [online], cited 21 October 2004, available at: http://sunsite.berkeley.edu:8085/AerialPhotos/airphotovbzj/vbzj-2-97.html; *Telephone Directory for Oakland* (Oakland, CA: The Pacific Telephone and Telegraph Company, 1954, 1956, 1957, 1958, 1960); files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.

[69] Sanborn Fire Insurance Map, c.1970, map 212, 214.

[70] Sanborn Fire Insurance Maps 1911, 1952, c.1970, map 174; "Aerial photographs of the San Francisco Bay Area 1968," in UC Berkeley Earth Sciences & Map Library [online], cited 21 October 2004, available at: http://sunsite.berkeley.edu:8085/AerialPhotos/airphotovbzj/vbzj-2-97.html; files of Oakland Cultural Heritage Survey office, City of Oakland, Oakland, CA.

[71] "A Short History of the JLAC," in The Jack London Aquatic Center [online], cited 27 October 2004, available at: http://www.jlac.org/about/history.html.

[72] "A Short History of the JLAC," in The Jack London Aquatic Center [online], cited 27 October 2004, available at: http://www.jlac.org/about/history.html.

[73] "A Short History of the JLAC," in The Jack London Aquatic Center [online], cited 27 October 2004, available at: http://www.jlac.org/about/history.html.

[74]"A Short History of the JLAC," in The Jack London Aquatic Center [online], cited 27 October 2004, available at: http://www.jlac.org/about/history.html.

[75] Betty Marvin, Oakland Cultural Heritage Survey, personal communication with Sarah Dreller, 18 April 2005.

[76] The OCHS's survey map of the area (no. 213) is labeled, "many small structures all F."

[77] *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin, no. 15 (Washington, D.C.: United States Department of the Interior, 1998), 5.

[78] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 3.

[79] Betty Marvin, Oakland Cultural Heritage Survey, personal communication with Bill Sugaya, 14 April 2005.

[80] Cynthia L. Shartzer, "Attachment 2", *Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal,"* 2004, p. 4.

[81] Cynthia L. Shartzer, "Attachment 2", *Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal,"* 2004, p. 16.

[82] Cynthia L. Shartzer, "Attachment 2", *Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal,"* 2004, p. 16.

[83] Woodruff Minor, *Pacific Gateway: An Illustrated History of the Port of Oakland* (Oakland, CA: Port of Oakland, 2000).

CAREY & CO. INC.
ARCHITECTURE

9th Avenue Terminal EIR
Oakland, California

August 15, 2005

HISTORIC DISTRICT BOUNDARY TECHNICAL MEMORANDUM

Designation as a Historic Resource
Carey & Co. has been asked to submit clarification of our professional opinion regarding the landmark boundary for the 9th Avenue Terminal in Oakland. This resource, which includes "a five-berth quay wharf, a transit shed, paved storage yards, and land for industrial tenants,"[1] appears to be individually eligible for listing on the National Register of Historic Places (NRHP) and the California Register of Historic Resources (CRHR). This is the only historic resource, as defined by the California Environmental Quality Act (CEQA), located within the Oak to 9th Avenue project site.

Designation as a City Landmark would conform to the boundary of the resource as defined in the Landmark application prepared by Cynthia L. Shartzer in the "Verbal boundary description" provided on page six (see attached map). This boundary states: "Ninth Avenue Terminal's marginal type wharf has a lower side in Clinton Basin of 312 feet, a main channel face of 952 feet and a Brooklyn Basin north channel face of 1,100 feet." The description further details that the east boundary is Defremery Avenue, the northwest boundary is "open wharf on Inner Harbor Channel waterfront and paved storage yard to Clinton Basin waterfront," the north boundary is 10th Avenue, and the south boundary is the Brooklyn Basin waterfront. Per Shartzer:

> East (Transit Shed Main Entrance) – Defremery Avenue
> N.W. (Transit shed rear entrance) open wharf on Inner Harbor Channel waterfront and paved storage yard to Clinton Basin waterfront
> North (Transit shed land-side elevation) 10th Ave. South: Brooklyn Basin waterfront[2]

The verbal boundary description draws the north boundary of the historic resource along 10th Avenue, bisecting the parcel. This indicates that the portion of the parcel to the north of 10th Avenue is not part of the 9th Avenue Terminal historic resource. Thus the application does not identify the entire parcel on which the historic resource is located as the potential area for an S-7 zone. Carey & Co. agrees with this assessment.

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[1] Cynthia L. Shartzer, Oakland Landmark and S-7 Preservation Combining Zone Application Form for "Ninth Avenue Terminal," 2004, p. 3.
[2] Shartzer, 6.

Setting and Potential as a Historic District

City of Oakland comments raised concerns regarding overall historical/cultural/aesthetic importance of the waterfront and maritime uses in Oakland's history and character. Carey & Co. analyzed the development of Oakland's waterfront in the Oak to 9th Avenue area and provided an historical overview in the "Overall Project Site" description listed under the "Setting" heading (pages 2 to 3 of the technical report). Additional treatment of Oakland's waterfront is contained in the Shartzer report as well as Woodruff Minor's *Pacific Gateway: An Illustrated History of the Port of Oakland.*

Our evaluation of the structures in the proposed project area and this area's potential as a historic district found that it lacked sufficient significance (pages 17 to 18 of the technical report). This is not to say that the area is culturally unimportant, rather our analysis showed that it did not meet the criteria of significance that is required under CEQA. Although the proposed project area has played a role in the development of Oakland's waterfront, this role has not been historically, culturally or aesthetically significant. The 9th Avenue Terminal itself remains historically significant for its association with this development, but in Carey & Co.'s professional opinion the overall project area lacks this significance.

9th Avenue Terminal
Historic Resource Boundary

Carey & Co. Inc.
July 22, 2005

APPENDIX H

Special-Status Species Considered for the Project

APPENDIX H

SPECIAL-STATUS SPECIES CONSIDERED FOR THE PROJECT

Common Name *Scientific Name*	Listing Status USFWS/CDFG/CNPS	Habitat Requirements	Potential Species Occurrence In Project Study Area
		FEDERAL AND STATE LISTED SPECIES	
ANIMALS			
Invertebrates			
Bay checkerspot butterfly *Euphydryas editha bayensis*	FT/--	Native grasslands on serpentine soils in San Francisco Bay Area. Host plants: *Plantago erecta* (primary); *Castilleja densiflorus,* and *C. exserta*	**Low.** Host plant does not occur on project site. No suitable habitat occurs in the local project vicinity.
Mission blue butterfly *Icaricia icarioides missionensis*	FE/--	Grasslands and coastal scrub with larval food plants (*Lupinus albifrons*, *L. variicolor*, and *L. formosus*)	**Low.** Host plant does not occur on project site. No suitable habitat occur in the local project vicinity.
San Bruno elfin butterfly *Incisalia mossii bayensis*	FE/--	Coastal scrub and bunchgrass grassland habitats, with larval foodplant, *Sedum spathulifolium*; adults nectar on *Lomatium utriculatum, Achillea millefolium, Arabis blepharophylla, Erysimum franciscanum, Ranunculus californicus*, and *Fragaria californica*	**Low.** Host plant does not occur on project site. All known populations are from San Mateo County. No records or suitable habitat occur in the local project vicinity.
Fish			
Pacific Herring *Clupea harengeus*	MSFCMA	Shallow intertidals of bays, estuaries, and coastlines; including rocks, jetties, sandy beach, and pilings. Spawns October - March	**High.** Suitable spawning habitat occurs in the Oakland Esutary and within the Oakland Inner Harbor. Known spawning populations north end of Golden Gate Bridge and San Francisco water front.
Tidewater goby *Eucyclogobius newberryi*	FE/CSC	Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels	**Low.** Know population at Lake Merritt in downtown Oakland. They avoid currents, such as tidal flows, to avoid being flushed to the ocean.
Coho salmon, Central California Coast ESU *Oncorhynchus kisutch*	FT/CE	Central and northern California coastal rivers and streams.	**Moderate**. The project is within the designated ESU; migrating individuals may occasionally move through Bay waters.
Steelhead, Central California Coast ESU *Oncorhynchus mykiss*	FT	Drainages of San Francisco and San Pablo bays, central Calif. Coastal rivers	**Moderate**. The project is within the designated ESU; migrating individuals may occasionally move through Bay waters.

Common Name *Scientific Name*	Listing Status USFWS/CDFG/CNPS	Habitat Requirements	Potential Species Occurrence In Project Study Area
FEDERAL AND STATE LISTED SPECIES			
ANIMALS (CONTINUED)			
Chinook Salmon, Central Valley-spring-run ESU *Oncorhynchus tshawytscha*	FT/CT	Central and northern California coastal rivers and streams	**Moderate**. The project is within the designated ESU; migrating individuals may occasionally move through Bay waters.
Fish			
Chinook Salmon, Central Valley (Sacramento) winter-run ESU *Oncorhynchus tshawytscha*	FE/CE	Bay waters	**Moderate**. The project is within the designated ESU; migrating individuals may occasionally move through Bay waters.
Chinook Salmon, Central Valley fall/late fall run *Oncorhynchus tshawytscha*	--/CSC	Spawns in the Sacramento and San Joaquin Rivers and their tributaries	**Moderate**. The project is within the designated ESU; migrating individuals may occasionally move through Bay waters.
Amphibians			
California tiger salamander *Ambystoma californiense*	FPT/CSC	Wintering sites occur in grasslands occupied by burrowing mammals; breed in ponds and vernal pools	**Low.** No suitable habitat in project vicinity.
California red-legged frog *Rana aurora draytonii*	FT/CSC	Breed in stock ponds, pools, and slow-moving streams	**Low.** No suitable habitat in project vicinity.
Birds			
Western snowy plover (nesting coastal population) *Charadrius alexandrinus nivosus*	FT/CSC	Sandy beaches on marine and estuarine shores - requires sandy, gravely, or friable soils for nesting	**Low.** No suitable habitat in project vicinity
American peregrine falcon *Falco peregrinus anatum*	FSC/CE	Nests in cliffs and outcrops usually adjacent to lakes	**Low.** Uncommon non-breeding resident in local vicinity.
California black rail *Laterallus jamaicensis coturniculus*	FSC/CT	Nests and forages in tidal emergent wetland with pickleweed	**Low.** No suitable habitat in project vicinity.
California clapper rail *Rallus longirostris obsoletus*	FE/CE	Nests and forages in emergent wetland with pickleweed, cordgrass, and bulrush	**Low.** No suitable habitat present.
California brown pelican (nesting colony) *Pelecanus occidentalis californicus*	FE/CE	Forages in open water – roosting in flatlands such as berms and islands	**Low (Nesting).** Occasional visitor in shore areas of Marina, especially on ocean side. No nesting in project region.

Common Name *Scientific Name*	Listing Status USFWS/CDFG/CNPS	Habitat Requirements	Potential Species Occurrence In Project Study Area
FEDERAL AND STATE LISTED SPECIES			
ANIMALS (CONTINUED)			
Birds			
California least tern (nesting colony) *Sterna antillarum browni*	FE/CE	Nests along the coast from San Francisco Bay south to northern Baja California - colonial breeder on bare or sparsely vegetated flat substrates including sand beaches, alkali flats, land fills, or paved areas	**Low**. Could forage within the Oakland Inner Harbor. No suitable nesting habitat occurs within the vicinity of the project area. Closest know nesting location is across the bay at the Alameda Naval Air Station 3.2 miles away (CNDDB, 2005).
Mammals			
Salt marsh harvest mouse *Reithrodontomys raviventris raviventris*	FE/CE	Prefers saline emergent marsh with dense stands of pickleweed and associated upland areas during high tides.	**Low.** No suitable pickleweed vegetation occurs in project vicinity. .
Steller (northern) sea lion *Eumetopias jubatus*	MMPA	Pacific Coast south to Santa Rosa Island, CA.	**Low**. Migrating individuals may occasionally move through Pacific Ocean outside of the Marina.
Harbor seal *Phoca vitulina*	MMPA	Littoral in nature, colonies found on protected tidal rocks, reefs, and breakwaters	**Moderate** Individual harbor seals may occur in the Oakland Inner Harbor. Closest known haul out site is located at the Alameda Breakwater Gap less than five miles from the project site (CNDDB, 2005).
California sea lion *Zalophus californianus*	MMPA	Littoral in nature, colonies found on protected tidal rocks, reefs, and breakwaters	**Low.** Project site provides no haul out areas. Populations observed west of project area, Pier 39 – San Francisco, and Angel's Island. Incidental within project area.
PLANTS			
Marsh sandwort *Arenaria paludicola*	FE/CE/1B	Marsh and swamps, growing through dense mats of *Typha*, *Juncus*, etc.	**Low.** No habitats on the project site support this species.
Robust spineflower *Chorizanthe robusta* var. *robusta*	FE/--/1B	Sandy terraces and bluffs, or in loose sand	**Low.** No habitats on the project site support this species.
Santa Cruz tarplant *Holocarpha macradenia*	FT/CE/1B	Coastal prairie, valley and foothill grassland	**Low.** No habitats on the project site support this species.
Beach layia *Layia carnosa*	FE/CE/1B	Sparsely vegetated semi-stabilized dunes, usually behind foredunes	**Low.** No habitats on the project site support this species.

Common Name *Scientific Name*	Listing Status USFWS/CDFG/CNPS	Habitat Requirements	Potential Species Occurrence In Project Study Area
FEDERAL AND STATE LISTED SPECIES			
PLANTS (CONTINUED)			
San Francisco popcorn flower *Plagiobotrys diffusus*	FSC/CE/1B	Coastal prairie; grassland with marine influence	**Low.** No habitat available at the project site.
FEDERAL OR STATE SPECIES OF SPECIAL CONCERN			
ANIMALS			
Fish			
Sacramento perch *Archoplites interruptus*	FSC/CSC	Prefer warm water. Aquatic vegetation is essential for young. Tolerate wide range of physio-chemical water conditions	**Low.** No habitat available at the project site.
Amphibians			
Foothill yellow-legged frog *Rana boylii*	FSC/CSC	Fast-moving streams and rivers in chaparral, forests, and woodlands	**Low.** No habitat available at the project site.
Birds			
Cooper's hawk *Accipiter cooperii*	--/ CSC	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains, also, live oaks	**Moderate.** Ornamental trees on the project site provide suitable habitat. CNDDB reports one known occurrence at Lakeshore Park less than 5 miles from the project area.
Northern harrier *Circus cyaneus*	--/CSC	Nests in coastal salt and freshwater marshes. Nests and forages in grasslands, from salt grass in desert sink to mountains	**Low (breeding).** No habitat available at the project site.
California yellow warbler *Dendroica petechia brewsteri*	--/CSC	Nests in riparian areas dominated by willows, cottonwoods, sycamores, alders, or mature chaparral; may use urban areas near waterways	**Low.** No habitat available at the project site.
White-tailed kite *Elanus leucurus*	FSC/CFP	Nests in rolling foothills/valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodlands	**Low.** No habitat available at the project site.

Common Name *Scientific Name*	Listing Status USFWS/CDFG/CNPS	Habitat Requirements	Potential Species Occurrence In Project Study Area
FEDERAL OR STATE SPECIES OF SPECIAL CONCERN			
ANIMALS (CONTINUED)			
Birds			
Saltmarsh common yellowthroat *Geothlypis trichas sinuosa*	FSC/CSC	Nests in fresh and saltwater marshes, needs thick continuous cover down to water surface for foraging	**Low.** No habitat available at the project site.
Double-crested cormorant (rookery site) *Phalacrocorax auritus*	--/CSC	Forages in a variety of habitats and nests in riparian forests or on protected islands.	**Low (Nesting).** Nesting at Bay Bridge, but no such habitat occurs in the project vicinity (CNDDB, 2003).
Mammals			
Pallid bat *Antrozous pallidus*	--/CSC	Day roosts are mainly in caves, crevices, and mines; also found in buildings and under bark. Forages in open lowland areas	**Low.** Abandoned buildings located on the project site but no suitable foraging habitat present on project site..
Greater western mastiff bat *Eumops perotis californicus*	FSC/CSC	Needs rock crevices, grassland, coastal scrub; may use urban areas	**Low.** Abandoned buildings located on the project site but no suitable foraging habitat present on project site..
Long-eared myotis *Myotis evotis*	FSC/--	Roosts in buildings, crevices, under bark, snags, and in forests. Caves are the primary night roost	**Low.** Abandoned buildings located on the project site but no suitable foraging habitat present on project site..
Fringed myotis *Myotis thysansodes*	FSC/--	Roosts in caves, old buildings, and under bark	**Low.** Abandoned buildings located on the project site but no suitable foraging habitat present on project site..
Long-legged myotis *Myotis volans*	FSC/--	Roosts in rock crevices, buildings, tree bark, snags, mines, and caves. Trees are perhaps the most important daytime roosts for this species.	**Low.** Abandoned buildings located on the project site but no suitable foraging habitat present on project site..
Yuma myotis *Myotis yumanensis*	FSC/CSC	Roosts in caves, old buildings, and under bark. Forms maternity colony in the spring.	**Low.** Abandoned buildings located on the project site but no suitable foraging habitat present on project site..
Townsend's western big-eared bat *Corynorhinus townsendii*	FSC/CSC	Roosts in caves, mines, buildings or other human-made structures for roosting. Forages in open lowland areas	**Low.** Abandoned buildings located on the project site but no suitable foraging habitat present on project site..
Salt marsh vagrant shrew *Sorex vagrans halicoetes*	FSC/CSC	Inhabits tidal salt marshes dense with pickleweed around south San Francisco Bay	**Low.** No habitat available at the project site.

Common Name *Scientific Name*	Listing Status USFWS/CDFG/CNPS	Habitat Requirements	Potential Species Occurrence In Project Study Area
FEDERAL OR STATE SPECIES OF SPECIAL CONCERN			
PLANTS			
Bent-flowered fiddleneck *Amsinckia lunaris*	FSC/--/1B	Cismontane woodland, valley and foothill grasslands.	**Low.** No habitat occurs in the project vicinity.
Franciscan manzanita *Arctostaphylos hookeri* ssp. *franciscana*	FSC/--/1A	Serpentine outcrops in chaparral and serpentinite coastal scrub.	**Low.** No habitat occurs in the project vicinity.
Montara manzanita *Arctostaphylos imbricate*	FSC/--/1B	Chaparral, coastal scrub. Endemic to San Mateo County	**Low.** No habitat occurs in the project vicinity.
Alkali milk-vetch *Astragalus tener* var. *tener*	FSC/--/1B	Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools.	**Low.** No habitat occurs in the project vicinity.
San Francisco spineflower *Chorizanthe cuspidata* var. *cuspidata*	FSC/--/1B	Sandy terraces and slopes of coastal bluff scrub, coastal dunes, coastal prairie, and coastal scrub	**Low.** No habitat occurs in the project vicinity.
Point Reyes bird's beak *Cordylanthus maritimus* ssp. *palustris*	FSC/--/1B	Usually found in coastal salt marsh with *Salicornia* sp., *Distichlis* sp., *Jaumea* sp., and *Spartina* sp.	**Low.** No habitat occurs in the project vicinity.
Saline clover *Trifolium depauperatum* var. *hydrophilum*	FSC/--/1B	Marshes and swamps, valley and foothill grassland, vernal pools	**Low.** No habitat occurs in the project vicinity.
San Francisco gumplant *Grindelia hirsutula* var. *maritima*	FSC/--/1B	Coastal bluff scrub, coastal scrub, valley, and foothill grassland; slopes with sandy or serpentinite soils	**Low.** No habitat occurs in the project vicinity.
Kellogg's horkelia *Horkelia cuneata* ssp. *sericea*	FSC/--/1B	In openings of closed-coned coniferous forest, coastal scrub, maritime chaparral; sandy, or gravelly soils	**Low.** No habitat occurs in the project vicinity.
Rose linanthus *Linanthus rosaceus*	FSC/--/1B	Coastal bluff scrub.	**Low.** No habitat occurs in the project vicinity.

Status codes:

Federal Categories (U.S. Fish and Wildlife Service)

FE = Listed as Endangered by the Federal Government
FT = Listed as Threatened by the Federal Government
FPT = Listed as Proposed Threatened by the Federal Government
FSC = Federal Species of Concern
FC3c = Too widespread and/or not threatened
FD = Delisted. Status monitored for five years.

State Categories (California Department of Fish and Game)

CE = Listed as Endangered by the State of California
CT = Listed as Threatened by the State of California
CR = Listed as Rare by the State of California

CSC = California Species of Special Concern
CFP = Listed as Fully Protected by the State of California
* = California Natural Diversity Data Base Special Animals List

MMPA= Protection under the Marine Mammal Protection Act
MSFCMA=Protection under Magnuson-Stevens Fishery Conservation and Management Act

California Native Plant Society (CNPS)

List 1A = Plants presumed extinct in California
List 1B = Plants rare, threatened, or endangered in California and elsewhere
List 2 = Plants rare, threatened, or endangered in California but more common
List 3 = Plants about which more information is needed
List 4 = Plants of limited distribution

-- No listing status

APPENDIX I

Traffic, Air Quality, and Noise Analysis of Alternatives

NOISE TECHNICAL APPENDIX – ALTERNATIVES

	PM Peak-Hour Noise Level, dBA, Leq											
Road Segment	**Existing**	**Cumulative (Year 2025) No Project**	**Cumulative (Year 2025) plus Project**	**Cumulative (Year 2025) plus Alt. 1B**	**Incremental Increase (Existing vs. Cumulative Plus Alt. 1B)**	**Significant? (Yes or No)[c]**	**Cumulative (Year 2025) plus Alt. 2**	**Incremental Increase (Existing vs. Cumulative Plus Alt. 2)**	**Significant? (Yes or No)[c]**	**Cumulative (Year 2025) plus Alt. 3**	**Incremental Increase (Existing vs. Cumulative Plus Alt. 3)**	**Significant? (Yes or No)[c]**
1. 5th Street (between Madison and Oak Streets)[a]	71.7	73.9	74.4	74	2.3	No	74.2	2.5	No	73.9	2.2	No
2. Oak Street (between 5th Street and Embarcadero) [a]	69.6	72.5	73.8	72.9	3.3	**Yes**	73.2	3.6	**Yes**	72.7	3.1	**Yes**
3 Embarcadero (north of 5th Avenue)[b]	68.3	69	72.6	70.3	2	No	71.2	2.9	No	69.8	1.5	No
4. Embarcadero (between 5th Avenue and 6th Avenue) [b]	71	71.6	74.7	72.7	1.7	No	73.7	2.7	No	72.3	1.3	No
5. Embarcadero (between 6th Avenue and 10th Avenue) [b]	70.3	70.3	73.7	72	1.7	No	72.7	2.4	No	70.9	0.6	No
6. 5th Avenue (west of Embarcadero) [a]	50.8	59.8	65.5	62.6	11.8	**Yes**	59.8	9	**Yes**	59.8	9	**Yes**
7. East 8th Street (between Oak Street and 5th Avenue) [a]	72	74.7	75.1	74.8	2.8	No	74.9	2.9	No	74.8	2.8	No
8. 5th Avenue (between East 8th Street and Embarcadero) [a]	70	70.7	73	73	3	No	71.5	1.5	No	72.1	2.1	No

AIR TECHNICAL APPENDIX - ALTERNATIVES

Scenario	Criteria Air Pollutant Emissions (lbs/day)			
	ROG	NOx	PM10	CO
Project				
Cumulative Plus Project (Year 2025)	73	54	**223**	667
Existing	20	18	13	227
Net Cumulative Plus Project Emissions	52	36	**210**	440
Significant? (Yes or No)	No	No	Yes	No
Alternative 1B - No Project/ Estuary Policy Plan				
Cumulative Plus Alternative 1B (Year 2025)	21	16	62	201
Existing	20	18	13	227
Net Cumulative Plus Alt. 1B Emissions	1	-2	49	-26
Significant? (Yes or No)	No	No	No	No
Alternative 2 - Enhanced Open Space				
Cumulative Plus Alternative 2 (Year 2025)	43	33	**136**	403
Existing	20	18	13	227
Net Cumulative Plus Alt. 2 Emissions	23	15	**122**	176
Significant? (Yes or No)	No	No	Yes	No
Alternative 3 - Reduced Density				
Cumulative Plus Alternative 3 (Year 2025)	16	13	53	154
Existing	20	18	13	227
Net Cumulative Plus Alt. 3 Emissions	-4	-5	40	-72
Significant? (Yes or No)	No	No	No	No

TRAFFIC SUMMARY (PROJECT IMPACT B.2) - ALTERNATIVES

I/S I.D.	Location	Control	2025 No Project		2025 With 540 Unit		2025 With Estuary Plan		2025 With 1,800 Unit		2025 With Project		2025 No Project		2025 With 540 Unit		2025 With Estuary Plan		2025 With 1,800 Unit		2025 With Project	
			AM PEAK HOUR										PM PEAK HOUR									
			Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1	Webster Street/Atlantic Avenue	Signal	74.6	E	No	No	No	No	No	No	Yes	Yes										
3	Embarcadero/Broadway	Stop											21.3	C	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	I-880 EB On-Ramp/Broadway/5th Street	Stop											>80	F	No	No	Yes	Yes	Yes	Yes	Yes	Yes
9	Oak Street/5th Street	Signal											60.7	E	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	Jackson Street/6th Street	Signal	77	E	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	>80	F	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
27	Harrison Street/West Grand Avenue	Signal	>80	F	No	No	No	No	No	No	Yes	Yes										
30	Foothill Boulevard/Lakeshore Avenue	Signal	58.1	E	No	No	No	No	Yes	Yes	Yes	Yes										
34	Lakeshore Avenue/MacArthur Boulevard	Signal											>80	F	No	No	Yes	Yes	Yes	Yes	Yes	Yes
35	Lakeshore Avenue/Lake Park	Signal											55.8	E	No	No	No	No	Yes	Yes	Yes	Yes
36	Embarcadero/5th Avenue	Stop/Signal											>50	F	No	No	No	No	Yes	Yes	Yes	Yes
37	Embarcadero/I-880 NB Off-Ramp	Stop/Signal											14.8	B	No	No	No	No	Yes	Yes	Yes	Yes
38	Embarcadero/I-880 SB On-Ramp	Stop											14.3	B	No	No	No	No	No	No	Yes	Yes
40	5th Avenue/7th/8th	Signal													No	No	No	No	No	No	Yes	Yes
41	14th Avenue/7th Street/E. 12 Street (SB)	Signal											72	E	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
49	14th Avenue (WB)/Foothill Boulevard	Signal	54.1	D	No	No	Yes	Yes	No	No	Yes	Yes										
50	14th Avenue (EB)/Foothill Boulevard	Signal											>80	F	No	No	No	No	No	No	Yes	Yes
52	23rd Avenue/16th Street	Signal											70.7	E	No	No	Yes	Yes	Yes	Yes	Yes	Yes

TRAFFIC SUMMARY (CUMULATIVE IMPACT B.3) - ALTERNATIVES

			2025 With 540 Unit		2025 With Estuary Plan		2025 With 1,800 Unit		2025 With Project		2025 With 540 Unit		2025 With Estuary Plan		2025 With 1,800 Unit		2025 With Project	
			AM PEAK HOUR								PM PEAK HOUR							
I/S I.D.	Location	Control	LOS	Percent	LOS	Percent	LOS	Percent	LOS	Percent	LOS	Percent	LOS	Percent	LOS	Percent	LOS	Percent
1	Webster Street/Atlantic Avenue	Signal	No	No	No	No	No	No	Yes	Yes	No	No	No	No	No	No	Yes	Yes
3	Embarcadero/Broadway	AWS									Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	Embarcadero/Oak Street	Signal									Yes	Yes	Yes	Yes	Yes	Yes	No	No
5	I-880 EB On-Ramp/Broadway/5th Street	Stop									Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	Oak Street/5th Street	Signal									No	No	No	Yes	Yes	Yes	Yes	Yes
12	Jackson Street/6th Street	Signal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes
30	Foothill Boulevard/Lakeshore Avenue	Signal	No	No	No	No	No	No	Yes	Yes								
34	Lakeshore Avenue/MacArthur Boulevard	Signal									No	No	No	No	No	No	Yes	Yes
35	Lakeshore Avenue/Lake Park	Signal									No	No	No	No	Yes	Yes	Yes	Yes
36	Embarcadero/5th Avenue	Stop	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
37	Embarcadero/I-880 NB Off-Ramp	Stop											Yes	Yes	Yes	Yes	Yes	Yes
38	Embarcadero/I-880 SB On-Ramp	Stop															Yes	Yes
40	5th Avenue/7th/8th	Signal															Yes	Yes
41	14th Avenue/7th Street/E. 12 Street (SB)	Signal									No	No	No	No	Yes	Yes	Yes	Yes
52	23rd Avenue/16th Street	Signal									No	No	No	Yes	Yes	Yes	Yes	Yes

APPENDIX J

Diesel Particulate Matter (DPM) Emissions Technical Documentation

Appendix J: Summary of yearly DPM emissions (lbs) from all sources in the vicinity of the Project (not related to the Project)

	Project		I-880 trucks	Trains	Boats	*TOTALS (lbs)*
	construction	*project trucks*				
2007	553.71	0	5,508.25	261.92	441.52	***6,765.40***
2008	2,227.19	0	5,049.06	259.01	441.52	***7,976.79***
2009	844.36	0	4,608.69	256.10	441.52	***6,150.68***
2010	1,567.91	35.95	4,117.40	253.19	441.52	***6,415.97***
2011	1,282.22	36.91	3,810.07	250.28	436.62	***5,816.10***
2012	929.72	37.87	3,595.27	247.37	431.71	***5,241.94***
2013	542.92	38.83	3,413.85	244.46	426.81	***4,666.87***
2014	1,049.32	39.80	3,225.99	241.55	421.90	***4,978.55***
2015	507.36	40.76	3,069.09	238.64	417.00	***4,272.83***
2016	1,064.69	41.72	2,874.23	235.73	412.09	***4,628.45***
2017	1,004.09	42.68	2,702.78	232.82	407.18	***4,389.56***
2018	526.55	43.65	2,528.85	229.91	402.28	***3,731.23***
2019	0	44.61	2,380.82	227.00	397.37	***3,049.80***
2020	0	45.57	2,234.67	224.09	392.47	***2,896.80***
2021	0	46.54	2,135.61	221.18	387.56	***2,790.88***
2022	0	47.50	2,037.80	218.27	382.65	***2,686.22***
2023	0	48.46	1,962.08	215.36	377.75	***2,603.64***
2024	0	49.42	1,811.58	212.45	372.84	***2,446.29***
2025	0	50.39	1,811.75	209.53	367.94	***2,439.61***
2026	0	*49.08*	1,764.99	*207.23*	363.03	***2,384.34***
2027	0	*48.24*	1,734.49	*204.95*	358.13	***2,345.81***
2028	0	*46.94*	1,687.73	*202.70*	353.22	***2,290.58***
2029	0	*46.12*	1,658.49	*200.47*	349.33	***2,254.41***
2030	0	*45.47*	1,635.11	*198.26*	345.49	***2,224.33***
2031	0	*44.69*	1,606.95	*196.08*	341.69	***2,189.41***
2032	0	*44.68*	1,606.78	*193.92*	337.93	***2,183.32***
2033	0	*44.06*	1,584.48	*191.79*	334.22	***2,154.55***
2034	0	*43.98*	1,581.33	*189.68*	330.54	***2,145.53***
2035	0	*43.92*	1,579.23	*187.59*	326.90	***2,137.65***
2036	0	*43.89*	1,578.27	*185.53*	323.31	***2,131.00***
2037	0	*43.22*	1,553.96	*183.49*	319.75	***2,100.41***
2038	0	*43.19*	1,553.01	*181.47*	316.23	***2,093.90***
2039	0	*43.16*	1,552.06	*179.48*	312.76	***2,087.46***
2040	0	*43.02*	1,546.87	*177.50*	309.31	***2,076.71***
						116,747.02

Screen 3 Runs:

Construction -

05/31/05

```
14:45:15
  ***  SCREEN3 MODEL RUN  ***
  *** VERSION DATED 95250 ***

 DPM for Construction, assumes 1008 lb./yr for 12 years

 SIMPLE TERRAIN INPUTS:
    SOURCE TYPE                =        AREA
    EMISSION RATE (G/(S-M**2)) =     .260000E-07
    SOURCE HEIGHT (M)          =      1.0000
    LENGTH OF LARGER SIDE (M)  =   1280.0000
    LENGTH OF SMALLER SIDE (M) =    450.0000
    RECEPTOR HEIGHT (M)        =       .0000
    URBAN/RURAL OPTION         =       URBAN
    MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION


 BUOY. FLUX =     .000 M**4/S**3;  MOM. FLUX =     .000 M**4/S**2.

 *** STABILITY CLASS  4 ONLY ***
 *** 10-METER WIND SPEED OF   2.00 M/S ONLY ***

 **********************************
 *** SCREEN AUTOMATED DISTANCES ***
 **********************************

 *** TERRAIN HEIGHT OF    0. M ABOVE STACK BASE USED FOR FOLLOWING
DISTANCES ***
```

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
100.	.3618	4	2.0	2.0	640.0	1.00	7.
200.	.3662	4	2.0	2.0	640.0	1.00	1.
300.	.3751	4	2.0	2.0	640.0	1.00	0.
400.	.3829	4	2.0	2.0	640.0	1.00	0.
500.	.3897	4	2.0	2.0	640.0	1.00	0.
600.	.3959	4	2.0	2.0	640.0	1.00	0.
700.	.2956	4	2.0	2.0	640.0	1.00	19.
800.	.1770	4	2.0	2.0	640.0	1.00	16.
900.	.1384	4	2.0	2.0	640.0	1.00	12.
1000.	.1160	4	2.0	2.0	640.0	1.00	6.
1100.	.1006	4	2.0	2.0	640.0	1.00	1.
1200.	.8857E-01	4	2.0	2.0	640.0	1.00	0.
1300.	.7878E-01	4	2.0	2.0	640.0	1.00	0.
1400.	.7064E-01	4	2.0	2.0	640.0	1.00	0.
1500.	.6379E-01	4	2.0	2.0	640.0	1.00	0.
1600.	.5794E-01	4	2.0	2.0	640.0	1.00	0.
1700.	.5294E-01	4	2.0	2.0	640.0	1.00	0.
1800.	.4861E-01	4	2.0	2.0	640.0	1.00	0.
1900.	.4483E-01	4	2.0	2.0	640.0	1.00	0.
2000.	.4154E-01	4	2.0	2.0	640.0	1.00	0.

```
  2100.   .3863E-01    4     2.0    2.0   640.0    1.00      0.
  2200.   .3605E-01    4     2.0    2.0   640.0    1.00      0.
  2300.   .3377E-01    4     2.0    2.0   640.0    1.00      0.
  2400.   .3171E-01    4     2.0    2.0   640.0    1.00      0.
  2500.   .2987E-01    4     2.0    2.0   640.0    1.00      0.
  2600.   .2821E-01    4     2.0    2.0   640.0    1.00      0.
  2700.   .2670E-01    4     2.0    2.0   640.0    1.00      0.
  2800.   .2533E-01    4     2.0    2.0   640.0    1.00      0.
  2900.   .2408E-01    4     2.0    2.0   640.0    1.00      0.
  3000.   .2294E-01    4     2.0    2.0   640.0    1.00      0.
  3500.   .1847E-01    4     2.0    2.0   640.0    1.00      0.
  4000.   .1541E-01    4     2.0    2.0   640.0    1.00      0.
  4500.   .1324E-01    4     2.0    2.0   640.0    1.00      0.
  5000.   .1165E-01    4     2.0    2.0   640.0    1.00      0.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND   100. M:
   670.   .3985        4     2.0    2.0   640.0    1.00     17.

     ***************************************
     *** SUMMARY OF SCREEN MODEL RESULTS ***
     ***************************************

 CALCULATION       MAX CONC   DIST TO  TERRAIN
  PROCEDURE       (UG/M**3)   MAX (M)   HT (M)
--------------   -----------  -------  -------
SIMPLE TERRAIN     .3985        670.       0.


**************************************************
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
**************************************************
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Traffic and Trains -

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05/31/05

16:17:51
  ***  SCREEN3 MODEL RUN  ***
  *** VERSION DATED 95250 ***

 2010 I-880 Trucks and Trains

 SIMPLE TERRAIN INPUTS:
    SOURCE TYPE                =        AREA
    EMISSION RATE (G/(S-M**2)) =     .660000E-06
    SOURCE HEIGHT (M)          =      1.0000
    LENGTH OF LARGER SIDE (M)  =    300.0000
    LENGTH OF SMALLER SIDE (M) =     30.0000
    RECEPTOR HEIGHT (M)        =      1.0000
    URBAN/RURAL OPTION         =       URBAN
    ANGLE RELATIVE TO LONG AXIS =    90.0000


 BUOY. FLUX =     .000 M**4/S**3;  MOM. FLUX =     .000 M**4/S**2.

 *** STABILITY CLASS  4 ONLY ***
```

*** 10-METER WIND SPEED OF 2.00 M/S ONLY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
100.	.5738	4	2.0	2.0	640.0	1.00	90.
200.	.2906	4	2.0	2.0	640.0	1.00	90.
300.	.1962	4	2.0	2.0	640.0	1.00	90.
400.	.1475	4	2.0	2.0	640.0	1.00	90.
500.	.1162	4	2.0	2.0	640.0	1.00	90.
600.	.9376E-01	4	2.0	2.0	640.0	1.00	90.
700.	.7715E-01	4	2.0	2.0	640.0	1.00	90.
800.	.6450E-01	4	2.0	2.0	640.0	1.00	90.
900.	.5477E-01	4	2.0	2.0	640.0	1.00	90.
1000.	.4712E-01	4	2.0	2.0	640.0	1.00	90.
1100.	.4100E-01	4	2.0	2.0	640.0	1.00	90.
1200.	.3605E-01	4	2.0	2.0	640.0	1.00	90.
1300.	.3202E-01	4	2.0	2.0	640.0	1.00	90.
1400.	.2864E-01	4	2.0	2.0	640.0	1.00	90.
1500.	.2584E-01	4	2.0	2.0	640.0	1.00	90.
1600.	.2344E-01	4	2.0	2.0	640.0	1.00	90.
1700.	.2141E-01	4	2.0	2.0	640.0	1.00	90.
1800.	.1965E-01	4	2.0	2.0	640.0	1.00	90.
1900.	.1811E-01	4	2.0	2.0	640.0	1.00	90.
2000.	.1678E-01	4	2.0	2.0	640.0	1.00	90.
2100.	.1561E-01	4	2.0	2.0	640.0	1.00	90.
2200.	.1457E-01	4	2.0	2.0	640.0	1.00	90.
2300.	.1363E-01	4	2.0	2.0	640.0	1.00	90.
2400.	.1280E-01	4	2.0	2.0	640.0	1.00	90.
2500.	.1206E-01	4	2.0	2.0	640.0	1.00	90.
2600.	.1139E-01	4	2.0	2.0	640.0	1.00	90.
2700.	.1078E-01	4	2.0	2.0	640.0	1.00	90.
2800.	.1022E-01	4	2.0	2.0	640.0	1.00	90.
2900.	.9715E-02	4	2.0	2.0	640.0	1.00	90.
3000.	.9251E-02	4	2.0	2.0	640.0	1.00	90.
3500.	.7441E-02	4	2.0	2.0	640.0	1.00	90.
4000.	.6199E-02	4	2.0	2.0	640.0	1.00	90.
4500.	.5317E-02	4	2.0	2.0	640.0	1.00	90.
5000.	.4678E-02	4	2.0	2.0	640.0	1.00	90.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 100. M:

100.	.5738	4	2.0	2.0	640.0	1.00	90.

****
*** SCREEN DISCRETE DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
60.	.9539	4	2.0	2.0	640.0	1.00	90.
75.	.7634	4	2.0	2.0	640.0	1.00	90.
90.	.6369	4	2.0	2.0	640.0	1.00	90.
120.	.4792	4	2.0	2.0	640.0	1.00	90.
160.	.3613	4	2.0	2.0	640.0	1.00	90.
180.	.3220	4	2.0	2.0	640.0	1.00	90.

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***************************************
*** SUMMARY OF SCREEN MODEL RESULTS ***
***************************************
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CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	.9539	60.	0.

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**************************************************
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
**************************************************
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Boats -
05/31/05

14:57:04

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  ***  SCREEN3 MODEL RUN  ***
  *** VERSION DATED 95250 ***

 Boats (2007)

 SIMPLE TERRAIN INPUTS:
    SOURCE TYPE                =        AREA
    EMISSION RATE (G/(S-M**2)) =     .600000E-07
    SOURCE HEIGHT (M)          =      3.0000
    LENGTH OF LARGER SIDE (M)  =    600.0000
    LENGTH OF SMALLER SIDE (M) =     60.0000
    RECEPTOR HEIGHT (M)        =      1.0000
    URBAN/RURAL OPTION         =       URBAN
    ANGLE RELATIVE TO LONG AXIS =    90.0000


 BUOY. FLUX =     .000 M**4/S**3;  MOM. FLUX =     .000 M**4/S**2.

 *** STABILITY CLASS  4 ONLY ***
 *** 10-METER WIND SPEED OF   2.00 M/S ONLY ***

 **********************************
 *** SCREEN AUTOMATED DISTANCES ***
 **********************************

 *** TERRAIN HEIGHT OF    0. M ABOVE STACK BASE USED FOR FOLLOWING
DISTANCES ***
```

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
100.	.1042	4	2.0	2.0	640.0	3.00	90.
200.	.5283E-01	4	2.0	2.0	640.0	3.00	90.
300.	.3570E-01	4	2.0	2.0	640.0	3.00	90.
400.	.2714E-01	4	2.0	2.0	640.0	3.00	90.
500.	.2200E-01	4	2.0	2.0	640.0	3.00	90.
600.	.1856E-01	4	2.0	2.0	640.0	3.00	90.
700.	.1608E-01	4	2.0	2.0	640.0	3.00	90.
800.	.1417E-01	4	2.0	2.0	640.0	3.00	90.
900.	.1265E-01	4	2.0	2.0	640.0	3.00	90.
1000.	.1138E-01	4	2.0	2.0	640.0	3.00	90.
1100.	.1031E-01	4	2.0	2.0	640.0	3.00	90.
1200.	.9396E-02	4	2.0	2.0	640.0	3.00	90.
1300.	.8600E-02	4	2.0	2.0	640.0	3.00	90.
1400.	.7905E-02	4	2.0	2.0	640.0	3.00	90.
1500.	.7295E-02	4	2.0	2.0	640.0	3.00	90.
1600.	.6758E-02	4	2.0	2.0	640.0	3.00	90.
1700.	.6278E-02	4	2.0	2.0	640.0	3.00	90.
1800.	.5853E-02	4	2.0	2.0	640.0	3.00	90.
1900.	.5475E-02	4	2.0	2.0	640.0	3.00	90.
2000.	.5132E-02	4	2.0	2.0	640.0	3.00	90.
2100.	.4827E-02	4	2.0	2.0	640.0	3.00	90.
2200.	.4547E-02	4	2.0	2.0	640.0	3.00	90.
2300.	.4295E-02	4	2.0	2.0	640.0	3.00	90.
2400.	.4068E-02	4	2.0	2.0	640.0	3.00	90.
2500.	.3857E-02	4	2.0	2.0	640.0	3.00	90.
2600.	.3666E-02	4	2.0	2.0	640.0	3.00	90.
2700.	.3493E-02	4	2.0	2.0	640.0	3.00	90.
2800.	.3330E-02	4	2.0	2.0	640.0	3.00	90.
2900.	.3180E-02	4	2.0	2.0	640.0	3.00	90.
3000.	.3044E-02	4	2.0	2.0	640.0	3.00	90.
3500.	.2492E-02	4	2.0	2.0	640.0	3.00	90.
4000.	.2104E-02	4	2.0	2.0	640.0	3.00	90.
4500.	.1825E-02	4	2.0	2.0	640.0	3.00	90.
5000.	.1616E-02	4	2.0	2.0	640.0	3.00	90.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 100. M:

100.	.1042	4	2.0	2.0	640.0	3.00	90.

```
**********************************
*** SCREEN DISCRETE DISTANCES ***
**********************************
```

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
150.	.6996E-01	4	2.0	2.0	640.0	3.00	90.
210.	.5038E-01	4	2.0	2.0	640.0	3.00	90.
230.	.4613E-01	4	2.0	2.0	640.0	3.00	90.
280.	.3815E-01	4	2.0	2.0	640.0	3.00	90.
420.	.2592E-01	4	2.0	2.0	640.0	3.00	90.

```
   480.    .2286E-01     4      2.0     2.0    640.0     3.00      90.

      ***************************************
      *** SUMMARY OF SCREEN MODEL RESULTS ***
      ***************************************

 CALCULATION       MAX CONC   DIST TO  TERRAIN
  PROCEDURE       (UG/M**3)   MAX (M)   HT (M)
--------------  -----------  -------  -------
SIMPLE TERRAIN     .1042        100.       0.

***************************************************
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
***************************************************
```

URBEMIS Results:

Existing Scenario –
<Insert>

APPENDIX J – SECTION J.2

Project Diesel Particulate Matter (DPM) Emissions (lbs) from Project Sources

Construction Diesel Equipment DPM Emissions

Construction Emissions Calculations - Version II			
	Phase 1	**Phase 2**	**Phase 3**
Demolition	2007	2009	2011
clearing, grading, and soil handling	2008	2010	2011
site improvement	2008	2010	2012
building construction	2009 - 2014	2014 - 2017	2016 - 2018
		PM10 Emissions (lbs)	
	2007	554	
	2008	2,227	
	2009	844	
	2010	1,568	
	2011	1,282	
	2012	930	
	2013	543	
	2014	1,049	
	2015	507	
	2016	1,065	
	2017	1,004	
	2018	527	
	TOTAL	**12,100**	

Construction - 2007							rev. April 2005			
Building demolition at Phase 1 only										
Phase 1 - Building Demolition										
1. On-Road Sources										
YR 2007 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)										
Vehicle Type	PM10									
medium-heavy-duty trucks	0.306									
							PM10			
Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day			grams/ day	lbs/day	days/ month	months/ year
Material transport										
dump trucks	5	6	20	600			183.60	0.40	22	6
							Subtotal			***53.43***
2. Off-Road Sources										
Emission factors for 2007 (lbs/day)										
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*										
Equipment Type	PM10									
generator	0.39									
325 excavator	0.29									
bobcat (loader)	0.22									
wood grinder	0.57									
concrete grinder	0.57									
barge mounted excavator	0.29									
Assumes 8-hour operation of each piece of equipment.										
		PM10								
Equipment Type	# of pieces	lbs/day	days/month	months/year			lbs/year			
generator	1	0.39								
excavator	3	0.87								
bobcat (loader)	5	1.1								
wood grinder	1	0.57								
concrete grinder	1	0.57								
barge mounted excavator	1	0.29								
Subtotal		3.79	22	6			**500.28**			
TOTAL (pounds/year)										**553.71**

Construction - 2008

Clearing, grading and soil handling, and site improvements at Phase 1 only

rev. April 2005

Phase 1 - Clearing, grading and soil handling

1. On-Road Sources

YR 2008 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)

Vehicle Type	PM10
medium-heavy-duty trucks	0.294

Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	PM10 grams/ day	PM10 lbs/day	days/ month	months/ year
Material transport								
dump trucks	25	6	20	3,000	882.00	1.94	22	12
					Subtotal			**513.34**

2. Off-Road Sources

Emission factors for 2008 (lbs/day)
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*

Equipment Type	PM10
barge excavator	0.29
365 excavator	0.29
825 compactor	0.44
14 blades (misc. portable eq	0.41
623 scraper	0.58

Assumes 8-hour operation of each piece of equipment.

Equipment Type	# of pieces	PM10 lbs/day	days/month	months	lbs/year
barge excavator	1	0.29			
365 excavator	4	1.16			
825 compactor	2	0.88			
14 blades	2	0.82			
623 scraper	3	1.74			
Subtotal		4.89	22	12	**1290.96**

Phase 1 - Site Improvements									
1. On-Road Sources									
YR 2008 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)									
Vehicle Type	PM10								
medium-heavy-duty trucks	0.294								
							PM10		
Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day		grams/ day	lbs/day	days/month	months/year
Material transport									
delivery trucks	2	6	20	240		70.56	0.16	22	6
						Subtotal			**20.53**
2. Off-Road Sources									
Emission factors for 2008 (lbs/day)									
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*									
Equipment Type	PM10								
backhoes	0.14								
excavator	0.29								
bobcat (loader)	0.22								
paving machine	0.22								
curb and gutter machine (oth	0.5								
transfer truck	0.58								
concrete truck	0.58								
Assumes 8-hour operation of each piece of equipment.									
		PM10							
Equipment Type	# of pieces	lbs/day	days/month	months		lbs/year			
backhoes	2	0.28	22	6		36.96			
excavator	1	0.29	22	6		38.28			
bobcat (loader)	2	0.44	22	6		58.08			
paving machine	1	0.22	22	6		29.04			
curb and gutter machine	1	0.5	22	6		66			
transfer truck	15	8.7	10	1		87			
concrete truck	15	8.7	10	1		87			
Subtotal						**402.36**			
							TOTAL (pounds/y		**2227.19**

Construction - 2009

Building construction at Phase 1 and Building demolition at Phase 2

rev. April 2005

Phase 1- Building Construction

1. On-Road Sources

YR 2009 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)

Vehicle Type	PM10
medium-heavy-duty trucks	0.281

Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	PM10 grams/ day	PM10 lbs/day	days/month	months/year
Material transport								
delivery trucks	2	6	20	240	67.44	0.15	22	12
cement truck	10	10	10	1,000	281.00	0.62	14	1
					Subtotal		*1 building*	*47.92*
							2 buildings	***95.85***

2. Off-Road Sources

Emission factors for 2009 (lbs/day)
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*

Equipment Type	PM10
generators	0.31
gradall	0.13
scissor lift	0.13
forklift	0.13
pile driving rig	0.38
pile auger	0.38
cement truck	0.58

Assumes 8-hour operation of each piece of equipment.

Equipment Type	# of pieces	PM10 lbs/day	days/month	months	lbs/year
generators	2	0.62	22	8	109.12
gradall	1	0.13	22	6	17.16
scissor lift	2	0.26	22	8	45.76
forklift	1	0.13	22	6	17.16
pile driving rig	1	0.38	22	3	25.08
pile auger	1	0.38	22	3	25.08
cement truck	1	0.58	14	1	8.12
Subtotal				*1 building*	*247.48*
				2 buildings	***494.96***

Phase 2 - Building Demolition										
	1. On-Road Sources									
		YR 2009 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)								
		Vehicle Type	PM10							
		medium-heavy-duty trucks	0.281							
								PM10		
		Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day		grams/ day	lbs/day	days/ month	months/ year
		Material transport									
		dump trucks	5	6	20	600		168.60	0.37	22	3
								Subtotal			***24.53***
	2. Off-Road Sources									
		Emission factors for 2009 (lbs/day)								
		from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*								
		Equipment Type	PM10							
		generator	0.31							
		325 excavator	0.29							
		bobcat (loader)	0.22							
		wood grinder	0.45							
		concrete grinder	0.45							
		barge mounted excavator	0.29							
		Assumes 8-hour operation of each piece of equipment.								
				PM10						
		Equipment Type	# of pieces	lbs/day	days/month	months		lbs/year		
		generator	1	0.31						
		excavator	3	0.87						
		bobcat (loader)	5	1.1						
		wood grinder	1	0.45						
		concrete grinder	1	0.45						
		barge mounted excavator	1	0.29						
		Subtotal		3.47	22	3		***229.02***		
									TOTAL (pounds/year)	**844.36**

Construction - 2010

Building Construction at Phase 1, and Clearing, grading, and soil handling, and Site Improvements at Phase 2

Phase 1- building construction

1. On-Road Sources

YR 2010 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)

Vehicle Type	PM10
medium-heavy-duty trucks	0.26

Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	PM10 grams/ day	PM10 lbs/day	days/month	months/year
Material transport								
delivery truck	2	6	20	240	62.40	0.14	22	12
					Subtotal		*1 building*	*36.32*
							2 buildings	***72.64***

2. Off-Road Sources

Emission factors for 2010 (lbs/day)

from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*

Equipment Type	PM10
generators	0.28
gradall	0.13
scissor lift	0.13
forklift	0.13
pile driving rig	0.36
pile auger	0.36

Assumes 8-hour operation of each piece of equipment.

Equipment Type	# of pieces	PM10 lbs/day	days/month	months	lbs/year
generators	2	0.56	22	8	98.56
gradall	1	0.13	22	6	17.16
scissor lift	2	0.26	22	8	45.76
forklift	1	0.13	22	6	17.16
pile driving rig	1	0.36	22	3	23.76
pile auger	1	0.36	22	3	23.76
Subtotal				*1 building*	*226.16*
				2 buildings	***452.32***

Phase 2 - Clearing, grading, and soil handling

1. On-Road Sources

YR 2010 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)

Vehicle Type	PM10
medium-heavy-duty trucks	0.26

Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	PM10 grams/ day	PM10 lbs/day	PM10 days/ month	PM10 months/ year
Material transport								
dump truck	12	6	20	1,440	374.40	0.83	22	6
					Subtotal			***108.95***

2. Off-Road Sources

Emission factors for 2010 (lbs/day)
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*

Equipment Type	PM10
barge excavator	0.29
365 excavator	0.29
825 compactor	0.34
14 blades (misc. portable eq	0.32
623 scraper	0.58

Assumes 8-hour operation of each piece of equipment.

Equipment Type	# of pieces	PM10 lbs/day	days/month	months	lbs/year
barge excavator	1	0.29			
365 excavator	2	0.58			
825 compactor	2	0.68			
14 blades	2	0.64			
623 scraper	3	1.74			
Subtotal		3.93	22	6	***518.76***

Phase 2 - Site Improvements									
1. On-Road Sources									
YR 2010 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)									
Vehicle Type	PM10								
medium-heavy-duty trucks	0.26								
						PM10			
Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day		grams/ day	lbs/day	days/month	months/year
Material transport									
delivery truck	2	6	20	240		62.40	0.14	22	6
						Subtotal			***18.16***
2. Off-Road Sources									
Emission factors for 2010 (lbs/day)									
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*									
Equipment Type	PM10								
backhoes	0.12								
excavator	0.29								
bobcat (loader)	0.22								
paving machine	0.22								
curb and gutter machine (oth	0.5								
transfer truck	0.58								
concrete truck	0.58								
Assumes 8-hour operation of each piece of equipment.									
		PM10							
Equipment Type	# of pieces	lbs/day	days/month	months		lbs/year			
backhoes	2	0.24	22	6		31.68			
excavator	1	0.29	22	6		38.28			
bobcat (loader)	2	0.44	22	6		58.08			
paving machine	1	0.22	22	6		29.04			
curb and gutter machine	1	0.5	22	6		66			
transfer truck	15	8.7	10	1		87			
concrete truck	15	8.7	10	1		87			
Subtotal						***397.08***			
							TOTAL (pounds/year)		**1567.91**

Construction - 2011

Building Construction at Phase 1, and Building Demolition, and clearing, grading, and soil handling at Phase 3

Phase 1 - building construction rev. April 2005

1. On-Road Sources

YR 2011 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)

Vehicle Type	PM10
medium-heavy-duty trucks	0.243

Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	PM10 grams/ day	PM10 lbs/day	days/month	months/year
Material transport								
delivery truck	2	6	20	240	58.32	0.13	22	12
cement truck	10	10	10	1,000	243.00	0.54	14	1
					Subtotal		*1 building*	*41.44*
							2 buildings	***82.89***

2. Off-Road Sources

Emission factors for 2010 (lbs/day)

from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*

Equipment Type	PM10
generators	0.28
gradall	0.13
scissor lift	0.13
forklift	0.13
pile driving rig	0.36
pile auger	0.36
cement truck	0.58

Assumes 8-hour operation of each piece of equipment.

Equipment Type	# of pieces	PM10 lbs/day	days/month	months	lbs/year
generators	2	0.56	22	8	98.56
gradall	1	0.13	22	6	17.16
scissor lift	2	0.26	22	8	45.76
forklift	1	0.13	22	6	17.16
pile driving rig	1	0.36	22	3	23.76
pile auger	1	0.36	22	3	23.76
cement truck	1	0.58	14	1	8.12
Subtotal				*1 building*	*234.28*
				2 buildings	***468.56***

Phase 3 - Building demolition

1. On-Road Sources

YR 2011 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)

Vehicle Type	PM10
medium-heavy-duty trucks	0.243

Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	PM10 grams/ day	PM10 lbs/day	days/ month	months/ year
Material transport								
dump truck	5	6	20	600	145.80	0.32	22	2
					Subtotal			***14.14***

2. Off-Road Sources

Emission factors for 2010 (lbs/day)
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*

Equipment Type	PM10
generator	0.28
325 excavator	0.29
bobcat (loader)	0.22
wood grinder	0.4
concrete grinder	0.4
barge mounted excavator	0.29

Assumes 8-hour operation of each piece of equipment.

Equipment Type	# of pieces	PM10 lbs/day	days/month	months	lbs/year
generator	1	0.28			
excavator	3	0.87			
bobcat (loader)	5	1.1			
wood grinder	1	0.4			
concrete grinder	1	0.4			
barge mounted excavator	1	0.29			
Subtotal		3.34	22	2	***146.96***

Phase 3 - Clearing, grading, and soil handling										
	1. On-Road Sources									
		YR 2011 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)								
		Vehicle Type	PM10							
		medium-heavy-duty trucks	0.243							
							PM10			
		Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	grams/ day	lbs/day	days/ month	months/ year
		Material transport								
		dump truck	12	6	10	720	174.96	0.39	22	6
							Subtotal			***50.91***
	2. Off-Road Sources									
		Emission factors for 2010 (lbs/day)								
		from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*								
		Equipment Type	PM10							
		barge excavator	0.29							
		365 excavator	0.29							
		825 compactor	0.34							
		14 blades (misc. portable eq	0.32							
		623 scraper	0.58							
		Assumes 8-hour operation of each piece of equipment.								
				PM10						
		Equipment Type	# of pieces	lbs/day	days/month	months	lbs/year			
		barge excavator	1	0.29						
		365 excavator	2	0.58						
		825 compactor	2	0.68						
		14 blades	2	0.64						
		623 scraper	3	1.74						
		Subtotal		3.93	22	6	***518.76***			
								TOTAL (pounds/year)		**1282.22**

Construction - 2012

Building Construction at Phase 1, and Site improvement at Phase 3

rev. April 2005

Phase 1 - Building Construction

1. On-Road Sources

YR 2012 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)

Vehicle Type	PM10
medium-heavy-duty trucks	0.23

Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	PM10 grams/ day	PM10 lbs/day	days/month	months/year
Material transport								
dump truck	2	6	20	240	55.20	0.12	22	12
					Subtotal		*1 building*	*32.13*
							2 buildings	***64.25***

2. Off-Road Sources

Emission factors for 2010 (lbs/day)
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*

Equipment Type	PM10
generators	0.28
gradall	0.13
scissor lift	0.13
forklift	0.13
pile driving rig	0.36
pile auger	0.36

Assumes 8-hour operation of each piece of equipment.

Equipment Type	# of pieces	PM10 lbs/day	days/month	months	lbs/year
generators	2	0.56	22	8	98.56
gradall	1	0.13	22	6	17.16
scissor lift	2	0.26	22	8	45.76
forklift	1	0.13	22	6	17.16
pile driving rig	1	0.36	22	3	23.76
pile auger	1	0.36	22	3	23.76
Subtotal				*1 building*	*226.16*
				2 buildings	***452.32***

Phase 3 - Site Improvements										
	1. On-Road Sources									
		YR 2012 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)								
		Vehicle Type	PM10							
		medium-heavy-duty trucks	0.23							
							PM10			
		Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	grams/ day	lbs/day	days/month	months/year
		Material transport								
		delivery truck	2	6	20	240	55.20	0.12	22	6
							Subtotal			***16.06***
	2. Off-Road Sources									
		Emission factors for 2010 (lbs/day)								
		from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*								
		Equipment Type	PM10							
		backhoes	0.12							
		excavator	0.29							
		bobcat (loader)	0.22							
		paving machine	0.22							
		curb and gutter machine (oth	0.5							
		transfer truck	0.58							
		concrete truck	0.58							
		Assumes 8-hour operation of each piece of equipment.								
				PM10						
		Equipment Type	# of pieces	lbs/day	days/month	months	lbs/year			
		backhoes	2	0.24	22	6	31.68			
		excavator	1	0.29	22	6	38.28			
		bobcat (loader)	2	0.44	22	6	58.08			
		paving machine	1	0.22	22	6	29.04			
		curb and gutter machine	1	0.5	22	6	66			
		transfer truck	15	8.7	10	1	87			
		concrete truck	15	8.7	10	1	87			
		Subtotal					***397.08***			
								TOTAL (pounds/year)		**929.72**

Construction - 2013									
Building Construction at Phase 1						rev. April 2005			
Phase 1 - Building Construction									
1. On-Road Sources									
YR 2013 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)									
Vehicle Type	PM10								
medium-heavy-duty trucks	0.218								
						PM10			
Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day		grams/ day	lbs/day	days/month	months/year
Material transport									
delivery trucks	2	6	20	240		52.32	0.12	22	12
cement truck	10	10	10	1,000		218.00	0.48	14	1
						Subtotal		*1 building*	*37.18*
								2 buildings	***74.36***
2. Off-Road Sources									
Emission factors for 2010 (lbs/day)									
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*									
Equipment Type	PM10								
generators	0.28								
gradall	0.13								
scissor lift	0.13								
forklift	0.13								
pile driving rig	0.36								
pile auger	0.36								
cement truck	0.58								
Assumes 8-hour operation of each piece of equipment.									
		PM10							
Equipment Type	# of pieces	lbs/day	days/month	months		lbs/year			
generators	2	0.56	22	8		98.56			
gradall	1	0.13	22	6		17.16			
scissor lift	2	0.26	22	8		45.76			
forklift	1	0.13	22	6		17.16			
pile driving rig	1	0.36	22	3		23.76			
pile auger	1	0.36	22	3		23.76			
cement truck	1	0.58	14	1		8.12			
Subtotal				*1 building*		*234.28*			
				2 buildings		***468.56***			
TOTAL (pounds/year)									**542.92**

Construction - 2014

Building Construction at Phase 1 and Building construction at Phase 2

rev. April 2005

Phase 1 - Building Construction

1. On-Road Sources

YR 2014 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)

Vehicle Type	PM10
medium-heavy-duty trucks	0.207

Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	PM10 grams/ day	PM10 lbs/day	days/month	months/year
Material transport								
delivery trucks	2	6	20	240	49.68	0.11	22	12
					Subtotal		*1 building*	*28.91*
							2 buildings	***57.83***

2. Off-Road Sources

Emission factors for 2010 (lbs/day)
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*

Equipment Type	PM10
generators	0.28
gradall	0.13
scissor lift	0.13
forklift	0.13
pile driving rig	0.36
pile auger	0.36

Assumes 8-hour operation of each piece of equipment.

Equipment Type	# of pieces	PM10 lbs/day	days/month	months	lbs/year
generators	2	0.56	22	8	98.56
gradall	1	0.13	22	6	17.16
scissor lift	2	0.26	22	8	45.76
forklift	1	0.13	22	6	17.16
pile driving rig	1	0.36	22	3	23.76
pile auger	1	0.36	22	3	23.76
Subtotal				*1 building*	*226.16*
				2 buildings	***452.32***

Phase 2 - Building Construction										
	1. On-Road Sources									
		YR 2014 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)								
		Vehicle Type	PM10							
		medium-heavy-duty trucks	0.207							
							PM10			
		Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	grams/ day	lbs/day	days/month	months/year
		Material transport								
		delivery truck	2	6	20	240	49.68	0.11	22	12
		cement truck	10	10	10	1,000	207.00	0.46	14	1
							Subtotal		*1 building*	*35.30*
									2 buildings	***70.61***
	2. Off-Road Sources									
		Emission factors for 2010 (lbs/day)								
		from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*								
		Equipment Type	PM10							
		generators	0.28							
		gradall	0.13							
		scissor lift	0.13							
		forklift	0.13							
		pile driving rig	0.36							
		pile auger	0.36							
		cement truck	0.58							
		Assumes 8-hour operation of each piece of equipment.								
				PM10						
		Equipment Type	# of pieces	lbs/day	days/month	months	lbs/year			
		generators	2	0.56	22	8	98.56			
		gradall	1	0.13	22	6	17.16			
		scissor lift	2	0.26	22	8	45.76			
		forklift	1	0.13	22	6	17.16			
		pile driving rig	1	0.36	22	3	23.76			
		pile auger	1	0.36	22	3	23.76			
		cement truck	1	0.58	14	1	8.12			
		Subtotal				*1 building*	*234.28*			
						2 buildings	***468.56***			
								TOTAL (pounds/year)		**1049.32**

Construction - 2015						rev. April 2005			
Building Construction at Phase 2									
Phase 2 - Building Construction									
1. On-Road Sources									
YR 2015 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)									
Vehicle Type	PM10								
medium-heavy-duty trucks	0.197								
						PM10			
Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day		grams/ day	lbs/day	days/month	months/year
Material transport									
delivery trucks	2	6	20	240		47.28	0.10	22	12
						Subtotal		*1 building*	*27.52*
								2 buildings	***55.04***
2. Off-Road Sources									
Emission factors for 2010 (lbs/day)									
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*									
Equipment Type	PM10								
generators	0.28								
gradall	0.13								
scissor lift	0.13								
forklift	0.13								
pile driving rig	0.36								
pile auger	0.36								
Assumes 8-hour operation of each piece of equipment.									
		PM10							
Equipment Type	# of pieces	lbs/day	days/month	months		lbs/year			
generators	2	0.56	22	8		98.56			
gradall	1	0.13	22	6		17.16			
scissor lift	2	0.26	22	8		45.76			
forklift	1	0.13	22	6		17.16			
pile driving rig	1	0.36	22	3		23.76			
pile auger	1	0.36	22	3		23.76			
Subtotal				*1 building*		*226.16*			
				2 buildings		***452.32***			
						TOTAL (pounds/year)			**507.36**

Construction - 2016

Building Construction at Phase 2 and Building Construction as Phase 3 rev. April 2005

Phase 2 - Building Construction

1. On-Road Sources

YR 2016 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)

Vehicle Type	PM10
medium-heavy-duty trucks	0.187

Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	PM10 grams/ day	PM10 lbs/day	days/month	months/year
Material transport								
delivery truck	2	6	20	240	44.88	0.10	22	12
cement truck	10	10	10	1,000	187.00	0.41	14	1
					Subtotal		*1 building*	*31.89*
							2 buildings	***63.78***

2. Off-Road Sources

Emission factors for 2010 (lbs/day)
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*

Equipment Type	PM10
generators	0.28
gradall	0.13
scissor lift	0.13
forklift	0.13
pile driving rig	0.36
pile auger	0.36
cement truck	0.58

Assumes 8-hour operation of each piece of equipment.

Equipment Type	# of pieces	PM10 lbs/day	days/month	months	lbs/year
generators	2	0.56	22	8	98.56
gradall	1	0.13	22	6	17.16
scissor lift	2	0.26	22	8	45.76
forklift	1	0.13	22	6	17.16
pile driving rig	1	0.36	22	3	23.76
pile auger	1	0.36	22	3	23.76
cement truck	1	0.58	14	1	8.12
Subtotal				*1 building*	*234.28*
				2 buildings	***468.56***

Phase 3 - Building Construction									
1. On-Road Sources									
YR 2016 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)									
Vehicle Type	PM10								
medium-heavy-duty trucks	0.187								
						PM10			
Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day		grams/ day	lbs/day	days/month	months/year
Material transport									
delivery truck	2	6	20	240		44.88	0.10	22	12
cement truck	10	10	10	1,000		187.00	0.41	14	1
						Subtotal		*1 building*	*31.89*
								2 buildings	***63.78***
2. Off-Road Sources									
Emission factors for 2010 (lbs/day)									
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*									
Equipment Type	PM10								
generators	0.28								
gradall	0.13								
scissor lift	0.13								
forklift	0.13								
pile driving rig	0.36								
pile auger	0.36								
cement truck	0.58								
Assumes 8-hour operation of each piece of equipment.									
		PM10							
Equipment Type	# of pieces	lbs/day	days/month	months		lbs/year			
generators	2	0.56	22	8		98.56			
gradall	1	0.13	22	6		17.16			
scissor lift	2	0.26	22	8		45.76			
forklift	1	0.13	22	6		17.16			
pile driving rig	1	0.36	22	3		23.76			
pile auger	1	0.36	22	3		23.76			
cement truck	1	0.58	14	1		8.12			
Subtotal				*1 building*		*234.28*			
				2 buildings		***468.56***			
							TOTAL (pounds/year)		**1064.69**

Construction - 2017

Building Construction at Phase 2 and Building Construction as Phase 3 rev. April 2005

Phase 2 - Building Construction

1. On-Road Sources

YR 2017 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)

Vehicle Type	PM10
medium-heavy-duty trucks	0.178

Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	PM10 grams/ day	PM10 lbs/day	days/month	months/year
Material transport								
deliver truck	2	6	20	240	42.72	0.09	22	12
					Subtotal		*1 building*	*24.86*
							2 buildings	***49.73***

2. Off-Road Sources

Emission factors for 2010 (lbs/day)
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*

Equipment Type	PM10
generators	0.28
gradall	0.13
scissor lift	0.13
forklift	0.13
pile driving rig	0.36
pile auger	0.36

Assumes 8-hour operation of each piece of equipment.

Equipment Type	# of pieces	PM10 lbs/day	days/month	months	lbs/year
generators	2	0.56	22	8	98.56
gradall	1	0.13	22	6	17.16
scissor lift	2	0.26	22	8	45.76
forklift	1	0.13	22	6	17.16
pile driving rig	1	0.36	22	3	23.76
pile auger	1	0.36	22	3	23.76
Subtotal				*1 building*	*226.16*
				2 buildings	***452.32***

Phase 3 - Building Construction									
1. On-Road Sources									
YR 2017 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)									
Vehicle Type	PM10								
medium-heavy-duty trucks	0.178								
						PM10			
Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day		grams/ day	lbs/day	days/month	months/year
Material transport									
delivery truck	2	6	20	240		42.72	0.09	22	12
						Subtotal		*1 building*	*24.86*
								2 buildings	***49.73***
2. Off-Road Sources									
Emission factors for 2010 (lbs/day)									
from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*									
Equipment Type	PM10								
generators	0.28								
gradall	0.13								
scissor lift	0.13								
forklift	0.13								
pile driving rig	0.36								
pile auger	0.36								
Assumes 8-hour operation of each piece of equipment.									
		PM10							
Equipment Type	# of pieces	lbs/day	days/month	months		lbs/year			
generators	2	0.56	22	8		98.56			
gradall	1	0.13	22	6		17.16			
scissor lift	2	0.26	22	8		45.76			
forklift	1	0.13	22	6		17.16			
pile driving rig	1	0.36	22	3		23.76			
pile auger	1	0.36	22	3		23.76			
Subtotal				*1 building*		*226.16*			
				2 buildings		***452.32***			
							TOTAL (pounds/year)		**1004.09**

Construction - 2018										
Building Construction at Phase 3							rev. April 2005			
Phase 3 - Building Construction										
	1. On-Road Sources									
		YR 2018 EMFAC2002 v2.2 Running Exhaust Emission Factors at 30 mph (grams/mile)								
		Vehicle Type	PM10							
		medium-heavy-duty trucks	0.17							
							PM10			
		Vehicle Type	# of trucks	One-way trips/day	Average Trip Length (miles)	Total miles/day	grams/ day	lbs/day	days/month	months/year
		Material transport								
		delivery truck	2	6	20	240	40.80	0.09	22	12
		cement truck	10	10	10	1,000	170.00	0.37	14	1
							Subtotal		*1 building*	*28.99*
									2 buildings	***57.99***
	2. Off-Road Sources									
		Emission factors for 2010 (lbs/day)								
		from Table 3-2 in SMAQMD's *Guide to Air Quality Assessment*								
		Equipment Type	PM10							
		generators	0.28							
		gradall	0.13							
		scissor lift	0.13							
		forklift	0.13							
		pile driving rig	0.36							
		pile auger	0.36							
		cement truck	0.58							
		Assumes 8-hour operation of each piece of equipment.								
				PM10						
		Equipment Type	# of pieces	lbs/day	days/month	months	lbs/year			
		generators	2	0.56	22	8	98.56			
		gradall	1	0.13	22	6	17.16			
		scissor lift	2	0.26	22	8	45.76			
		forklift	1	0.13	22	6	17.16			
		pile driving rig	1	0.36	22	3	23.76			
		pile auger	1	0.36	22	3	23.76			
		cement truck	1	0.58	14	1	8.12			
		Subtotal				*1 building*	*234.28*			
						2 buildings	***468.56***			
								TOTAL (pounds/year)		**526.55**

Project Diesel Truck DPM Emissions

O29 Project Diesel Particulate Matter (PM2.5) Emissions from Project Diesel Trucks - 2010 and 2025							
Table 1: Running Exhaust Emissions (grams/mile)							
Emfac2002 V2.2 Apr 23 2003, Run on 4/20/05							
Alameda County, Annual, 60F, 30% humidity, 20 MPH							
I. 2010							
Year: 2010 -- Model Years: 1965 to 2010							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.011	0.003	0.01	0.009	0.033	
number of trucks/day		100	27	91	82	301	9,120
fraction of trucks that are diesel		0.182	0.333	0.8	0.889		
number of diesel trucks/day		18	9	73	73		
emissions (grams/mile)		0.058	0.078	0.333	0.255		
total grams/mile/trucks/day		*1.06*	*0.71*	*24.30*	*18.61*		*44.67*
miles/truck	1						
grams/day		***1.06***	***0.71***	***24.30***	***18.61***		***44.67***
lbs/day							**0.10**
lbs/year							**35.95**
II. 2025							
Year: 2025 -- Model Years: 1980 to 2025							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.011	0.003	0.01	0.009	0.033	
number of trucks/day		298	81	271	244	895	27,111
fraction of trucks that are diesel		0.2	0.333	0.778	1		
number of diesel trucks/day		60	27	211	244		
emissions (grams/mile)		0.03	0.039	0.17	0.098		
total grams/mile/truck/day		*1.79*	*1.06*	*35.86*	*23.91*		*62.61*
miles/truck	1						
grams/day		***1.79***	***1.06***	***35.86***	***23.91***		***62.61***
lbs/day							**0.14**
lbs/year							**50.39**

I-880 Diesel Truck Emissions

O29 Project Diesel Particulate Matter (PM2.5) Emissions from I-880 Diesel Trucks - 2005, 2010 and 2025								
Emfac2002 V2.2 Apr 23 2003, Run on 4/22/05								
Alameda County, Annual, 60F, 30% humidity, 30 MPH								
I. 2005								
Year: 2005 -- Model Years: 1965 to 2005								
**********								
			2 axle	3 axle	4 axle	5+ axle		
	vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
	fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
	number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
	fraction of trucks that are diesel		0.2	0.333	0.7	0.875		
	number of diesel trucks/day		1,700	1,166	700	12,031		
	emissions (grams/mile)		0.051	0.074	0.309	0.301		
	grams/mile/truck/day		*86.70*	*86.25*	*216.30*	*3,621.41*		*4,010.65*
	miles/truck	*2*						
	grams/day		***173.4***	***172.49***	***432.6***	***7242.8125***		***8,021.31***
	lbs/day							**17.68395**
	lbs/year							**6454.643**
II. 2007								
Year: 2007 -- Model Years: 1965 to 2007								
**********								
			2 axle	3 axle	4 axle	5+ axle		
	vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
	fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
	number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
	fraction of trucks that are diesel		0.182	0.5	0.8	0.889		
	number of diesel trucks/day		1,547	1,750	800	12,224		
	emissions (grams/mile)		0.047	0.067	0.282	0.246		
	grams/mile/truck/day		*72.71*	*117.25*	*225.60*	*3,007.04*		*3,422.60*
	miles/truck	*2*						
	grams/day		***145.4***	***234.5***	***451.2***	***6014.085***		***6,845.20***
	lbs/day							**15.09109**
	lbs/year							**5508.248**

III. 2008							
Year: 2008 -- Model Years: 1965 to 2008							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.182	0.5	0.8	0.889		
number of diesel trucks/day		1,547	1,750	800	12,224		
emissions (grams/mile)		0.046	0.064	0.27	0.224		
grams/mile/truck/day		*71.16*	*112.00*	*216.00*	*2,738.12*		*3,137.28*
miles/truck	*2*						
grams/day		***142.3***	***224***	***432***	***5476.24***		***6,274.56***
lbs/day							**13.83305**
lbs/year							**5049.062**
IV. 2009							
Year: 2009 -- Model Years: 1965 to 2009							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.182	0.333	0.8	0.889		
number of diesel trucks/day		1,547	1,166	800	12,224		
emissions (grams/mile)		0.044	0.061	0.258	0.206		
grams/mile/truck/day		*68.07*	*71.10*	*206.40*	*2,518.09*		*2,863.66*
miles/truck	*2*						
grams/day		***136.1***	***142.19***	***412.8***	***5036.185***		***5,727.31***
lbs/day							**12.62656**
lbs/year							**4608.695**
V. 2010							
Year: 2010 -- Model Years: 1965 to 2010							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.182	0.333	0.8	0.889		
number of diesel trucks/day		1,547	1,166	800	12,224		
emissions (grams/mile)		0.042	0.056	0.239	0.183		
grams/mile/truck/day		*64.97*	*65.27*	*191.20*	*2,236.95*		*2,558.39*
miles/truck	*2*						
grams/day		***129.9***	***130.54***	***382.4***	***4473.8925***		***5,116.78***
lbs/day							**11.28056**
lbs/year							**4117.405**

VI. 2011							
Year: 2010 -- Model Years: 1966 to 2011							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.182	0.333	0.8	0.9112		
number of diesel trucks/day		1,547	1,166	800	12,529		
emissions (grams/mile)		0.039	0.052	0.224	0.165		
grams/mile/truck/day		*60.33*	*60.61*	*179.20*	*2,067.29*		*2,367.42*
miles/truck	*2*						
grams/day		***120.7***	***121.21***	***358.4***	***4134.57***		***4,734.85***
lbs/day							**10.43855**
lbs/year							**3810.072**
VII. 2012							
Year: 2012 -- Model Years: 1967 to 2012							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.182	0.333	0.8	0.9334		
number of diesel trucks/day		1,547	1,166	800	12,834		
emissions (grams/mile)		0.037	0.049	0.211	0.152		
grams/mile/truck/day		*57.24*	*57.11*	*168.80*	*1,950.81*		*2,233.95*
miles/truck	*2*						
grams/day		***114.5***	***114.22***	***337.6***	***3901.612***		***4,467.91***
lbs/day							**9.850053**
lbs/year							**3595.269**
VIII. 2013							
Year: 2013 -- Model Years: 1968 to 2013							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.182	0.333	0.8	0.9556		
number of diesel trucks/day		1,547	1,166	800	13,140		
emissions (grams/mile)		0.035	0.046	0.201	0.141		
grams/mile/truck/day		*54.15*	*53.61*	*160.80*	*1,852.67*		*2,121.23*
miles/truck	*2*						
grams/day		***108.3***	***107.23***	***321.6***	***3705.339***		***4,242.46***
lbs/day							**9.353012**
lbs/year							**3413.849**

IX. 2014							
Year: 2014 -- Model Years: 1969 to 2014							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.182	0.333	0.8	0.9778		
number of diesel trucks/day		1,547	1,166	800	13,445		
emissions (grams/mile)		0.034	0.044	0.191	0.13		
grams/mile/truck/day		*52.60*	*51.28*	*152.80*	*1,747.82*		*2,004.50*
miles/truck	*2*						
grams/day		***105.2***	***102.56***	***305.6***	***3495.635***		***4,009.00***
lbs/day							**8.838321**
lbs/year							**3225.987**
X. 2015							
Year: 2015 -- Model Years: 1970 to 2015							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.182	0.333	0.8	1		
number of diesel trucks/day		1,547	1,166	800	13,750		
emissions (grams/mile)		0.032	0.042	0.181	0.121		
grams/mile/truck/day		*49.50*	*48.95*	*144.80*	*1,663.75*		*1,907.01*
miles/truck	*2*						
grams/day		***99.01***	***97.902***	***289.6***	***3327.5***		***3,814.01***
lbs/day							**8.408453**
lbs/year							**3069.085**
XI. 2016							
Year: 2016 -- Model Years: 1971 to 2016							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.182	0.333	0.8	1		
number of diesel trucks/day		1,547	1,166	800	13,750		
emissions (grams/mile)		0.031	0.04	0.172	0.113		
grams/mile/truck/day		*47.96*	*46.62*	*137.60*	*1,553.75*		*1,785.93*
miles/truck	*2*						
grams/day		***95.91***	***93.24***	***275.2***	***3107.5***		***3,571.85***
lbs/day							**7.87459**
lbs/year							**2874.225**

XII. 2017							
Year: 2017 -- Model Years: 1972 to 2017							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.182	0.333	0.8	1		
number of diesel trucks/day		1,547	1,166	800	13,750		
emissions (grams/mile)		0.03	0.038	0.164	0.106		
grams/mile/truck/day		*46.41*	*44.29*	*131.20*	*1,457.50*		*1,679.40*
miles/truck	*2*						
grams/day		***92.82***	***88.578***	***262.4***	***2915***		***3,358.80***
lbs/day							**7.404882**
lbs/year							**2702.782**
XIII. 2018							
Year: 2018 -- Model Years: 1973 to 2018							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.182	0.333	0.8	1		
number of diesel trucks/day		1,547	1,166	800	13,750		
emissions (grams/mile)		0.028	0.036	0.156	0.099		
grams/mile/truck/day		*43.32*	*41.96*	*124.80*	*1,361.25*		*1,571.32*
miles/truck	*2*						
grams/day		***86.63***	***83.916***	***249.6***	***2722.5***		***3,142.65***
lbs/day							**6.928353**
lbs/year							**2528.849**
XIV. 2019							
Year: 2019 -- Model Years: 1974 to 2019							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.182	0.333	0.8	1		
number of diesel trucks/day		1,547	1,166	800	13,750		
emissions (grams/mile)		0.027	0.034	0.149	0.093		
grams/mile/truck/day		*41.77*	*39.63*	*119.20*	*1,278.75*		*1,479.35*
miles/truck	*2*						
grams/day		***83.54***	***79.254***	***238.4***	***2557.5***		***2,958.69***
lbs/day							**6.522799**
lbs/year							**2380.822**

XV. 2020							
Year: 2020 -- Model Years: 1975 to 2020							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.182	0.333	0.8	1		
number of diesel trucks/day		1,547	1,166	800	13,750		
emissions (grams/mile)		0.026	0.033	0.142	0.087		
grams/mile/truck/day		*40.22*	*38.46*	*113.60*	*1,196.25*		*1,388.53*
miles/truck	*2*						
grams/day		***80.44***	***76.923***	***227.2***	***2392.5***		***2,777.07***
lbs/day							**6.122385**
lbs/year							**2234.67**
XVI. 2021							
Year: 2021 -- Model Years: 1976 to 2021							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.1856	0.333	0.7956	1		
number of diesel trucks/day		1,578	1,166	796	13,750		
emissions (grams/mile)		0.025	0.032	0.137	0.083		
grams/mile/truck/day		*39.44*	*37.30*	*109.00*	*1,141.25*		*1,326.98*
miles/truck	*2*						
grams/day		***78.88***	***74.592***	***217.9944***	***2282.5***		***2,653.97***
lbs/day							**5.850994**
lbs/year							**2135.613**
XVII. 2022							
Year: 2022 -- Model Years: 1977 to 2022							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.1892	0.333	0.7912	1		
number of diesel trucks/day		1,608	1,166	791	13,750		
emissions (grams/mile)		0.024	0.031	0.133	0.079		
grams/mile/truck/day		*38.60*	*36.13*	*105.23*	*1,086.25*		*1,266.21*
miles/truck	*2*						
grams/day		***77.19***	***72.261***	***210.4592***	***2172.5***		***2,532.41***
lbs/day							**5.583017**
lbs/year							**2037.801**

XVIII. 2023							
Year: 2023 -- Model Years: 1978 to 2023							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.1928	0.333	0.7868	1		
number of diesel trucks/day		1,639	1,166	787	13,750		
emissions (grams/mile)		0.023	0.03	0.129	0.076		
grams/mile/truck/day		*37.69*	*34.97*	*101.50*	*1,045.00*		*1,219.15*
miles/truck	*2*						
grams/day		***75.38***	***69.93***	***202.9944***	***2090***		***2,438.31***
lbs/day							**5.375552**
lbs/year							**1962.076**
XIV. 2024							
Year: 2024 -- Model Years: 1979 to 2024							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of vehicles/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.1964	0.333	0.7824	1		
number of diesel trucks/day		1,669	1,166	782	13,750		
emissions (grams/mile)		0.021	0.028	0.122	0.07		
grams/mile/truck/day		*35.06*	*32.63*	*95.45*	*962.50*		*1,125.64*
miles/truck	*2*						
grams/day		***70.11***	***65.268***	***190.9056***	***1925***		***2,251.29***
lbs/day							**4.963241**
lbs/year							**1811.583**
VII. 2025							
Year: 2025 -- Model Years: 1980 to 2025							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of trucks/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.2	0.333	0.778	1		
number of diesel trucks/day		1,700	1,166	778	13,750		
emissions (grams/mile)		0.021	0.028	0.122	0.07		
grams/mile/truck/day		*35.70*	*32.63*	*94.92*	*962.50*		*1,125.75*
miles/truck	*2*						
grams/day		***71.40***	***65.27***	***189.83***	***1,925.00***		***2,251.50***
lbs/day							**4.963708**
lbs/year							**1811.753**

VIII. 2026							
Year: 2026 -- Model Years: 1981 to 2026							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of trucks/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.2	0.333	0.778	1		
number of diesel trucks/day		1,700	1,166	778	13,750		
emissions (grams/mile)		0.021	0.028	0.12	0.068		
grams/mile/truck/day		*35.70*	*32.63*	*93.36*	*935.00*		*1,096.69*
miles/truck	*2*						
grams/day		***71.40***	***65.27***	***186.72***	***1,870.00***		***2,193.39***
lbs/day							**4.835593**
lbs/year							**1764.991**
IX. 2027							
Year: 2027 -- Model Years: 1982 to 2027							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of trucks/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.2	0.333	0.778	1		
number of diesel trucks/day		1,700	1,166	778	13,750		
emissions (grams/mile)		0.02	0.027	0.117	0.067		
grams/mile/truck/day		*34.00*	*31.47*	*91.03*	*921.25*		*1,077.74*
miles/truck	*2*						
grams/day		***68.00***	***62.94***	***182.05***	***1,842.50***		***2,155.49***
lbs/day							**4.75204**
lbs/year							**1734.495**
X. 2028							
Year: 2028 -- Model Years: 1983 to 2028							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of trucks/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.2	0.333	0.778	1		
number of diesel trucks/day		1,700	1,166	778	13,750		
emissions (grams/mile)		0.02	0.027	0.115	0.065		
grams/mile/truck/day		*34.00*	*31.47*	*89.47*	*893.75*		*1,048.69*
miles/truck	*2*						
grams/day		***68.00***	***62.94***	***178.94***	***1,787.50***		***2,097.38***
lbs/day							**4.623925**
lbs/year							**1687.733**

XI. 2029							
Year: 2029 -- Model Years: 1984 to 2029							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of trucks/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.2	0.333	0.778	1		
number of diesel trucks/day		1,700	1,166	778	13,750		
emissions (grams/mile)		0.019	0.026	0.113	0.064		
grams/mile/truck/day		*32.30*	*30.30*	*87.91*	*880.00*		*1,030.52*
miles/truck	*2*						
grams/day		***64.60***	***60.61***	***175.83***	***1,760.00***		***2,061.03***
lbs/day							**4.543802**
lbs/year							**1658.488**
XII. 2030							
Year: 2030 -- Model Years: 1985 to 2030							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of trucks/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.2	0.333	0.778	1		
number of diesel trucks/day		1,700	1,166	778	13,750		
emissions (grams/mile)		0.019	0.026	0.112	0.063		
grams/mile/truck/day		*32.30*	*30.30*	*87.14*	*866.25*		*1,015.99*
miles/truck	*2*						
grams/day		***64.60***	***60.61***	***174.27***	***1,732.50***		***2,031.98***
lbs/day							**4.479745**
lbs/year							**1635.107**
XIII. 2031							
Year: 2031 -- Model Years: 1986 to 2031							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of trucks/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.2044	0.333	0.778	1		
number of diesel trucks/day		1,737	1,166	778	13,750		
emissions (grams/mile)		0.018	0.025	0.11	0.062		
grams/mile/truck/day		*31.27*	*29.14*	*85.58*	*852.50*		*998.49*
miles/truck	*2*						
grams/day		***62.55***	***58.28***	***171.16***	***1,705.00***		***1,996.98***
lbs/day							**4.40259**
lbs/year							**1606.945**

XIV. 2032						
Year: 2032 -- Model Years: 1987 to 2032						
**********						
	2 axle	3 axle	4 axle	5+ axle		
vehicle type	LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles	0.034	0.014	0.004	0.055	0.107	
number of trucks/day	8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel	0.2088	0.333	0.778	1		
number of diesel trucks/day	1,775	1,166	778	13,750		
emissions (grams/mile)	0.018	0.025	0.109	0.062		
grams/mile/truck/day	*31.95*	*29.14*	*84.80*	*852.50*		*998.39*
miles/truck	*2*					
grams/day	***63.89***	***58.28***	***169.60***	***1,705.00***		***1,996.77***
lbs/day						**4.402128**
lbs/year						**1606.777**
XV. 2033						
Year: 2033 -- Model Years: 1988 to 2033						
**********						
	2 axle	3 axle	4 axle	5+ axle		
vehicle type	LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles	0.034	0.014	0.004	0.055	0.107	
number of trucks/day	8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel	0.2132	0.333	0.778	1		
number of diesel trucks/day	1,812	1,166	778	13,750		
emissions (grams/mile)	0.018	0.025	0.108	0.061		
grams/mile/truck/day	*32.62*	*29.14*	*84.02*	*838.75*		*984.53*
miles/truck	*2*					
grams/day	***65.24***	***58.28***	***168.05***	***1,677.50***		***1,969.06***
lbs/day						**4.341039**
lbs/year						**1584.479**
XVI. 2034						
Year: 2034 -- Model Years: 1989 to 2034						
**********						
	2 axle	3 axle	4 axle	5+ axle		
vehicle type	LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles	0.034	0.014	0.004	0.055	0.107	
number of trucks/day	8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel	0.2176	0.333	0.778	1		
number of diesel trucks/day	1,850	1,166	778	13,750		
emissions (grams/mile)	0.017	0.025	0.107	0.061		
grams/mile/truck/day	*31.44*	*29.14*	*83.25*	*838.75*		*982.58*
miles/truck	*2*					
grams/day	***62.89***	***58.28***	***166.49***	***1,677.50***		***1,965.15***
lbs/day						**4.332422**
lbs/year						**1581.334**

XVII. 2035							
Year: 2035 -- Model Years: 1990 to 2035							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of trucks/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.222	0.333	0.778	1		
number of diesel trucks/day		1,887	1,166	778	13,750		
emissions (grams/mile)		0.017	0.024	0.106	0.061		
grams/mile/truck/day		*32.08*	*27.97*	*82.47*	*838.75*		*981.27*
miles/truck	*2*						
grams/day		***64.16***	***55.94***	***164.94***	***1,677.50***		***1,962.54***
lbs/day							**4.326656**
lbs/year							**1579.229**
XVIII. 2036							
Year: 2036 -- Model Years: 1991 to 2036							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of trucks/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.222	0.333	0.7724	1		
number of diesel trucks/day		1,887	1,166	772	13,750		
emissions (grams/mile)		0.017	0.024	0.106	0.061		
grams/mile/truck/day		*32.08*	*27.97*	*81.87*	*838.75*		*980.68*
miles/truck	*2*						
grams/day		***64.16***	***55.94***	***163.75***	***1,677.50***		***1,961.35***
lbs/day							**4.324038**
lbs/year							**1578.274**
XIX. 2037							
Year: 2037 -- Model Years: 1992 to 2037							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of trucks/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.222	0.333	0.7668	1		
number of diesel trucks/day		1,887	1,166	767	13,750		
emissions (grams/mile)		0.017	0.024	0.105	0.06		
grams/mile/truck/day		*32.08*	*27.97*	*80.51*	*825.00*		*965.57*
miles/truck	*2*						
grams/day		***64.16***	***55.94***	***161.03***	***1,650.00***		***1,931.13***
lbs/day							**4.257413**
lbs/year							**1553.956**

XX. 2038							
Year: 2038 -- Model Years: 1993 to 2038							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of trucks/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.222	0.333	0.7612	1		
number of diesel trucks/day		1,887	1,166	761	13,750		
emissions (grams/mile)		0.017	0.024	0.105	0.06		
grams/mile/truck/day		*32.08*	*27.97*	*79.93*	*825.00*		*964.98*
miles/truck	*2*						
grams/day		***64.16***	***55.94***	***159.85***	***1,650.00***		***1,929.95***
lbs/day							**4.25482**
lbs/year							**1553.009**
XXI. 2039							
Year: 2039 -- Model Years: 1994 to 2039							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of trucks/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.222	0.333	0.7556	1		
number of diesel trucks/day		1,887	1,166	756	13,750		
emissions (grams/mile)		0.017	0.024	0.105	0.06		
grams/mile/truck/day		*32.08*	*27.97*	*79.34*	*825.00*		*964.39*
miles/truck	*2*						
grams/day		***64.16***	***55.94***	***158.68***	***1,650.00***		***1,928.78***
lbs/day							**4.252228**
lbs/year							**1552.063**
XXII. 2040							
Year: 2040 -- Model Years: 1995 to 2040							
**********							
		2 axle	3 axle	4 axle	5+ axle		
vehicle type		LHD1	LHD2	MHD	HHD	Trucks	*TOTALS*
fraction of all vehicles		0.034	0.014	0.004	0.055	0.107	
number of trucks/day		8,500	3,500	1,000	13,750	26,750	250,000
fraction of trucks that are diesel		0.222	0.333	0.75	1		
number of diesel trucks/day		1,887	1,166	750	13,750		
emissions (grams/mile)		0.016	0.024	0.104	0.06		
grams/mile/truck/day		*30.19*	*27.97*	*78.00*	*825.00*		*961.16*
miles/truck	*2*						
grams/day		***60.38***	***55.94***	***156.00***	***1,650.00***		***1,922.33***
lbs/day							**4.238008**
lbs/year							**1546.873**

Train DPM Emissions

LOCOMOTIVE EMISSIONS											
DPM emission factors (g/hr) - current											
					Throttle Notches						
				3	***4***	***5***	***6***	***7***	***8***		
	Model Number			***15***	***20***	***30***	***40***	**40**	**40**	***mph***	
	GP-60			292.5	310.73	381.57	659.25	734.16	928.05		
	SD-70			229.83	298.26	388.58	603.96	880.88	1030		
	GP-40			226.38	258.5	336.03	551.88	638.64	821.34		
	GP-50			301.5	311.19	393.96	663.84	725.34	927.84		
	GP-38			186	212	267	417	463	608		
	Dash-9			232.4322	253.48	430.67	596.22	671.69	643.27		
	Dash-8			291.462	293.16	327.744	373.52	469.406	615.09		
	Dash-7			245	472.5	372	369	468	540		
	C60-A			337.9375	305.4352	500.4864	604.6515	713.461	1063.951		
	SD-90MACH			255.85	423.7	561.6	329.28	258.15	933.6		
I. 2007											
	A. AMTRAK TRAINS - DPM emissions (g/hr)										
					Throttle Notches						
	Model	***fraction***	***# of trains***	***3***	***4***	***5***	***6***	***7***	***8***		
	GP-60	0.2	7.6	2223	2361.548	2899.932	5010.3	5579.616	7053.18		
	GP-40	0.35	13.3	3010.854	3438.05	4469.199	7340.004	8493.912	10923.822		
	Dash-9	0.2	7.6	1766.485	1926.4115	3273.0859	4531.2416	5104.8425	4888.8246		
	Dash-8	0.25	9.5	2768.889	2785.02	3113.568	3548.44	4459.357	5843.355		
	TOTAL	*1*	*38*	*9,769.23*	*10,511.03*	*13,755.78*	*20,429.99*	*23,637.73*	*28,709.18*		
	fraction of time in each throttle			0	0.2	0.50	0.15	0.10	0.05	1	
	TOTAL			*0*	*2,102.21*	*6,877.89*	*3,064.50*	*2,363.77*	*1,435.46*	*15,843.83*	g/hr/day
	distance (miles)		2								
	hours			0.03333	0.02500	0.01667	0.01250	0.01250	0.01250		
	TOTAL (AMTRAK)			***0.00***	***52.56***	***114.63***	***38.31***	***29.55***	***17.94***	***252.98***	***grams/day***
										0.56	***lbs/day***
	B. FREIGHT TRAINS - DPM emissions (g/hr)										
					Throttle Notches						
	Model	**fraction**	**# of engines**	***3***	***4***	***5***	***6***	***7***	***8***		
	GP-40	0.6	7.2	1629.936	1861.2	2419.416	3973.536	4598.208	5913.648		
	GP-38	0.2	2.4	446.4	508.8	640.8	1000.8	1111.2	1459.2		
	Dash-8	0.2	2.4	699.5088	703.584	786.5856	896.448	1126.5744	1476.216		
	TOTAL	*1*	*12*	*2,775.84*	*3,073.58*	*3,846.80*	*5,870.78*	*6,835.98*	*8,849.06*		
	fraction of time in each throttle			0	0.2	0.50	0.15	0.10	0.05	1	
	TOTAL			*0*	*614.72*	*1,923.40*	*880.62*	*683.60*	*442.45*	*4,544.79*	*g/hr*
	distance (miles)		2								
	hours			0.03333	0.02500	0.01667	0.01250	0.01250	0.01250		
	TOTAL (AMTRAK)			***0.00***	***15.37***	***32.06***	***11.01***	***8.54***	***5.53***	***72.51***	***grams/day***
										0.16	***lbs/day***
								GRAND TOTAL		**325.49**	**grams/day**
										0.72	**lbs/day**
										261.92	**lbs/year**
II. 2025											
	assumes emission factors have been reduced to following fraction of current factors:								***0.8***		
								GRAND TOTAL		**260.39**	**grams/day**
										0.57	**lbs/day**
										209.53	**lbs/year**

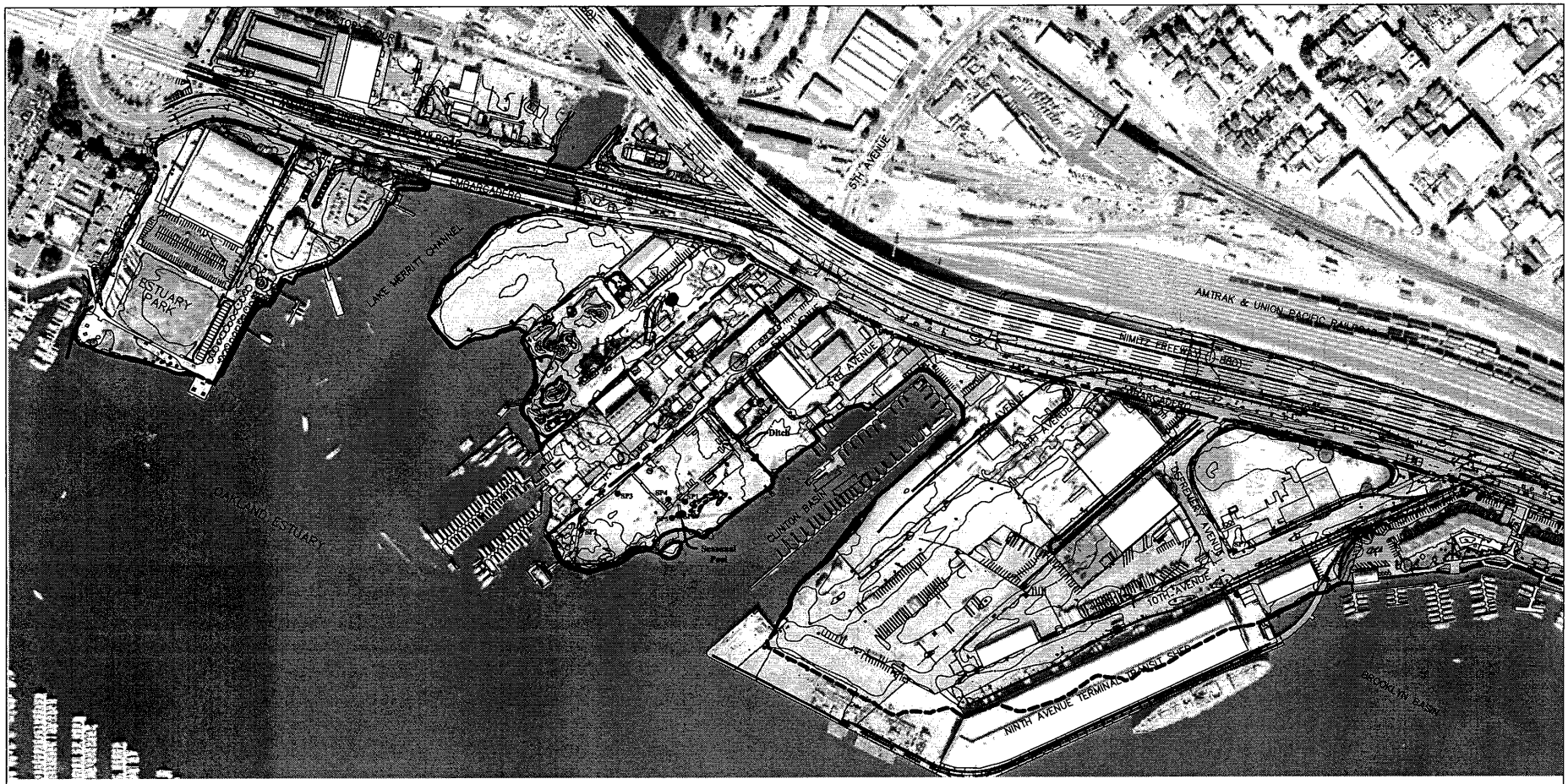
Boat DPM Emissions

MARINE VESSELS							
U.S. Coast Guard - Existing (PM Emissions)							
Exponent (x)	Intercept (b)	Coefficient (a)	Main Engine Emission Rate (g/kW-hr)	Emissions per vessel (lb/trip)	Total Emissions per day (lbs/day)	lbs/month	lbs/year
					Total		
1.5	0.2551	0.0059	0.32	0.04	**0.17**	**3.74**	**44.89**
Source:							
EPA "Analysis of Commercial Marine Vessels Emissions and Fuel Consumption Data" (February 2000)							
Equations:							
Emission Rate (g/kW-hr) = a (Fractional Load)$^{-x}$ + b							
Fuel Consumption (g/kW-hr) = 14.1205/(Fractional Load) + 205.7169 [Page 3-24]							
Emissions = Emission Rate (g/kW-hr) * Mode Specific (kW) * Time (hours)							
Assumptions:							
Main Engine							
Engine rating (hp) =	2,415						
Engine rating (kW) =	1,802						
Maneuvering Load (kW) =	0.2						
Maneuvering (kW) =	360						
Maneuvering (hr/trip) =	0.16667						
Trips/day	2						
Number of vessels	2						
					Subtotal		**44.89**

Tug Boats - Existing (PM Emissions)												
			Emission Rate (g/kW-hr)		**Emissions per tug (lb/trip)**			**Total emissions/day (lb/day)**			**lbs/month**	**lbs/year**
Exponent (x)	**Intercept (b)**	**Coefficient (a)**	**Departure**	**Arrival**	**Departure**	**Arrival**	**Total**	**Departure**	**Arrival**	**Total**		
1.5	0.2551	0.0059	0.32	0.32	0.11	0.08	**0.19**	0.90	0.60	**1.50**	**33.05**	**396.64**
Source:												
EPA "Analysis of Commercial Marine Vessels Emissions and Fuel Consumption Data" (February 2000)												
Equations:												
Emission Rate (g/kW-hr) = a (Fractional Load)$^{-x}$ + b												
Fuel Consumption (g/kW-hr) = 14.1205/(Fractional Load) + 205.7169 [Page 3-24]												
Emissions = Emission Rate (g/kW-hr) * Mode Specific (kW) * Time (hours)												
											TOTAL	**441.52**
Assumptions:												
Main Engine	Departure	Arrival										
DWT (hp) =	4,268	4,268										
DWT (kW) =	3,184	3,184										
Maneuvering Load (kW) =	0.20	0.20										
Maneuvering (kW) =	637	637										
Maneuvering (hr/trip) =	0.25	0.1666667										
Trip per day	1	1										
Number of tug boats =	8	8										

APPENDIX K

Draft Potentially Jurisdictional Wetland Delineation



NOTES:

1. Topography on this map is based on City of Oakland datum (OCD) (0.00 ft OCD=3.00 feet NGVD 1929);(0.00 ft OCD=5.88 feet Mean Low Low Water [MLLW])
2. The High Tide Line is approximately 6.44 feet above MLLW (0.56 feet OCD) at this location .
3. Mean High Water (MHW) is 5.82 feet above MLLW (-0.06 feet OCD) at this location.
4. This delineation is subject to verification by the U.S. Army Corps of Engineers. Verification still pending as of August 16, 2005.

LSA

N

0 500
FEET

SOURCE: USGS 7.5' QUAD - EL TORO, 1988

LEGEND

- PROJECT BOUNDARY
- SP5 WETLAND SAMPLE POINT
- SP3 NON-WETLAND SAMPLE POINT

POTENTIALLY JURISDICTIONAL FEATURES

- SEASONAL POOL (600 FT^2)
- CULVERT (2' x 80')
- DITCH (40' x 3')
- HIGH TIDE LINE
- HIGH TIDE LINE (LOCATED UNDER A PIER)

FIGURE 3

Oak to Ninth Project

Clean Water Act
Jurisdictional Delineation -
Project Site Overview

P:\SIP433\g\JurisdictionalDelineation.dwg (8/18/05) A-size

NOTES:

1. Topography on this map is based on City of Oakland datum (OCD) (0.00 ft OCD=3.00 feet NGVD 1929);(0.00 ft OCD=5.88 feet Mean Low Low Water [MLLW])
2. The High Tide Line is approximately 6.44 feet above MLLW (0.56 feet OCD) at this location .
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LSA

LEGEND

- PROJECT BOUNDARY
- SP5 WETLAND SAMPLE POINT
- SP3 NON-WETLAND SAMPLE POINT

POTENTIALLY JURISDICTIONAL FEATURES

- SEASONAL POOL (600 FT^2)
- CULVERT (2' x 80')
- DITCH (40' x 3')
- HIGH TIDE LINE
- HIGH TIDE LINE (LOCATED UNDER A PIER)

N

0 200

FEET

SOURCE: USGS 7.5' QUAD - EL TORO, 1988

FIGURE 3A

Oak to Ninth Project

Clean Water Act Jurisdictional Delineation

P:\SIP433\g\JurisdictionalDelineation.dwg (8/18/05) A-size - a

NOTES:

1. Topography on this map is based on City of Oakland datum (OCD) (0.00 ft OCD=3.00 feet NGVD 1929);(0.00 ft OCD=5.88 feet Mean Low Low Water [MLLW])
2. The High Tide Line is approximately 6.44 feet above MLLW (0.56 feet OCD) at this location .
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LSA

LEGEND

- PROJECT BOUNDARY
- SP5 WETLAND SAMPLE POINT
- SP3 NON-WETLAND SAMPLE POINT

POTENTIALLY JURISDICTIONAL FEATURES

- SEASONAL POOL (600 FT^2)
- CULVERT (2' x 80')
- DITCH (40' x 3')
- HIGH TIDE LINE
- HIGH TIDE LINE (LOCATED UNDER A PIER)

N

0 200

FEET

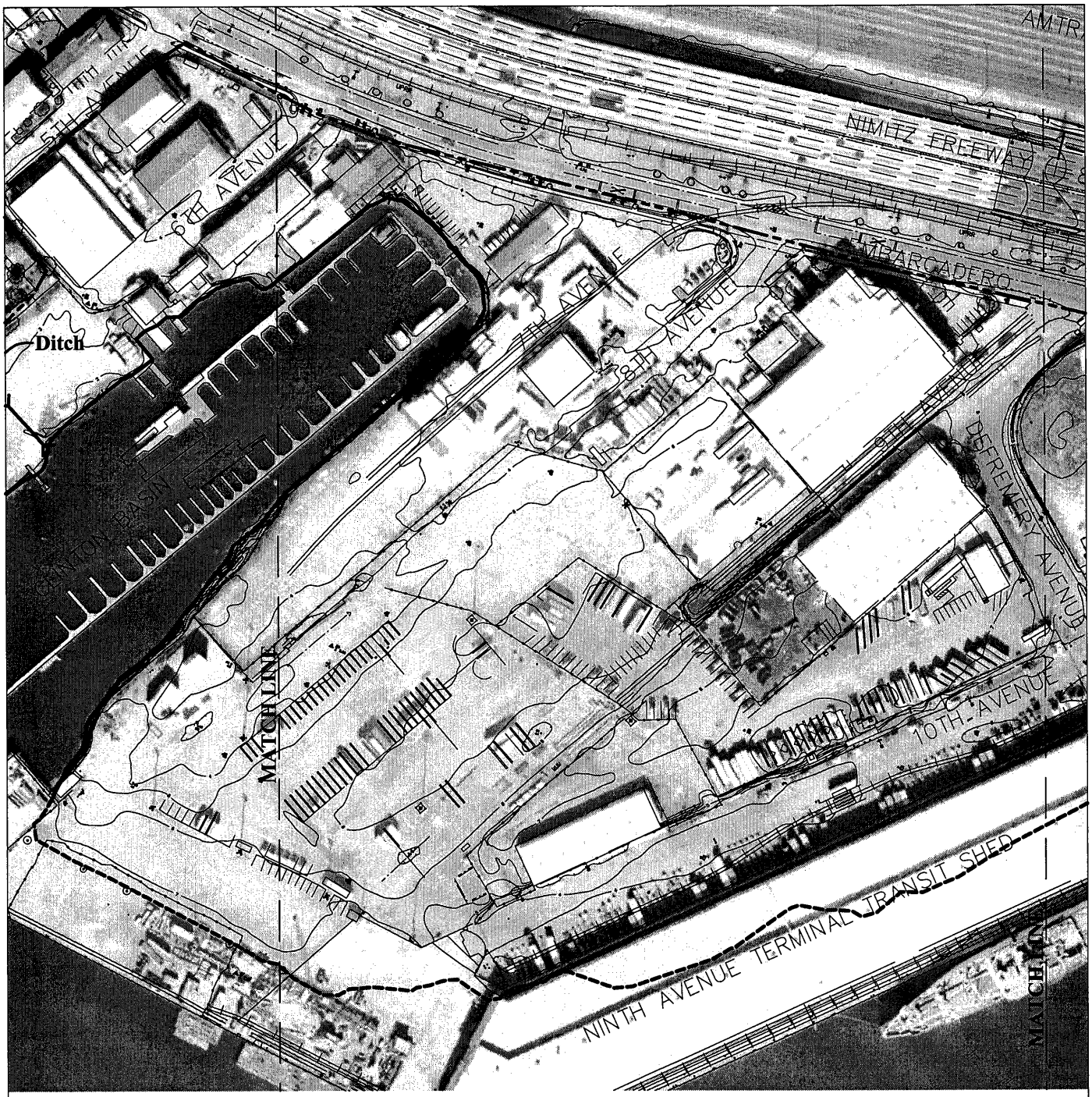
SOURCE: USGS 7.5' QUAD - EL TORO, 1988

FIGURE 3B

Oak to Ninth Project

Clean Water Act Jurisdictional Delineation

P:\SIP433\g\JurisdictionalDelineation.dwg (8/18/05) A-size - b



NOTES:

1. Topography on this map is based on City of Oakland datum (OCD) (0.00 ft OCD=3.00 feet NGVD 1929);(0.00 ft OCD=5.88 feet Mean Low Low Water [MLLW])
2. The High Tide Line is approximately 6.44 feet above MLLW (0.56 feet OCD) at this location .
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4. This delineation is subject to verification by the U.S. Army Corps of Engineers. Verification still pending as of August 16, 2005.

LSA

LEGEND

- PROJECT BOUNDARY
- SP5 WETLAND SAMPLE POINT
- SP3 NON-WETLAND SAMPLE POINT

POTENTIALLY JURISDICTIONAL FEATURES

- SEASONAL POOL (600 FT^2)
- CULVERT (2' x 80')
- DITCH (40' x 3')
- HIGH TIDE LINE
- HIGH TIDE LINE (LOCATED UNDER A PIER)

N

0 200
FEET

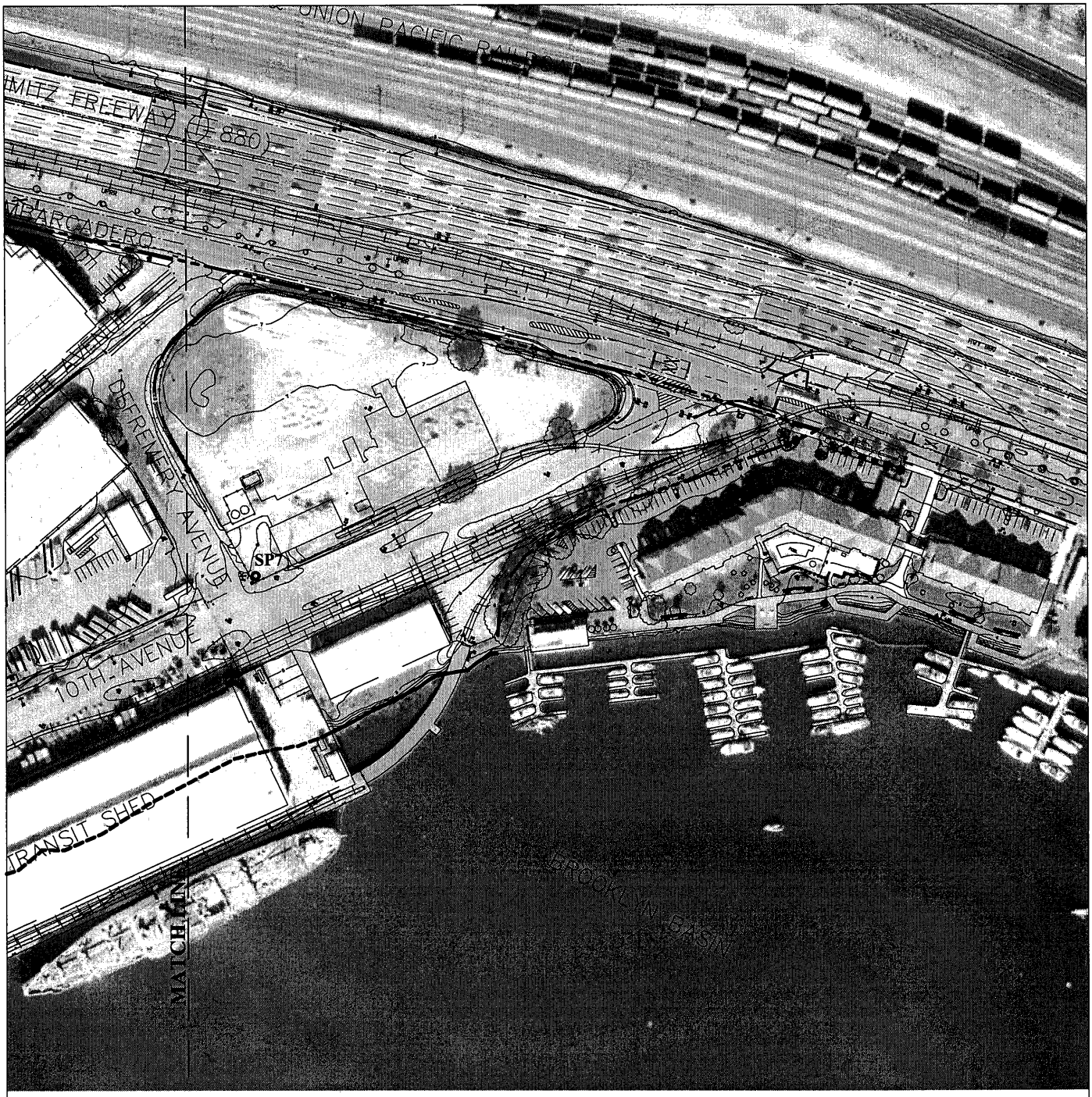
SOURCE: USGS 7.5' QUAD - EL TORO, 1988

FIGURE 3C

Oak to Ninth Project

Clean Water Act Jurisdictional Delineation

P:\SIP433\g\JurisdictionalDelineation.dwg (8/18/05) A-size - c



NOTES:

1. Topography on this map is based on City of Oakland datum (OCD) (0.00 ft OCD=3.00 feet NGVD 1929);(0.00 ft OCD=5.88 feet Mean Low Low Water [MLLW])
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LSA

LEGEND

- PROJECT BOUNDARY
- SP5 WETLAND SAMPLE POINT
- SP3 NON-WETLAND SAMPLE POINT

POTENTIALLY JURISDICTIONAL FEATURES

- SEASONAL POOL (600 FT²)
- CULVERT (2' x 80')
- DITCH (40' x 3')
- HIGH TIDE LINE
- HIGH TIDE LINE (LOCATED UNDER A PIER)

N

0 200
FEET

SOURCE: USGS 7.5' QUAD - EL TORO, 1988

FIGURE 3D

Oak to Ninth Project

Clean Water Act
Jurisdictional Delineation

P:\SIP433\g\JurisdictionalDelineation.dwg (8/18/05) A-size - d

OAK TO NINTH AVENUE PROJECT

Final Environmental Impact Report

State Clearinghouse No. 2004062013

Prepared for:
City of Oakland CEDA

February 2006

CITY OF OAKLAND

Community and Economic Development Agency, Planning & Zoning Services Division
250 Frank H. Ogawa Plaza, Suite 3315, Oakland, California, 94612-2032

NOTICE OF AVAILABILITY OF FINAL ENVIRONMENAL IMPACT REPORT FOR THE OAK TO NINTH AVENUE PROJECT

TO:	All Interested Parties
SUBJECT:	Notice of Availability of Final Environmental Impact Report for the Oak to Ninth Avenue Project
CASE NUMBER:	ER04-0009
PROJECT LOCATION:	Approximately 64.2 acres bound by Embarcadero Road, the Oakland Estuary, Fallon Street, and 10th Avenue. APN Nos. 0000-0430-001-02, portion of 0000-0430-001-04, 0000-0460-003, 0000-0460-004, 0000-0465-002, and a portion of 0000-0470-002.
PROJECT SPONSOR:	Oakland Harbor Partners, LLC (Signature Properties and Reynolds & Brown)

BRIEF DESCRIPTION OF PROJECT:
The project would construct approximately 3,100 residential dwelling units, approximately 200,000 square feet of ground-floor retail/commercial space, and approximately 28.4 acres of parks and open spaces (including improvements to the existing Estuary Park). The project would substantially demolish the existing 180,000 square-foot Ninth Avenue Terminal building (an historic resource) and would retain a minimum of 15,000 square feet of the Terminal's Bulkhead Building envisioned to contain a variety of uses consistent with the Tidelands Trust. A continuous public pedestrian trail and bicycle facility along the project's waterfront (excluding parcels not owned by the City/Port of Oakland or the project sponsor) as a segment of the Bay Trail. The majority of existing uses and structures on the project site would be removed or demolished.

ENVIRONMENTAL REVIEW: On September 1, 2005, a Draft EIR was published for this project, and the public review period ran until October 24, 2005. All comments that were received have been compiled and responded to in a Final EIR, along with changes and clarifications to the Draft EIR. The preparation of the Final EIR has been overseen by the Environmental Review Officer or his/her representative, and the conclusions and recommendations in the document represent the independent conclusions and recommendations of the City. Copies of the Final EIR are available for distribution to interested parties at no charge at the Community and Economic Development Agency, Planning Division, 250 Frank H. Ogawa Plaza, Suite 3315, Oakland, CA 94612, Monday through Friday, 8:30 a.m. to 5:00 p.m. The Final EIR is also available on the City of Oakland website at www.oaklandnet.com under "Oak to Ninth EIR" on the front page.

PUBLIC HEARING: The Oakland Planning Commission will hold public hearing to consider approval of the Oak to Ninth Avenue Project. This action consists of the certification of the Final EIR and consideration of the planning entitlements for the project. When the City confirms the date for the hearing, it will publish a public notice of the meeting date, time, and location in advance, as required by law. For further information, please contact Margaret Stanzione at (510) 238-4932 or mstanzione@oaklandnet.com.

February 1, 2006 Claudia Cappio, Development Director

OAK TO NINTH AVENUE PROJECT

Final Environmental Impact Report

State Clearinghouse No. 2004062013

Prepared for:
City of Oakland CEDA

February 2006

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ESA

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CHAPTER I
Introduction

A. CEQA Process

On September 1, 2005, the City of Oakland (Lead Agency) released for public review a Draft Environmental Impact Report (Draft EIR or DEIR) for the Oak to Ninth Avenue Project (ER04-0009). The 54-day public review and comment period on the Draft EIR began on September 1, 2005, and closed on October 24, 2005.

The City of Oakland Planning Commission held a public hearing on the Draft EIR on September 28, 2005. The Oakland Parks and Recreation Commission (PRAC) held a public hearing on the Draft EIR on October 12, 2005. The Oakland Landmarks Preservation Advisory Board (LPAB) held a public hearing on the Draft EIR on October 17, 2005.[1]

The Draft EIR for the Oak to Ninth Avenue Project, together with this response to comments document, constitute the Final Environmental Impact Report (Final EIR or FEIR) for the project.[2] The Final EIR is an informational document prepared by the Lead Agency that must be considered by decisionmakers (including the Oakland City Planning Commission and City Council) before approving or denying the proposed project.

The City of Oakland (Lead Agency) has prepared this document pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15132 of the CEQA Guidelines specify the following:

> "The Final EIR shall consist of:
>
> (a) The Draft EIR or a revision of that draft.
>
> (b) Comments and recommendations received on the Draft EIR either verbatim or in a summary.
>
> (c) A list of persons, organizations, and public agencies commenting on the Draft EIR.

---

1 On January 9, 2006, the LPAB held a public hearing regarding the historic designation of specific properties s on the project site. These determinations are pertinent to the Cultural Resources analysis in the EIR, but do not, in and of themselves, address the analysis in the DEIR. To the extent that information is changed in the DEIR as a result of determinations made by the LPAB, it is addressed in this Final EIR.

2 The commonly used term "EIR" is used in this document to refer to the Draft EIR combined with this document. This document is referred to as "Final EIR," its commonly used and practical title.

(d) The response of the Lead Agency to significant environmental points raised in review and consultation process.

(e) Any other information added by the Lead Agency."

This Final EIR incorporates comments from public agencies and the general public, and contains appropriate responses by the Lead Agency to those comments.

B. Organization of the Final EIR

This document contains information that responds to issues and comments raised during the public comment period on the Draft EIR. Comments received after close of the public comment period, and appropriate responses thereto, are also included and noted as such. The document is organized as follows after this introductory chapter.

Chapter II, *New Project Variant and Environmental Effects*, describes an additional project variant of the Oak to Ninth Avenue Project described in the Draft EIR and contains the environmental analysis of the new project variant.

Chapter III, *Changes to the Draft EIR*, contains text changes to the Draft EIR. These are changes initiated by Lead Agency staff or resulting from comments on the Draft EIR.

Chapter IV, *Organizations and Persons Commenting on the Draft EIR*, contains a list of organizations and persons that submitted written comments or commented at the various public hearings on the Draft EIR.

Chapter V, *Master Responses*, contains master responses to recurring topic areas raised in multiple written or spoken comments on the Draft EIR.

Chapter VI, *Other Responses to Written Comments on the Draft EIR*, contains comment letters received during the comment period (and within a reasonable timeframe after). The responses to the set of comments in each letter are provided following the letter.

Chapter VII, *Planning Commission Hearing Comments*, contains a transcript of the public comments received at the Oakland Planning Commission public hearing on the Draft EIR and responses to those comments.

Chapter IX, *Parks and Recreation Commission Hearing Comments*, contains a transcript of the public comments received at the Oakland PRAC public hearing on the Draft EIR and responses to those comments.

Chapter X, *Landmarks Preservation Advisory Board Hearing Comments*, contains a transcript of the public comments received at the LPAB public hearing on the Draft EIR and responses to those comments.

Appendices are included at the end of this report.

CHAPTER II

New Project Variant and Environmental Effects

In response to input received from the City as a result of its urban design analysis of the proposed project, the project sponsor has developed an additional project variant for the configuration of Parcel N.[1] The variant configuration is intended to reduce the amount of paved internal roadway area surrounding the building, which limited public access and separated the parcel from Estuary Park located immediately south of Parcel N. Additionally, the building design is modified to shift some of much of the building's mass and height away from the park and the waterfront. Parcel N is located directly west of the Jack London Aquatic Center (Aquatic Center) and north of Estuary Park.

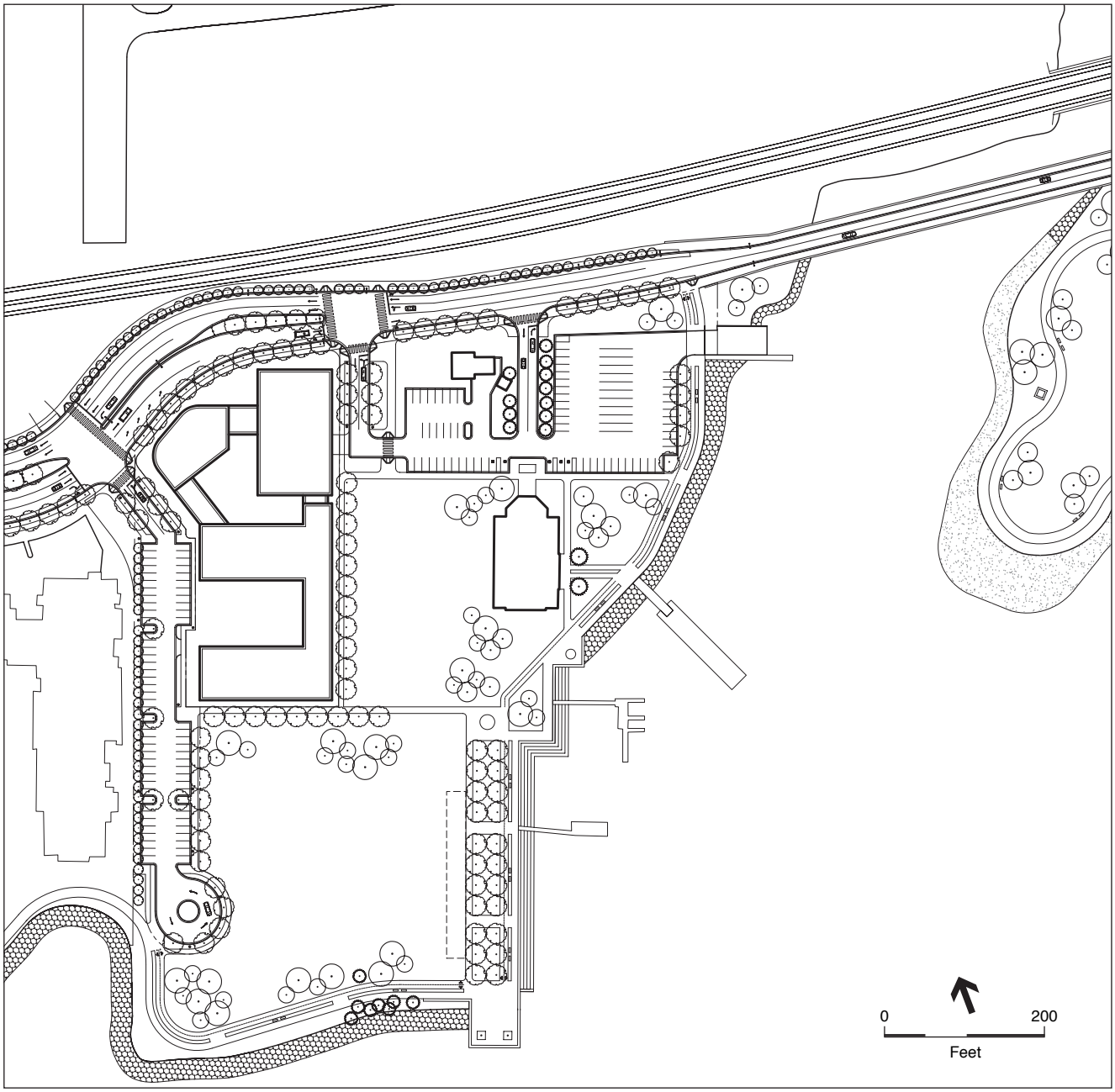
A. Description of Parcel N Variant

Shown below in **Figure II-1**, the new project variant presents a modified site plan configuration for Parcel N. Like the proposed project described in the Chapter III (Project Description) of the DEIR (and shown in **Figure II-2** of this Chapter), development on Parcel N would continue to provide up to 300 dwelling units and up to approximately 15,000 square feet of ground-floor retail. Approximately 300 onsite parking spaces (on-street and within the building) would continue to be provided to serve the uses on the site.

In the Parcel N site configuration for the project (as analyzed in the DEIR), streets with parking would border the west property line, the north edge of Estuary Park, and the east edge of the parcel, adjacent to the Jack London Aquatic Center and its associated parking lot. This street configuration created a "U" around the Parcel N building, and access to the site would occur at two new intersections at Embarcadero. The eastern intersection would also provide secondary access to the existing Aquatic Center parking lot.

In the Parcel N Variant, vehicular access to Parcel N from this intersection is prohibited and would serve as a secondary access to the Aquatic Center parking lot only. Access to Parcel N would be from the western intersection, and the street and associated on-street parking would abut the west boundary of the project site and extend further south along Estuary Park, similar to

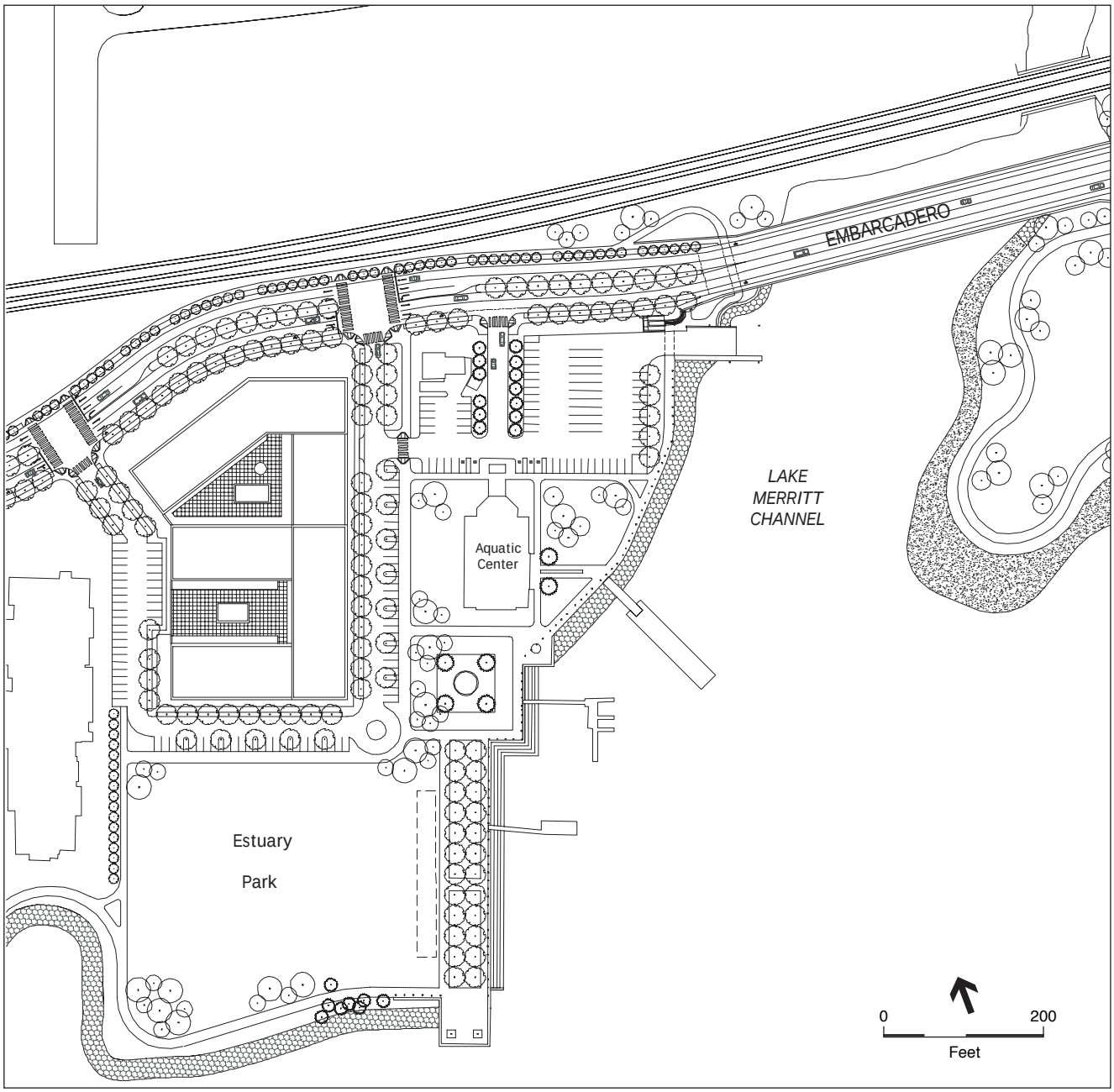
1 The City retained Ken Kay Associates, an Urban Planning, Landscape Architecture, and Urban Design firm to assist staff with an urban design analysis of the proposed site plan for the project. The outcomes were presented and discussed at the City Planning Commission hearings of December 14, 2005 and January 25, 2006.



SOURCE: ROMA Design Group in association with
MVE Architects, Moffatt & Nichol and BKF Engineers

Oak to Ninth Avenue . 202622

Figure II-1
Variant Parcel N Site Plan



SOURCE: ROMA Design Group

Oak to Ninth Avenue . 202622

Figure II-2
Project Parcel N Site Plan
(as analyzed in DEIR)

current conditions. With removal of the driveway north of Estuary Park, the park area could be increased to the north along the west side of the Aquatic Center. Parcel N would be reduced from 2.4 acres to approximately 1.85 acres (or 0.55 acres). Slight modifications would occur to the Embarcadero roadway alignment along the Parcel N frontage (compared to that depicted in the DEIR and shown in Figure II-2 in this FEIR document).

As shown comparing **Figure II-3** and **Figure II-4** (photosimulations of the Parcel N variant and Project Parcel N analyzed in the DEIR, respectively), the distribution of building height within the building would change, and the variant would introduce a 185-foot tower at the northeast corner of the building along the Embarcadero. The building height on other portions of the buildings would vary, with a maximum height of 64 feet (compared to a maximum 86 feet in the Project Parcel N analyzed in the DEIR). This tower would be approximately 150 feet wide on its east and west facades, and approximately 75 feet wide on its north and south facades.

As with the Increased Height Variant analyzed in the DEIR, the proposed Parcel N Variant is presented as a variation of the project for the City to consider. The environmental effects of the new variant, highlighting the extent to which they differ from those presented in the DEIR, are discussed below.

B. Environmental Effects

The Parcel N Variant would have the same impacts identified and analyzed in the DEIR for the proposed project. A summary analysis of the potential impacts of the Parcel N Variant is provided below. Emphasis is provided to the areas most potentially affected by the Parcel N changes described: circulation, views and scenic vistas, and shadow.

Land Use, Plans, and Policies

Compared to the proposed project, the variant would not result in changes to the Land Use, Plans, and Policies impacts identified for the project in the DEIR since no changes in land use or development program would occur.

Transportation, Circulation, and Parking

The variant would not result in changes to the transportation, circulation, and parking impacts identified for the project in the DEIR since no changes in land use or development program are proposed. The number of dwelling units, parking spaces, and square footage of retail/commercial uses would remain the same as with the proposed project. The change in site configuration would not result in the same impacts identified for the project related to site access and circulation, as discussed starting on DEIR page IV.B-57.

Air Quality and Meteorological Conditions

Since the variant would have the same traffic and circulation characteristics as the proposed project, it would generate the same number of vehicle trips and criteria air pollutant emissions. No change would result to the impacts identified in the DEIR.

Hydrology and Water Quality

The variant would not result in changes to the amount of impervious surfaces onsite, and would continue to remove existing uses and onsite handling and storage of hazardous material, improve the onsite storm drain system, and implement measures to treat runoff. As a result, the variant would result in the same water quality and hydrology impacts during construction and operations as identified for the project.

Cultural Resources

The variant would not affect the proposed substantial demolition of the Ninth Avenue Terminal. No historic resources are located in the area of Parcel N. Therefore, the variant would have the same cultural resources impacts as identified for the project.

Geology, Soils, and Seismicity

Building development of residential use would still occur with the variant, as with the project, therefore the same impacts relative to geology, soils, and seismic hazards that would occur with the project would occur with the variant.

Noise

Since the variant would have the same traffic and circulation characteristics and the internal street along the property line is generally consistent with that proposed by the project, the variant would therefore result in the same noise impacts as identified in the DEIR. The variant, like the project, would result in a significant, unavoidable impact because it locates residential uses in a noise environment that exceeds the City's "normally acceptable" standard.

Hazardous Materials

The variant would involve construction activities and would therefore have the same construction-related impacts identified in the DEIR. The project would still expose the public to hazardous materials during construction. Remediation would still occur, and any operational hazardous materials impacts would be less than significant, as with the project.

Biological Resources

The variant would not change the overall location of the development on Parcel N or any other characteristics that may affect biological resources, therefore the same impacts identified in the DEIR would occur.

Population, Housing, and Employment

The variant would not change the total number of housing units, population, or number or type of jobs proposed to occur. Therefore, the project would have the same population, housing, and employment impacts identified in the DEIR for the proposed project.

Visual Quality and Shadows

Visual Character

While the relative heights of the multiple building elements would change with the variant, compared to the proposed project, the overall massing of the building and its replacement of existing land uses and structures would not change the visual character impact identified in the DEIR.

Views and Scenic Vistas

Figure II-3 simulates the Parcel N Variant as viewed from the Amtrak pedestrian bridge at Jack London Square. This viewpoint is the same as that provided as Figure IV.K-4 of the Draft DEIR (and provided as **Figure II-4** in this Chapter) and provides a medium range view of the parcel. This viewpoint shows the widest building façade – the north-south façade being narrower. Compared to the DEIR project, the reconfigured Parcel N building would reduce the building height at the south portion of the site from up to 86 feet maximum to 64 feet maximum (adjacent to Estuary Park and the adjacent residential condominiums). Along the Embarcadero, the tower would be a new prominent element at up to 185 feet tall (other project towers up to 240 feet tall), and a lower podium approximately (56 to 64 feet maximum) would be situated at the initial east-bound approach to the site, as proposed in the DEIR project. Compared to the DEIR project, the Parcel N Variant would not result in a change to the resulting project views from this vantagepoint (looking at the building's broadest façade) that would not otherwise occur with the project. The same degree of existing long-range view of the distant hills would be blocked. Overall, Parcel N would result in noticeable changes to existing views, but would not substantially affect any scenic vista, including the long-range views of the East Bay hills

Existing view from Amtrak pedestrian bridge looking southeast (VP3)

Visual simulation of proposed project

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-3
Project Parcel N Photo Simulation

Existing view from Amtrak pedestrian bridge looking southeast (VP3)

Visual simulation of proposed project

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-4
Project Parcel N Photo Simulation
(as analyzed in DEIR)

Shadow

As discussed above, the variant would shift the relative heights of the multiple building elements as well as overall massing compared to the project. These changes would alter the shadow patterns cast by the project throughout the year and times of day. Situated along the western portion of the site, Parcel N development would cast shadows eastward toward the adjacent residential development (shadow-sensitive area) and northward on and across the Embarcadero. A set of variant shadow diagrams (**Figures II-5** through **II-16**) is provided at the end of this Chapter. Shadow diagrams for the proposed project as analyzed in the DEIR are provided in **Appendix C** of this FEIR.)

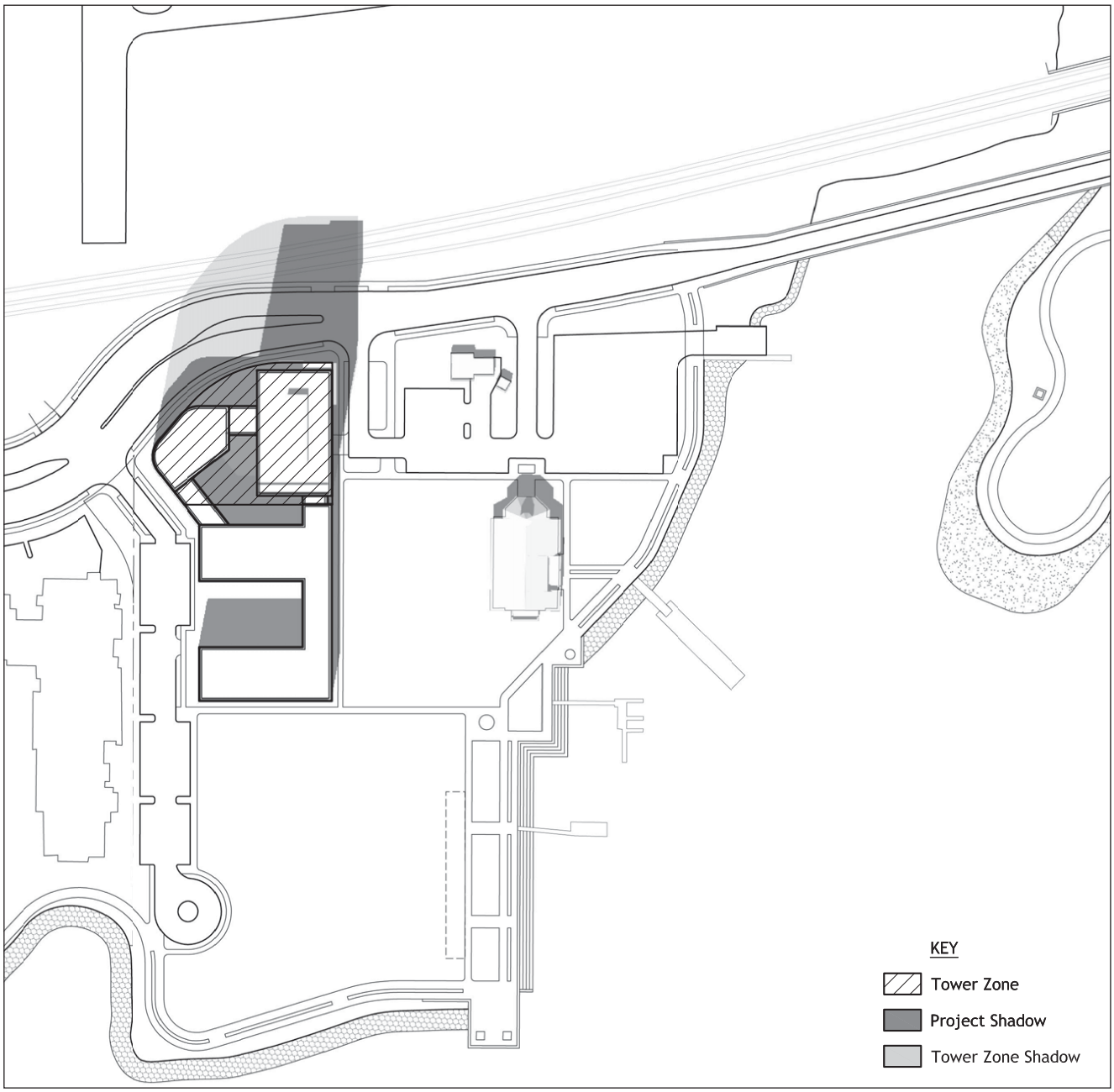
The noticeable changes in shading that would occur under the variant compared to the proposed project would occur to the west as a result of "opening" up the solid west-facing building façade and introduction of the new tower along the Embarcadero. During mornings in March, September, and December (worst-cases) (**Figures II-5**, **II-11**, and **II-14**, respectively), variant shadows on the adjacent residential property to the west would be less than that that cast by the project shadow (**Figures IV.K-20**, **IV.K-26**, and **IV.K-29** in **Appendix C** of this FEIR). Shadow in this shadow-sensitive area would be in full sun by mid-day (around noon) all year as shown in **Figures II-6**, **II-12**, and **II-15**. Shadow from the new tower would cast shadow on or across the Embarcadero during the afternoons most of the year, however, this right-of-way and the area immediately north are not considered shadow-sensitive areas and no significant impact would occur.

Public Services and Recreation

The variant would not change the proposed total open space acreage proposed by the project and could result in area where existing Estuary Park could extend northward. Also, the development program for the site, in terms of dwelling units, population, or land uses under the variant would be the same as for the proposed project; therefore the variant would not change the public services and recreation impacts identified for the proposed project.

Utilities and Service Systems

Similar to public services impacts above, since the variant would not change the total number of dwelling units, population, or land uses impacts identified for public utilities and service systems would be the same as identified for the proposed project.

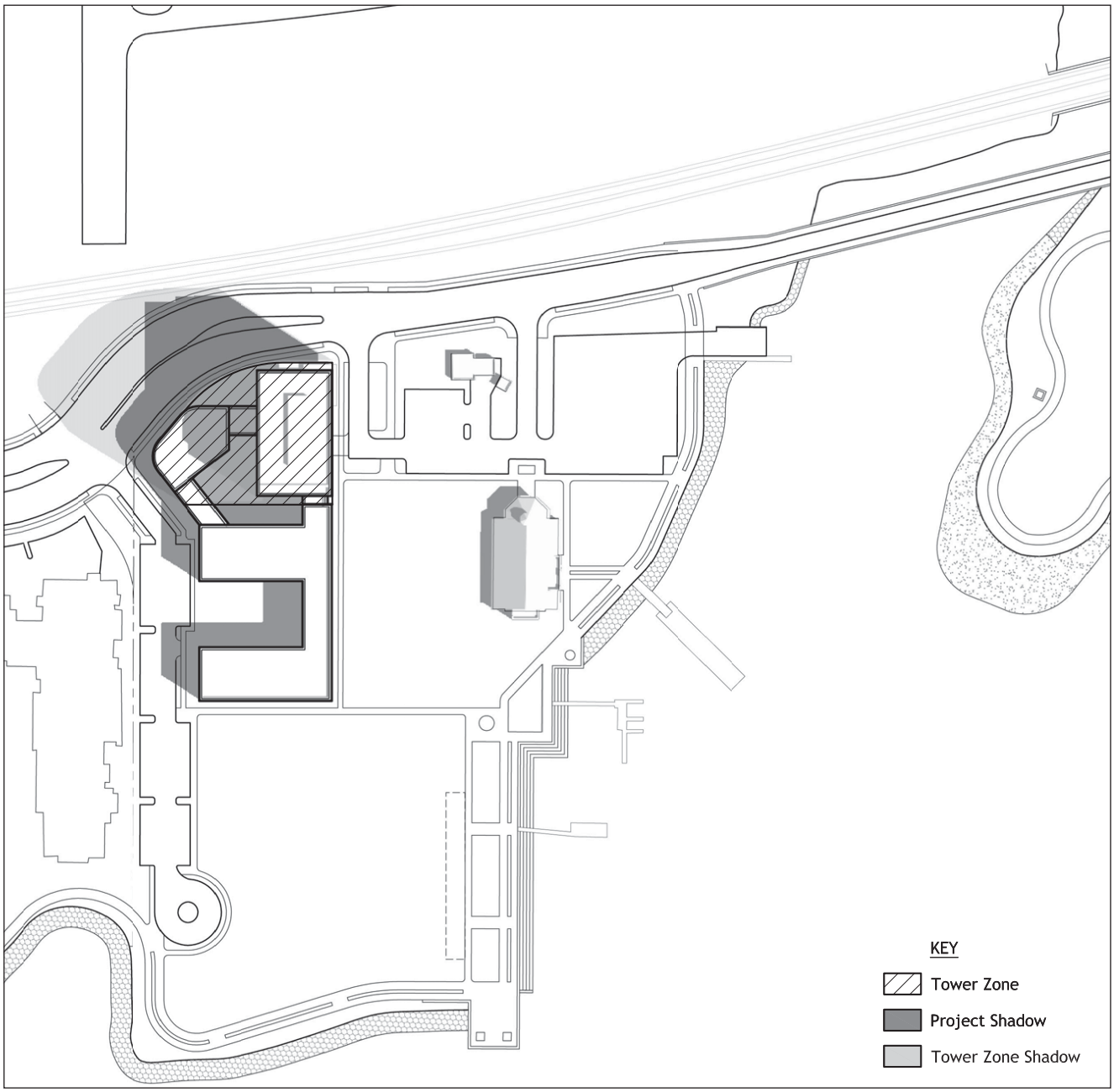


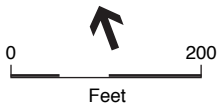
0 200
Feet

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-5
Variant Parcel N-
March Shadow Patterns, 9 am

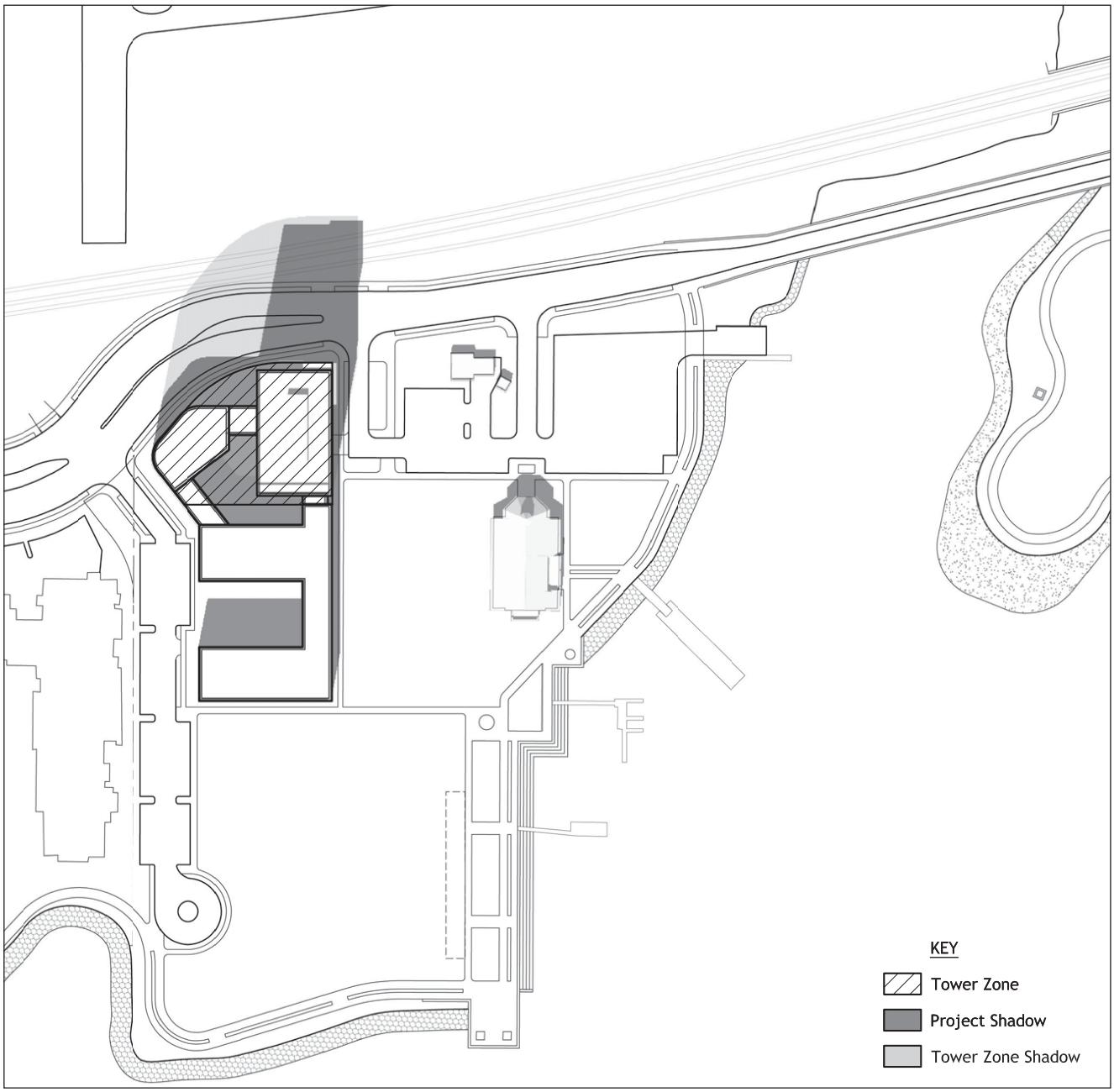




SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-6
Variant Parcel N-
March Shadow Patterns, 12 noon



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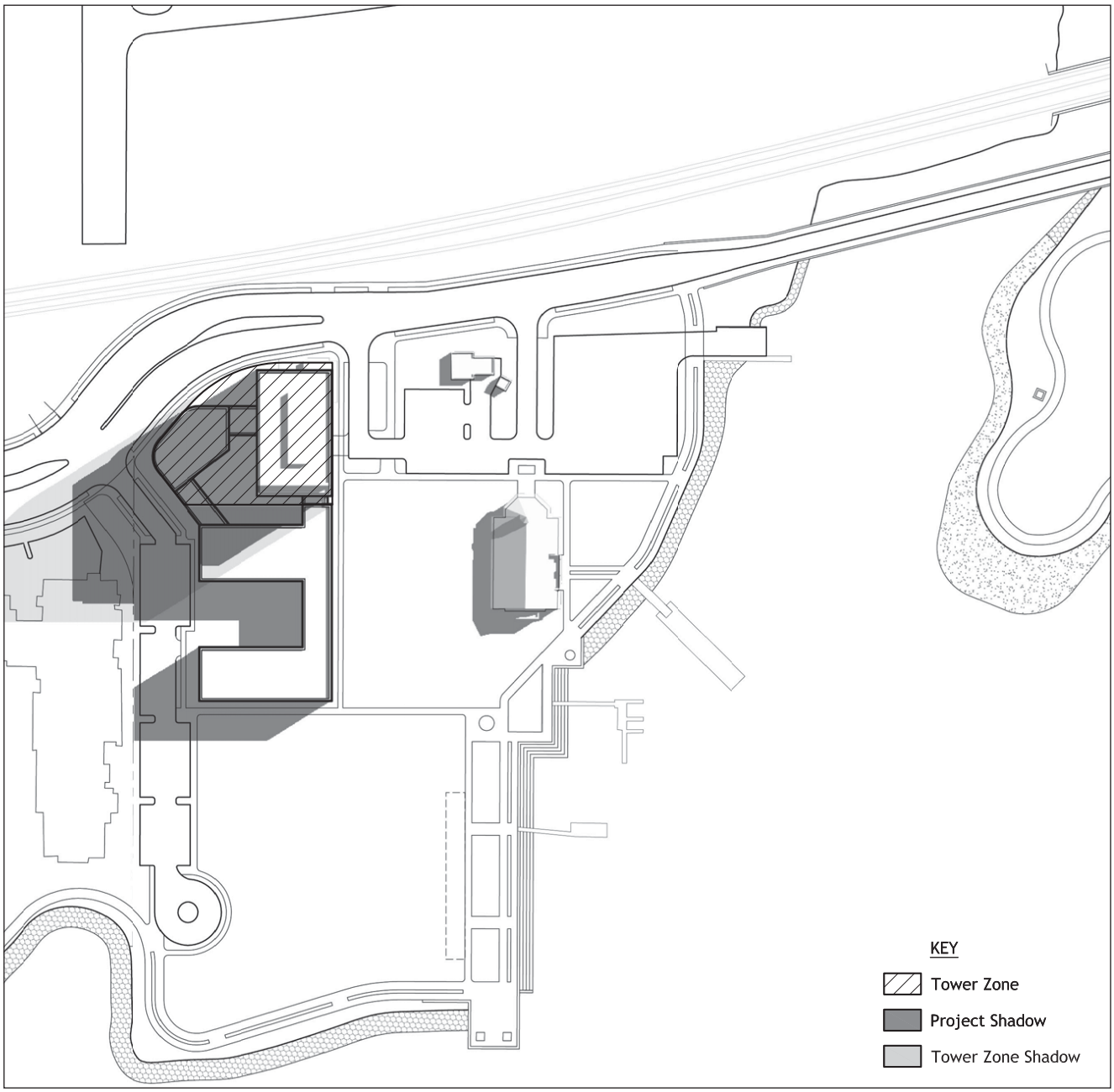
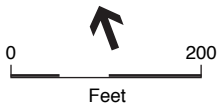
Feet

SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-7
Variant Parcel N-
March Shadow Patterns, 3 pm

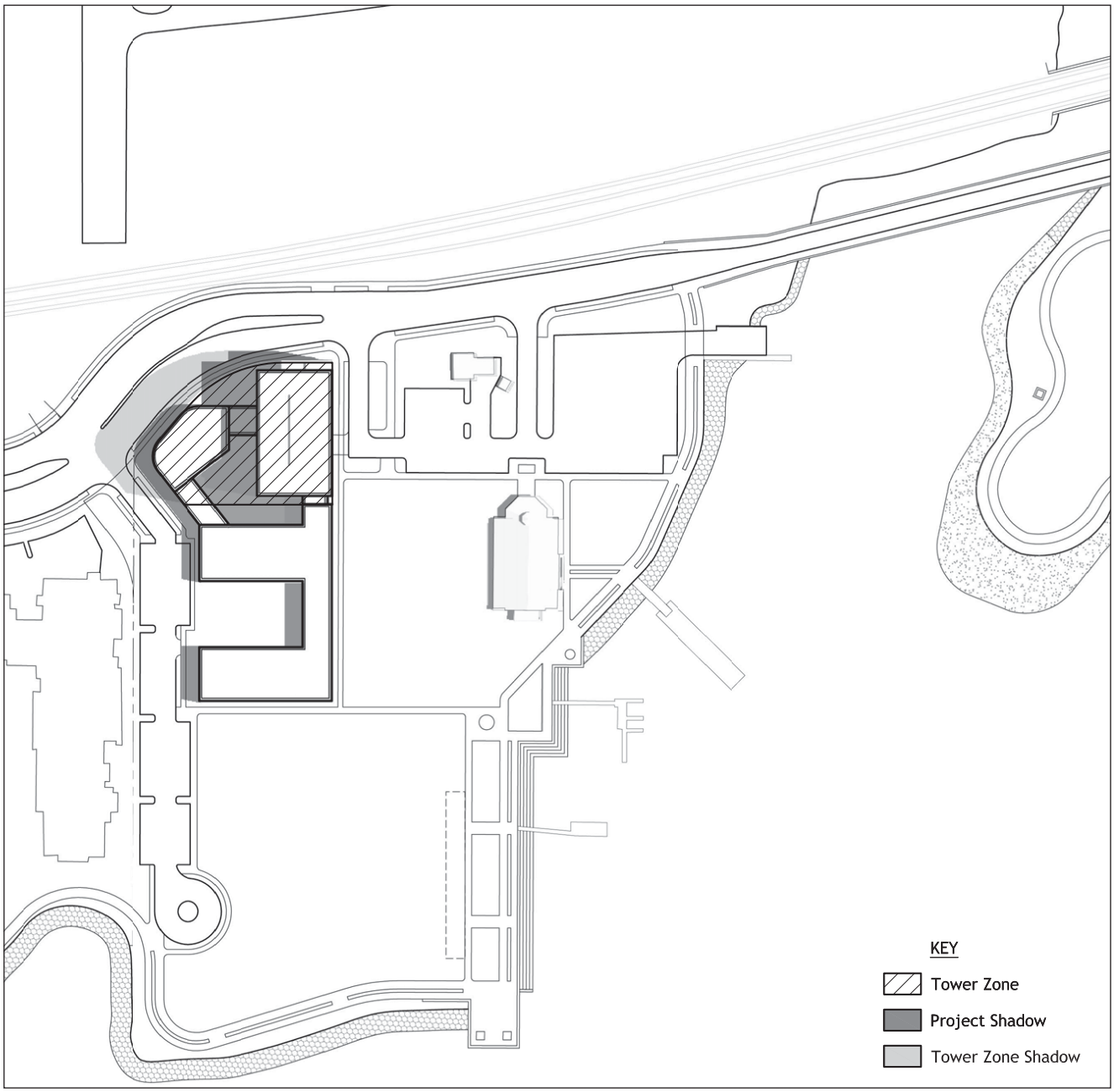


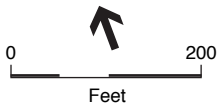


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-8
Variant Parcel N-
June Shadow Patterns, 9 am

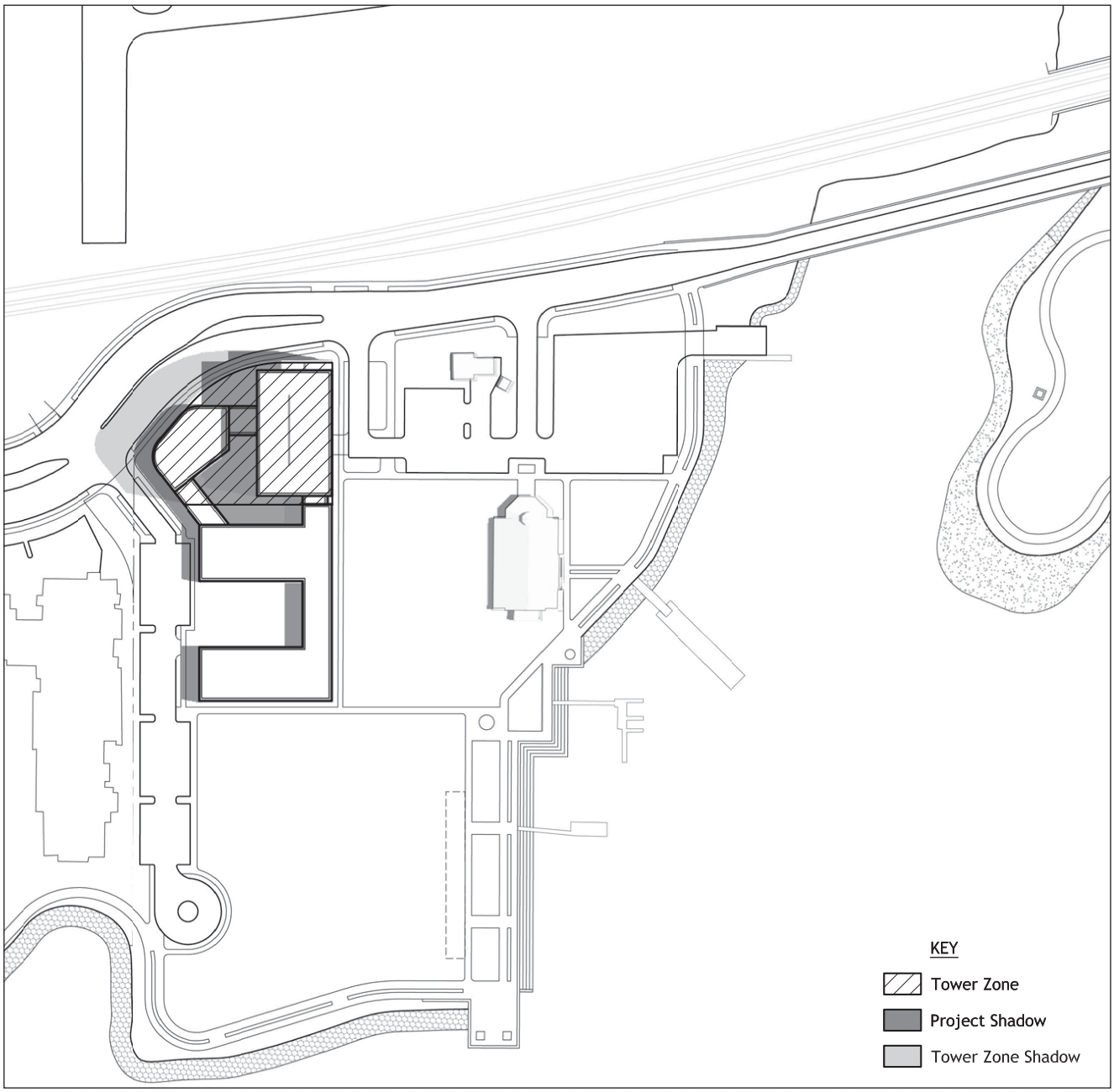


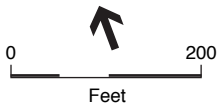


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-9
Variant Parcel N-
June Shadow Patterns, 12 Noon

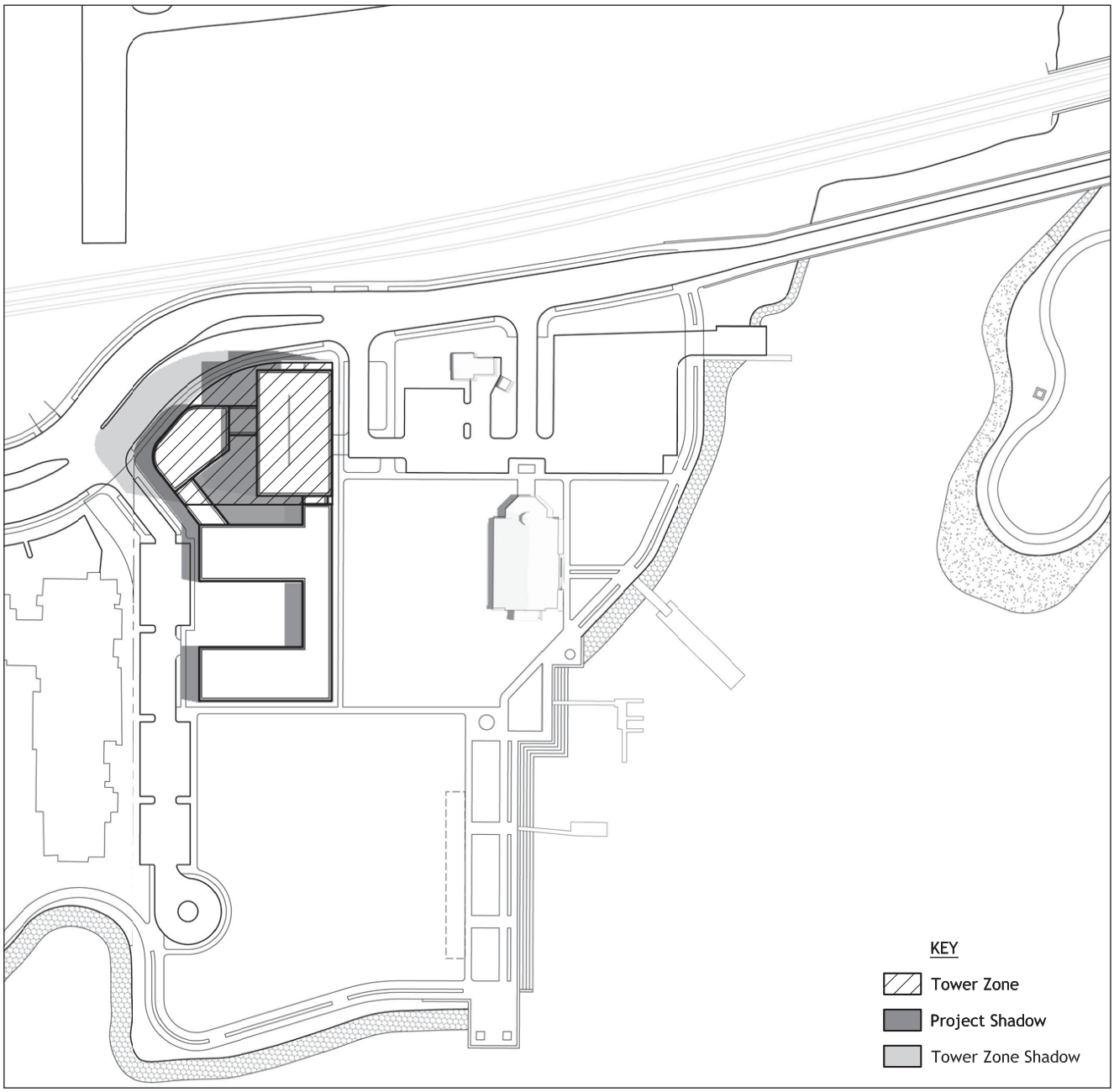


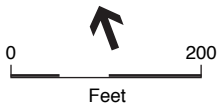


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-10
Variant Parcel N-
June Shadow Patterns, 3 pm

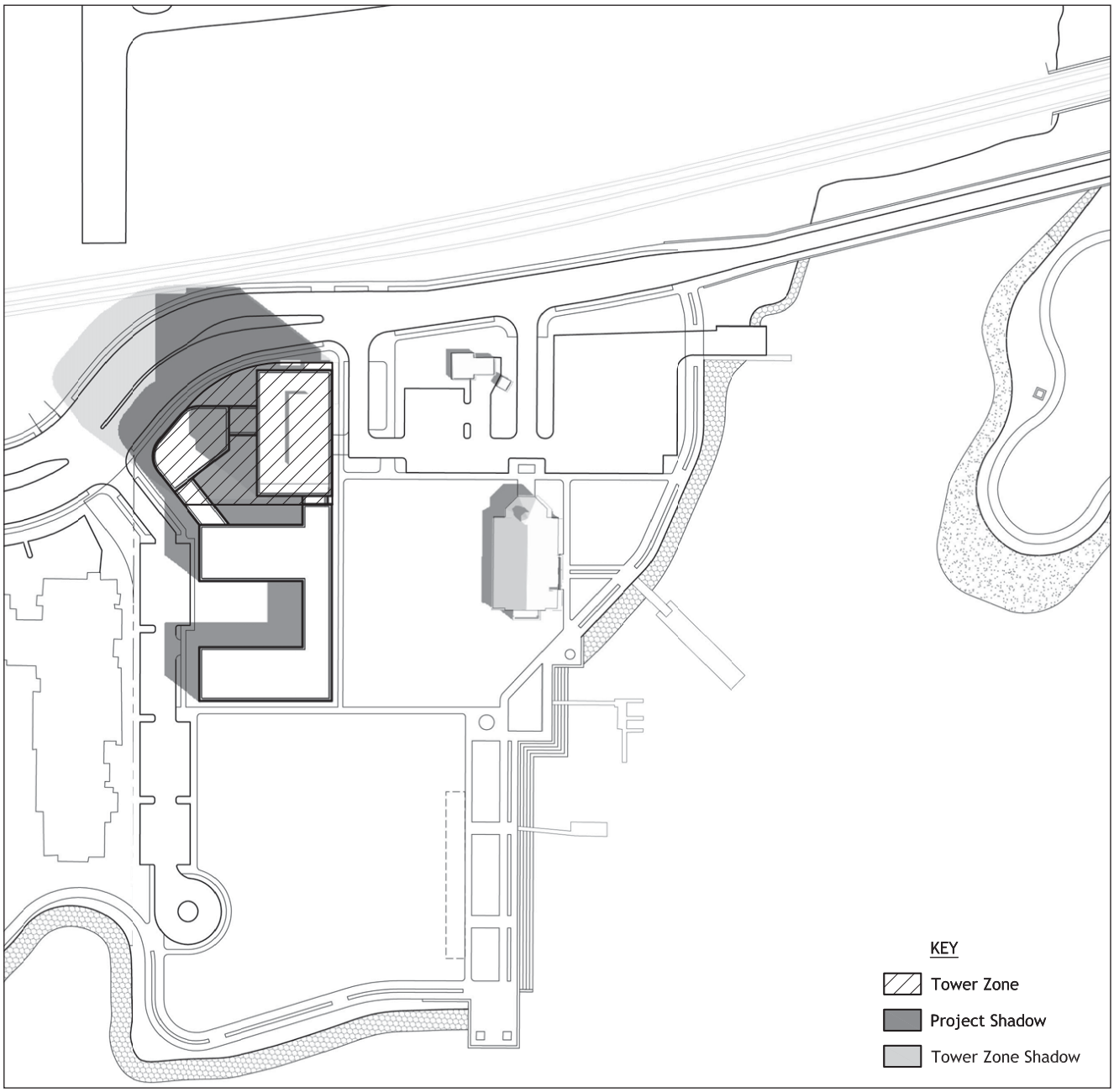


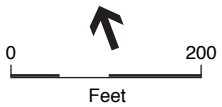


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-11
Variant Parcel N-
September Shadow Patterns, 9 am

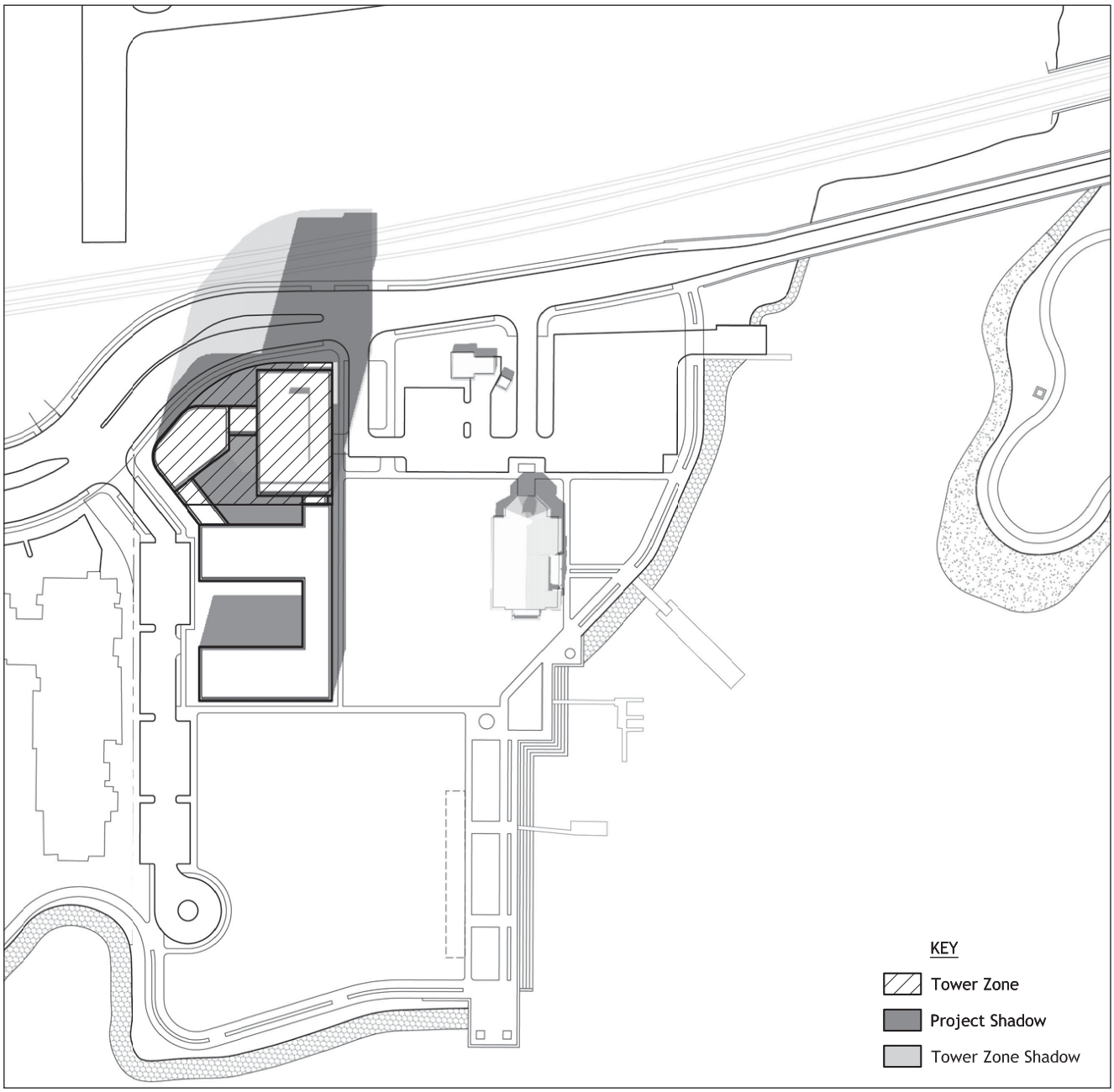


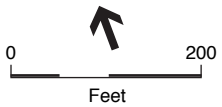


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-12
Variant Parcel N-
September Shadow Patterns, 12 noon

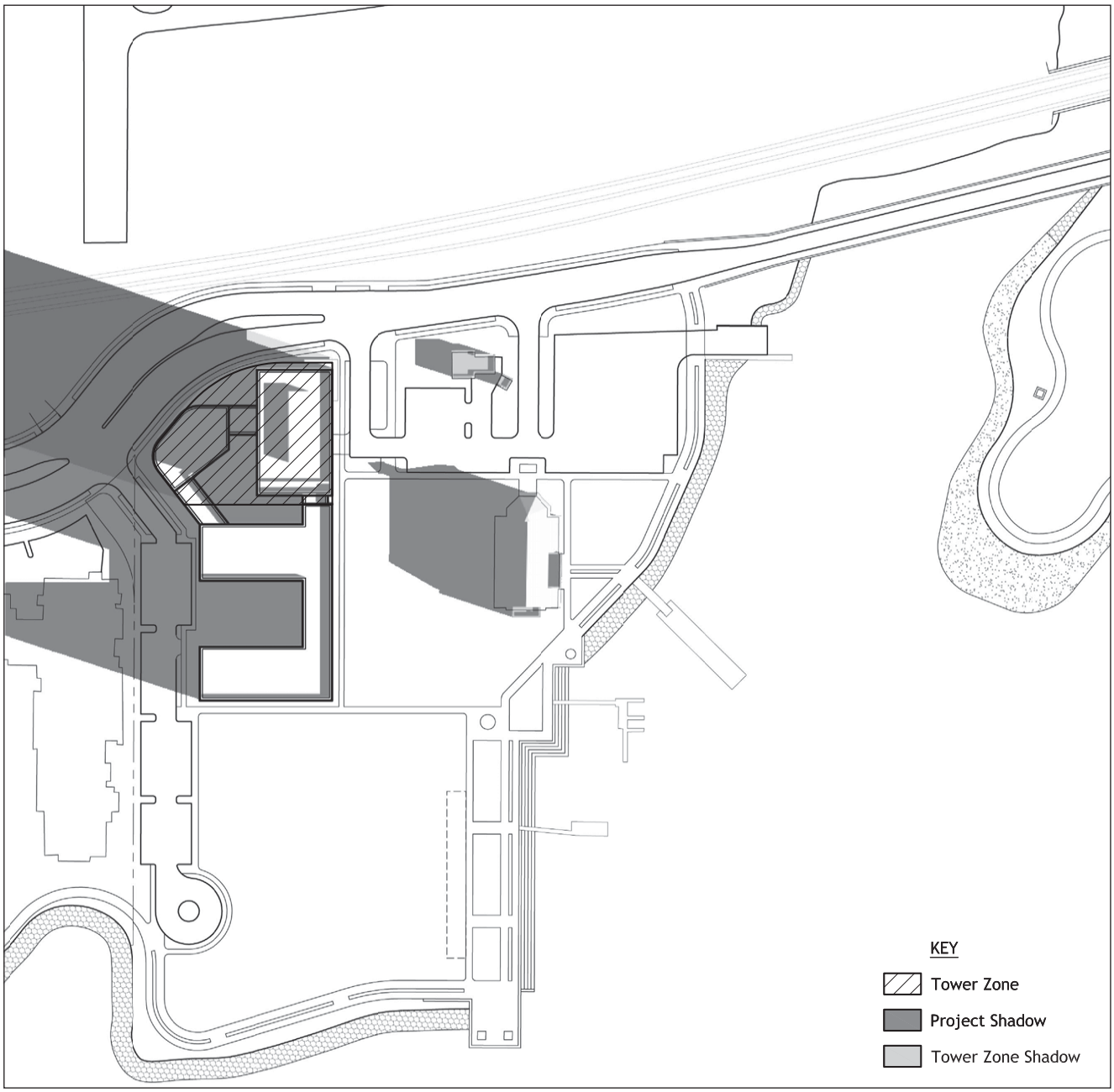


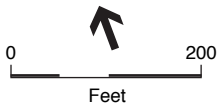


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-13
Variant Parcel N-
September Shadow Patterns, 3 pm

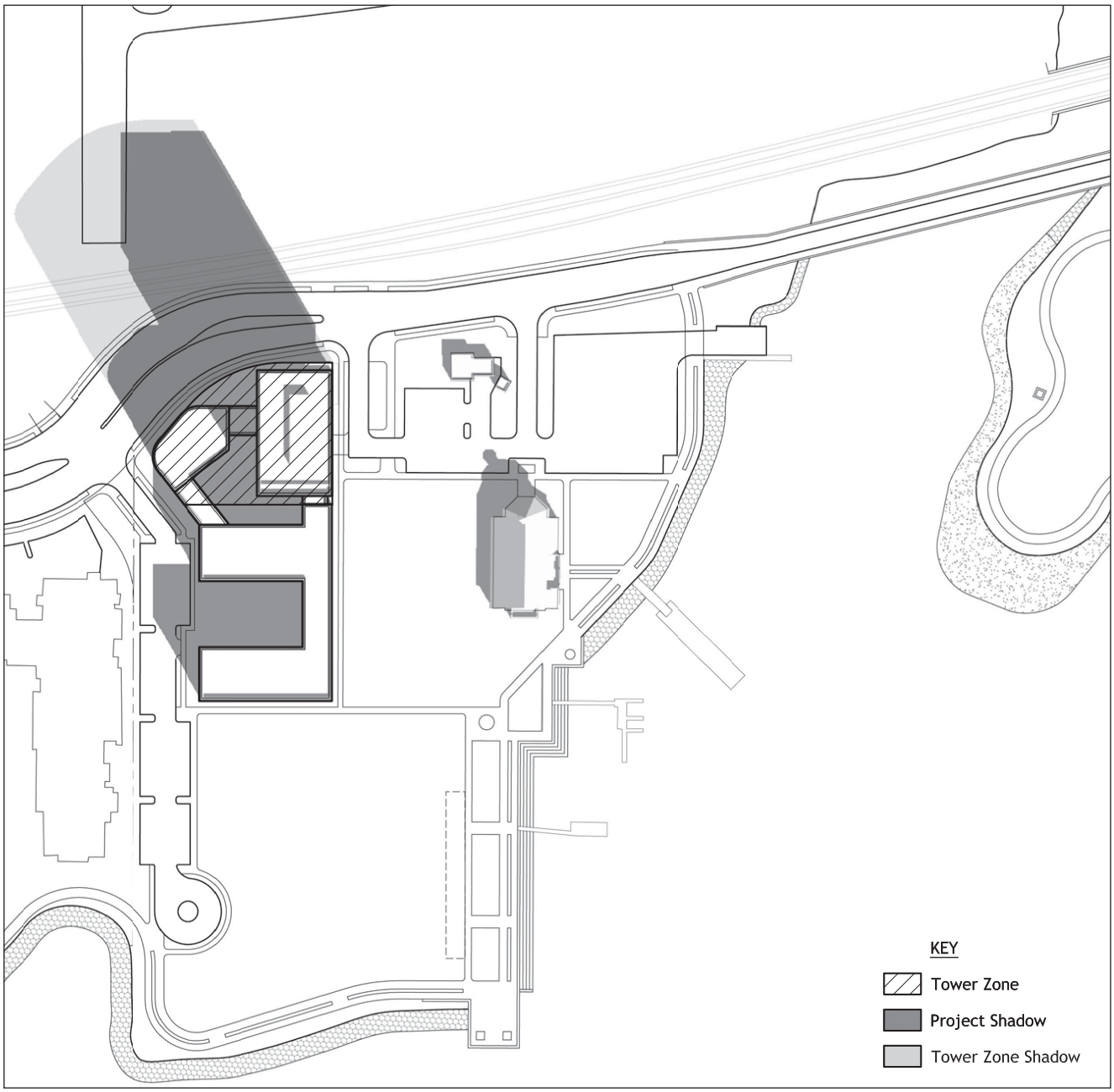


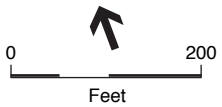


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-14
Variant Parcel N-
December Shadow Patterns, 9 am

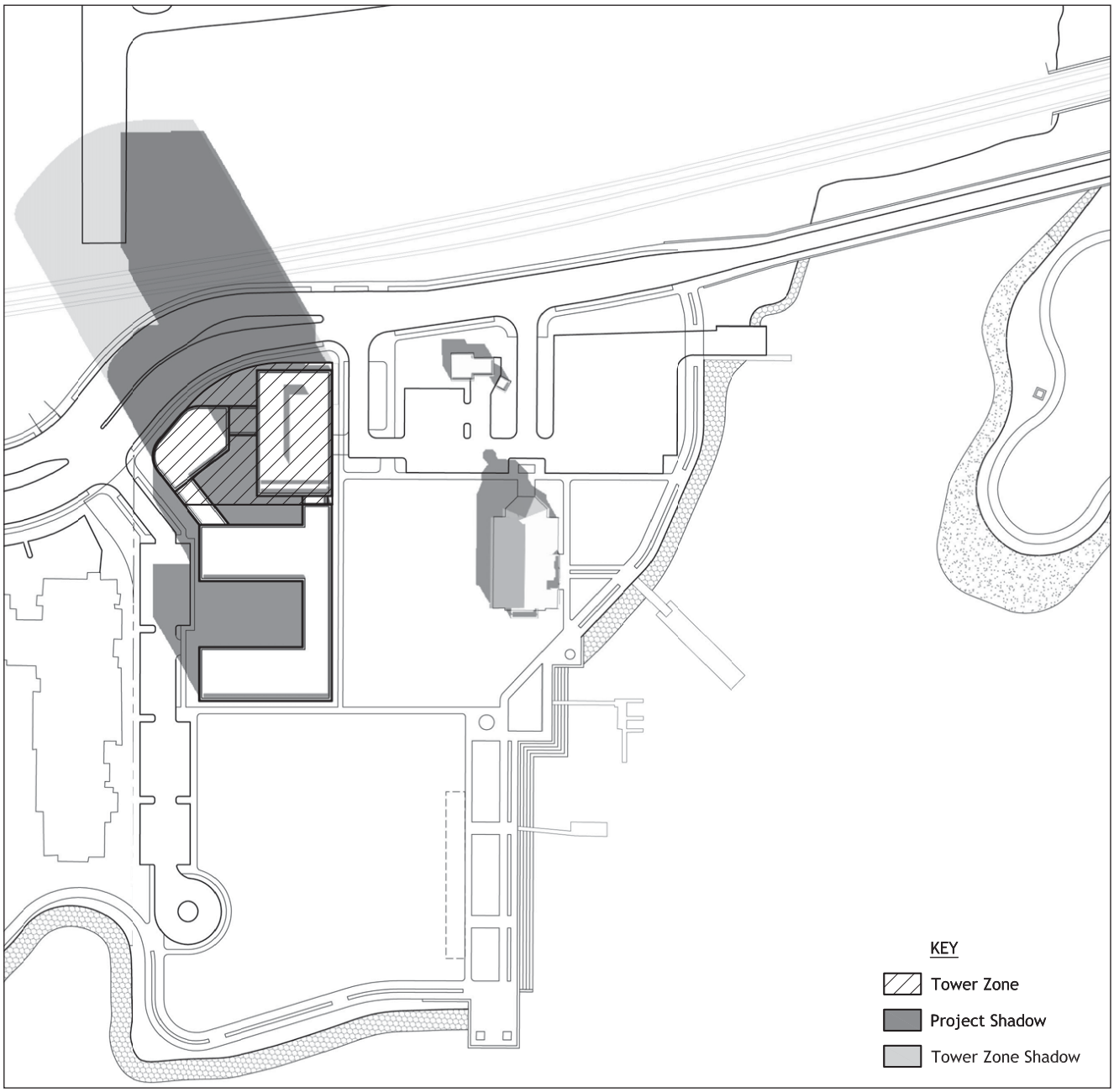


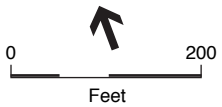


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-15
Variant Parcel N-
December Shadow Patterns, 12 noon





SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure II-16
Variant Parcel N-
December Shadow Patterns, 3 pm

CHAPTER III
Changes to the Draft EIR

A. Changes to the Draft EIR

The text changes presented in this chapter are initiated by Lead Agency staff or by comments on the Draft EIR. Changes include text corrections to the DEIR in cases where the error may cause misinterpretation of the information. Throughout this chapter, newly added text is shown in underline format, and deleted text is shown in strikeout format. For comments initiated by comments on the DEIR, the alpha-numeric comment designator is indicated at the end of the revision in italics.

Table III-1 provided at the end of this chapter is a Summary of Impacts and Mitigation Measures as they are revised in this document. This Response to Comments document, combined with the DEIR, constitutes the Final EIR.

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1. The text for Mitigation Measures C.7a through C.7k on DEIR pages IV.C-30-31 was omitted from Table II-1, Summary of Impacts and Mitigation Measures, (Chapter II, Summary) on DEIR page II-18. Revised **Table II-1** showing all revisions to impacts statements and mitigation measures is provided at the end of this chapter.

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2. The text for Mitigation Measure B.2a in Table II-1 (Chapter II, Summary) is incorrect (i.e., does not match the true mitigation language on DEIR p. IV.B-35 in the body of the DEIR. The following full text description of Mitigation Measure B.2a replaces the text in Table II-1 on DEIR page II-8:

> **"B.2a: The project applicant shall pay its fair share contribution to the cost of improvements proposed by the City of Alameda at the signalized intersection of *Atlantic Avenue and Webster Street*. Intersection reconfiguration would consist of adding and restriping lanes to provide the following lanes per approach:**
>
> - **Webster Street (from Oakland) – 1 Left-turn lane, 2 Through lanes, and 1 Right-turn lane (non-channelized right turn)**

- **Webster Street (to Oakland) – 2 Left-turn lanes, 1 Through lane, and 1 Through/Right-turn lane**
- **Atlantic Avenue (towards Alameda Point) – 1 Left-turn lane, 1 Through lane, and 1 Through/Right-turn lane**
- **Atlantic Avenue (away from Alameda Point) – 2 Left-turn lanes, 2 Through lanes, and 1 Right-turn lane**

"This mitigation measure was identified by the City of Alameda as the required improvement to accommodate redevelopment of the former Naval Air Station. The project would contribute to the implementation of this mitigation measure through payment of a fair share cost of the improvement (to be determined). During the AM and PM peak hours, the project's contribution to the estimated growth in traffic between the existing and cumulative traffic volumes (including project traffic). would be 5 and 6 percent, respectively. The project applicant would pay this fair share amount to the City of Alameda, which would then be responsible for the implementation of this improvement." *(G-10)*

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3. The text for Mitigation Measure B.3a in Table II-1 (Chapter II, Summary) is incorrect (i.e., does not match the true mitigation language on DEIR p. IV.B-47 in the body of the DEIR. The following full text description of Mitigation Measure B.3a replaces the text in Table II-1, p. II-9:

   "B.3a: Implement Mitigation Measure B.2a (contribute fair-share contribution to intersection improvements proposed by the City of Alameda)." *(G-10)*

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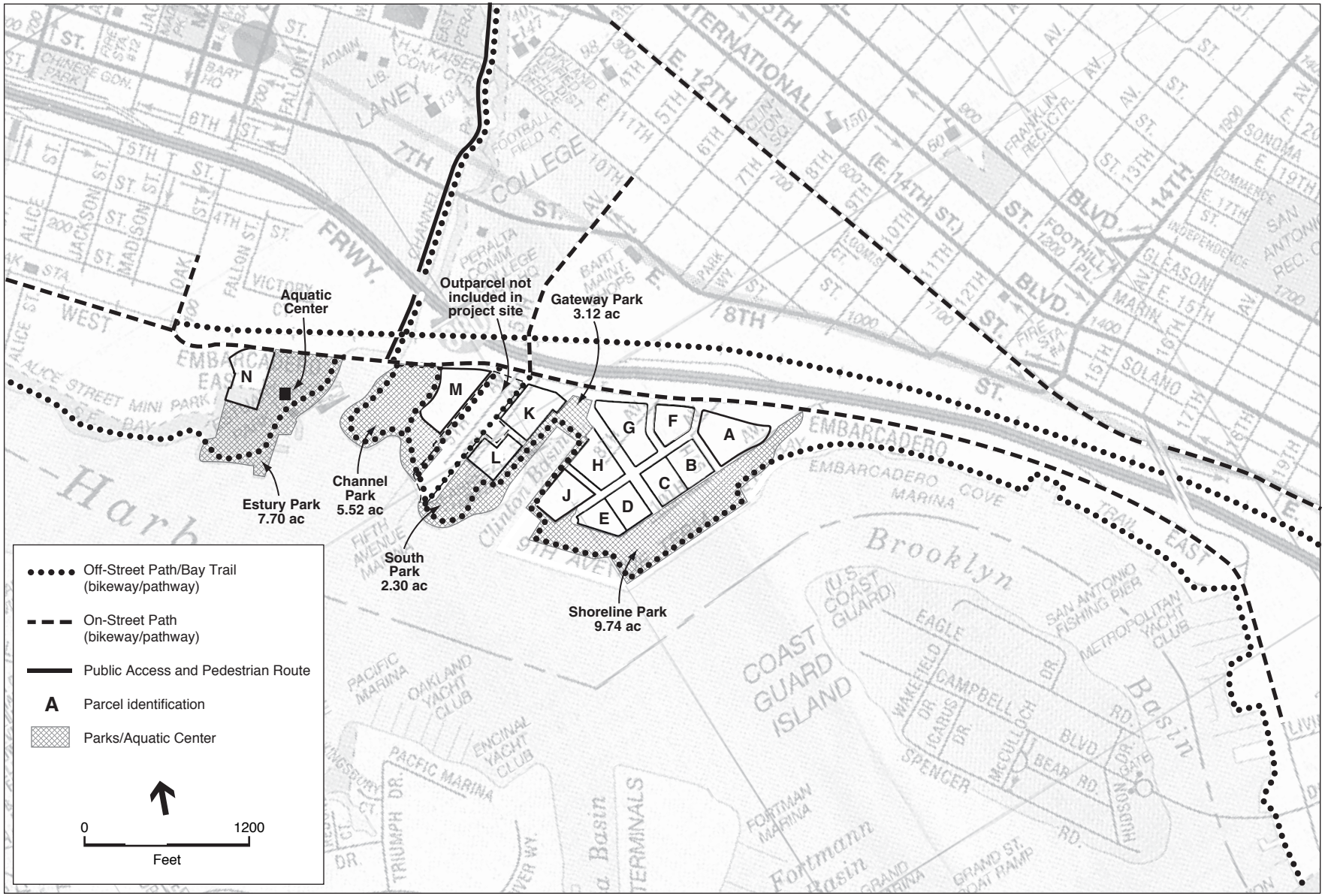
4. Figure III-7, Proposed Shoreline Parks Network, on p. III-17 of the DEIR is replaced with **Figure III-1** provided below:



Note: The shoreline / Bay Trail segment "across" the outparcel is not part of the Oak to Ninth Project; neither the project sponsor nor the Port of Oakland owns this property.

SOURCES: ESA; ABAG Bay Trail Project, 2002; Oakland Pedestrian Master Plan, 2002
Oakland Estuary Policy Plan; Oakland Bicycle Master Plan

Oak to Ninth Avenue . 202622

Figure III-1
Modified Shoreline Parks and Trails Network

Additionally, the following text is added after the second complete sentence on p. III-14 of the DEIR (additions shown as underlined):

> "The continuity of the proposed trail alignment along the waterfront is prevented by a segment that would cross the existing outparcel property that is within, but not part of, the project site and that fronts the water. Figure III-7 depicts the continuous alignment that would occur with respect to the outparcel and along Embarcadero."

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5. On p. III-11 of the DEIR, the first full paragraph is corrected as follows (additions shown as underlined; deletions as ~~strikeout~~):

> "The proposed number of parking spaces is based on minimum parking ratios of 1.0 covered space per residential dwelling unit, 1.0 space per ~~1,000~~ 500 square feet of retail/commercial use, and 1.0 space per five marina slips."

---

6. The following text is provided under the Estuary Park and Jack London Aquatic Center on DEIR p. III-18 to clarify the proposed improvements to the existing Bay Trail segment along Estuary Park:

> ***Estuary Park and Jack London Aquatic Center***
>
> The project would improve the existing Estuary Park through re-vegetation of the approximately 3.5-acre lawn/play field, shoreline protection (discussed below), and extending the waterfront Bay Trail that would edge the park and Lake Merritt Channel. The project would not change the existing picnic table/seating area pavilion and waterfront access facilities adjacent to the park and the Aquatic Center (boating and fishing docks and boat launch), and no new structures are proposed. The existing Bay Trail facilities along the shoreline of Estuary Park would be removed and replaced with a segment of the continuous public pedestrian trail and bicycle facility that would line the project's waterfront to the extent feasible. *(T-9)*

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7. Footnote on DEIR p.III-19 is corrected as follows (additions shown as underlined; deletions as ~~strikeout~~):

> "[13] See Footnote ~~3~~5."

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8. On p. III-22 of the DEIR, the second bullet under *Project Phasing* is corrected as follows (additions shown as underlined; deletions as ~~strikeout~~):

"• **Phases IV and V** (2008 to 2014) - Approximately ~~1,473~~ 873 units and 79,000 square feet of retail/commercial: Parcels D, E, H, and J; Clinton Basin and Quay; and project street rights-of-way. Shoreline Park would be developed by 2012, and Gateway Park would be developed by 2014, as would the Bay Trail segment from Brooklyn Basin to Clinton Basin.

• **Phases VI and VII** (2009 to 2017) - Approximately ~~798~~ 788 units and 37,000 square feet of retail: Parcels K, L, and M; and project street rights-of-way. South Park would be developed by 2015, and Channel Park would be developed by 2017, as would the Bay Trail segment east of Clinton Basin. Estimated demolition: Approximately 46,000 square feet of marine, storage, service, manufacturing, and industrial uses."

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9. The table inset on Figure III-8, Proposed Phasing Plan, on p. III-23 of the DEIR is corrected as follows (additions shown as underlined; deletions as ~~strikeout~~):

Parcel Areas	Development Area (ac.)	Retail Areas (sq.ft.)	Total Units
I	4.2	15,000	539
II	2.7	42,000	280
III	3.0	12,000	320
IV	2.7	14,000	~~244~~ 246
V	3.9	47,000	627
VI	3.7	32,000	454
VII	2.7	5,000	334
VIII	2.4	15,000	300
Total	25.3	20,000	3,100

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10. The following text is added to DEIR p. III-28 under *San Francisco Bay Conservation and Development Commission* (additions shown as underlined; deletions as ~~strikeout~~):

"• **San Francisco Bay Conservation and Development Commission (BCDC)** - The project would be subject to review by the San Francisco Bay Conservation and Development Commission (BCDC), a state agency. The project would be required to obtain BCDC permits and approvals for all development proposed within the Agency's jurisdiction, including filling, dredging, ~~and~~ shoreline alteration, and waterfront development that requires public access." *(T-11)*

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11. The third sentence of the third paragraph under *San Francisco Bay Plan and San Francisco Bay Are Seaport Plan* on DEIR p. IV.A-30 is revised as follows (additions shown as underlined; deletions as ~~strikeout~~):

> "The project site is within Bay Plan Map No. Five (Center Estuary), which designates a portion of the site west of Lake Merritt Channel (near Estuary Park) as Waterfront Park Priority Use Area. BCDC has regulatory authority for all portions of the project site waterside of BCDC's 100-foot shoreline band (~~including that~~ excluding portions within ~~of~~ the priority use area)…. No port priority use area is designated for the Ninth Avenue Terminal break bulk facility on the site." *(E-3)*

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12. On p. IV.B-1 of the DEIR, the first sentence of the fourth paragraph is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> "*State Route 260* (SR 260) is a ~~six~~ four-lane controlled-access facility (classified in the highway log as a freeway (~~three~~ two lanes in each directional tunnel) that connects the cities of Alameda and Oakland through the Posey & Webster tubes." *(G-6)*

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13. On p. IV.B-11 of the DEIR, the second paragraph under *Rail Service (BART and Amtrak)* is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> "Amtrak provides passenger rail service at the Jack London Square station. This station is about 0.75 mile west of the project site. Several lines use this station, including the Capital Corridor (~~to Reno, Nevada, via~~ serving Auburn-Sacramento-Oakland-San Jose), the San Joaquin (to Bakersfield via Fresno), and the Coast Starlight (between Seattle and Los Angeles). Currently 24 weekday Capitol Corridor trains operate between Sacramento and Oakland Jack London Square (18 trains on weekends), with 8 of these weekday trains continuing from Oakland Jack London Square Station to/from San Jose (12 trains on the weekends)." *(J-1)*

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14. On p. IV.B-16 of the DEIR, the first paragraph under Broadway/Jackson Interchange at I-880 is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> "Considerable efforts have also been made to improve operations at the Broadway / Jackson interchange at I-880. Phase I improvements would involve modifying the intersection at Broadway/5th Street and modifying the ramps at Jackson Street. The

preliminary studies and environmental process for Phase I improvements are complete, and both Project Study Report (PSR) and Project Report (PR) have been completed by Caltrans ~~the environmental process is still underway~~. Partial funding is available for these improvements, and the project is listed in the current official 2004 State Transportation Improvement Program (STIP). Additional funding is needed to accomplish all of the improvements necessary. Phase II improvements would improve access to the Posey Tube from I-880 and I-980. This phase is being funded by the Alameda County Transportation Improvement Agency and is being managed by the City of Alameda. Funding is not available for the design and construction of Phase II at this time." *(G-8)*

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15. The following text is added after the second full paragraph on page IV.B-18, above Bicycle/Pedestrian Improvements:

"The Capitol Corridor Joint Powers Authority (CCJPA), which operates the Capitol Corridor service along the Union Pacific Railroad (UPRR), currently operates 8 trains along the rail line adjacent to the project site. According to the CCJPA, by 2006, this number of trains is anticipated to increase to 14 trains per day, and is expected to increase further, to 32 trains per day, within the next 5 to 7 years; with these service expansions, the yearly ridership is anticipated to increase from 1.25 million riders to 2.5 million riders." *(J-3)*

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16. On p. IV.B-55 of the DEIR, Mitigation Measure B.4b, DEIR p. IV.B-55, is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

"Mitigation Measure B.4b: The project applicant shall operate a private shuttle service to complement AC Transit service that might be extended to the project site. The shuttle service shall run between the project site and nearby activity centers and transit nodes (e.g., Lake Merritt BART station) with ~~have~~ an adequate number of shuttle stops located onsite, and ~~shall operate~~ on a frequency sufficient to attract use of the service by project residents and employees." *(F-3)*

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17. On DEIR p. IV.B-57, the following text is added to the discussion of *Pedestrian Safety Impacts* (as a new paragraph):

"An additional aspect of pedestrian safety is the issue of pedestrians crossing the existing UPRR railroad tracks located adjacent to Embarcadero near the project site. Pedestrians could cross either along 5th Avenue or across the railroad tracks

to the north or south of 5th Avenue. Currently, the 5th Avenue crossing has safety equipment including crossing gates and warning lights. These facilities limit access by pedestrians as well as vehicles. There is also a chain link fence along Embarcadero, which limits crossings by pedestrians at other locations. With the development of the project site, these existing facilities would be maintained. While portions of 5th Avenue would be restriped by the project, no changes would be made to the existing crossing gates or warning signals. The project would also install additional warning signage related to bicyclists and pedestrians at the 5th Avenue and Oak Street crossing. Additionally, the project would maintain the existing chain link fence along the Embarcadero." *(Master Response F)*

---

18. The following is added to the list of requirements shown in bullet format as part of Mitigation Measure B.7:

    - "Maintain or reconstruct the fence along the Embarcadero that limits access to the railroad tracks adjacent to the project site.
    - Install additional bicycle and pedestrian warning signage at the existing at-grade crossing along 5th Avenue."

---

19. On p. IV.B-69 of the DEIR, the first sentence of Mitigation Measure B.10 is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

    "**Mitigation Measure B.10: Prior to initiation of each phase of development ~~the issuance of each building permit~~, the project applicant and construction contractor shall meet with the Traffic Engineering and Parking Division of the Oakland Public Works Agency and other appropriate City of Oakland and non-City agencies (e.g., Caltrans) to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction."** *(D-14)*

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20. On p. IV.B-69 of the DEIR, the following is added to the list of items and requirements shown in bullet format as part of Mitigation Measure B.10:

    - Provisions for coordination with BART to reduce, as needed, adverse effect on access to the Lake Merritt BART Station. *(F-10)*

---

21. The following revisions are made to the first paragraph on DEIR p. IV.C-10, before the *Air Quality and Meteorological Conditions Impact Discussion* heading (additions shown as underlined; deletions as ~~strikeout~~):

> "The existing sensitive receptors in the immediate project area are part of the six-acre Fifth Avenue Point live-work artist community along 5th Avenue, south of the Embarcadero. Fifth Avenue Point includes a mix of residential, industrial, and commercial uses on privately owned parcels. Also, proposed parks and open space recreational areas to be developed as part of the project would also be considered sensitive land uses. Due to the project construction phasing, proposed residential units that would be completed during initial phases would be occupied while other parcels are under construction developed. Therefore, the nearest sensitive receptors to project-related air quality impacts include the new project residents and tenants. In addition to the sensitive receptors in the immediate project vicinity, there are also receptors off-site, including residences within the Chinatown and Downtown areas." *(RR-6)*

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22. The following revisions are made on DEIR p. IV.E-24 (additions shown as underlined; deletions as ~~strikeout~~):

> **"Mitigation Measure E.1a: An archival cultural resource evaluation shall be implemented prior to the start of construction or other ground-disturbing activities to identify whether historic or unique archaeological resources exist within the project site. The archival cultural resource evaluation, or "sensitivity study," shall be conducted by a cultural resource professional approved by the City and who meets the Secretary of the Interior's Professional Qualifications Standards for Prehistoric and Historical Archaeology.**
>
> **The purpose of the archival cultural resource evaluation is to: (1) identify documentation and studies to determine the presence and location of potentially significant archaeological deposits; (2) determine if such deposits meet the definition of a historical resource under CEQA Guidelines Section 15064.5 or a unique archaeological resource under CEQA Section 21083.2(g); (3) guide additional archaeological work, potentially including pre-construction subsurface archaeological investigation if warranted, to recover the information potential of such deposits; and (4) define an archaeological monitoring plan, if warranted. A pre-construction meeting shall occur with the cultural resource professional and the City regarding the findings of the evaluation, and shall include consultation with and considerations of the Department of Toxic Substances (DTSC), the Lead Agency for the environmental cleanup activities on the project site. If excavation is the only feasible means of data recovery, such excavation shall**

be in accord with the provisions of CEQA Guidelines Section 15126.4(b)(3)(C). Any additional archaeological work and or monitoring shall be pursuant to a plan approved by the City. If a pre-constructing testing program is deemed necessary by the qualified professional as a result of the archival study, it shall be guided by the archival study and shall use a combination of subsurface investigation methods (including backhoe trenching, augering, and archaeological excavation units, as appropriate).

If monitoring of any areas during ground disturbing activates is determined to be required based on the results of the archival evaluation and the pre-construction testing, the monitoring will be conducted by a qualified cultural resources professional and the monitoring plan will include appropriate provisions for evaluating any archaeological deposits, consultation with the City, and any necessary data recovery program.

Mitigation Measure E.1b: Prior to the commencement of ground distributing activities, all construction personnel shall receive environmental training from a cultural resource professional approved by the City and who meets the Secretary of the Interior's Professional Qualifications Standards for Prehistoric and Historical Archaeology. The purpose of the environmental training is to inform all construction personnel of the possibility of encountering historical resources. All construction personnel specifically involved in onsite activities that may uncover prehistoric resources shall be trained in the identification of prehistoric resources and immediate actions required if potential resources are found.

Mitigation Measure E.1~~a~~c: Pursuant to CEQA Guidelines 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore, in the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project proponent and/or lead agency shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the City. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.

Mitigation Measure E.1~~b~~d: In the event that human skeletal remains are uncovered at the project site during construction or ground-breaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and follow the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code,

and all excavation and site preparation activities shall cease within a 50-foot radius until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously."

Significance after Mitigation: Less than Significant. *(JJ-6)*

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23. The additional text is added to Mitigation Measure E.8 on p. IV.E-24 (additions shown as underlined; deletions as ~~strikeout~~). This text also was omitted from Table II-1, Summary of Impacts and Mitigation Measures, (Chapter II, Summary) on DEIR page II-18.:

"Mitigation Measure E.8: The project sponsor shall set aside a minimum of 200 square feet of floor area within the Bulkhead Building for an historical exhibit depicting the history of the Oakland Municipal Terminals. At a minimum, the exhibit would consist of the following:

5) An educative and documentary audio/visual history on the Oak to Ninth area and accessory areas as appropriate, including:

a. Visual explanation of wharf design versus other types of pier design;

b. Oral histories of people who worked at the building and/or other maritime industries in the area;

c. Historic film clips.

d. History of the development of the harbor;

e. History of the development of the Port Board;

f. PWA and WPA involvement at the Port;

g. World War II uses;

h. A visual film documentation of the existing warehouse/industrial character of the area, including views from the water to the City.

i. Written transcripts on archival quality paper for any audio or visual exhibits prepared for this mitigation." *(JJ-7)*

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24. The following text is inserted as the last paragraph before the *Noise Attenuation* heading on DEIR p. IV.G-4 (additions shown as underlined; deletions as ~~strikeout~~):

> "Noise can have significant effects on physical and mental human health and well-being. Adverse impacts and effects include interference with speech and other forms of communication such as television and radio; sleep disruption; negative mood and behavioral changes; and hearing loss (usually temporary and caused by occupational, rather than environmental, noise). Sleep disruption and interference with communication are the main sources of noise-related community complaints. It should be mentioned that people's tolerance to annoyance from noise is highly subjective, varying greatly among individuals (Oakland General Plan Noise Element, 2005). Also, epidemiological studies have shown that cardiovascular effects occur after long-term exposure to noise (aircraft and road traffic) with 24-hour Leq values of 65-70 dBA, but the associations are weak and more research is required to estimate the long-term cardiovascular and psychophysiological risks due to noise (WHO, 1999)."

The following reference is added to DEIR p. IV.G-29:

"World Health Organization (WHO), *Guidelines for Community Noise*, 1999." *(R-11)*

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25. The following text shall be added on DEIR p. IV.G-5, as the third paragraph under *State of California Regulations*:

> "The project would involve hazardous noise activities related to certain construction activities and duration of such activities. Construction operations on the site therefore would be subject to federal and state Occupational Safety and Health Agency (OHSA) standards that address construction employee hearing conservation and noise exposure." (DOSH, 2006; OSHA, 2006) References:
>
> California Division of Occupational Safety and Health (DOSH) website, http://www.dir.ca.gov/title8/5097.html; accessed January 4, 2006.
>
> U.S. Department of Occupational Safety and Health Agency (OSHA) website, http://www.osha.gov/SLTC/constructionnoise/programs.html; accessed January 4, 2006. *(KK-17)*

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26. The following text is added to the first paragraph on DEIR p. IV.G-27 (additions shown as underlined; deletions as ~~strikeout~~):

"Based on noise measurements in the project site vicinity (see Table IV.G-3 and Table IV.G-4), existing ground-level and aerial (elevations of 14 to 70 feet) Ldn noise levels range from 60 dBA to 80 dBA and from 62 dBA to 85 dBA, respectively. These noise levels are primarily due to the proximity of the measurement location to the Embarcadero and I-880, as well as the railroad tracks to the north, and show that project-related ground floor and non-ground floor residences in close proximity to these noise sources would be exposed to noise levels classified from "normally unacceptable" to "clearly unacceptable" for residential uses (DEIR Table IV.G-2)." *(M-7)*

27. The following revisions and additions are made to Mitigation Measures for Impact G.3 on page IV.G-27 (additions shown as underlined; deletions as ~~strikeout~~):

"Mitigation Measure G.3a: To comply with the requirements of Title 24 and achieve an interior noise level of less than 45 dBA, noise reduction in the form of sound-rated assemblies (i.e., windows, exterior doors, and walls) shall be incorporated into project building design. Final recommendations for sound-rated assemblies will depend on the specific building designs and layout of buildings on the site and shall be determined during the design phase.[1]

Mitigation Measure G.3b: Due to the proximity of the project to a railroad crossing, a written disclosure of railroad crossing noise, particularly usage of train horns and bells on warning devices during the daytime and nighttime hours, shall be provided to potential residents of the project." *(M-7)*

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28. The fourth paragraph under *Ninth Avenue Terminal Area, Site Investigations,* on DEIR p. IV.H-17 is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

In addition to the soil and groundwater investigations, the Port of Oakland has previously conducted asbestos surveys in Port owned buildings in the project area for tenant notification purposes. The results of the surveys indicate that asbestos was detected or assumed in various friable and non-friable materials including transite pipe, floor tile and adhesive, duct tape, drywall and joint compound, and wall texturing compound (ACC Environmental Consultants, 1998)~~(Heinze, 2005)~~.

Additionally, the following references are revised on DEIR p. IV.H-26 (additions shown as underlined; deletions as ~~strikeout~~):

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1 *Oak to 9th Residential Development, Oakland, California, Environmental Noise Assessment* by Charles M. Salter Associates, Inc., November 2002. Table 4 of the Salter Associates document lists conceptual window and wall Sound Transmission Class (STC) ratings for different noise environments and gives an estimate of the STC requirements needed to meet interior noise criteria.

~~Heinze, Diane, Port of Oakland, personal communication, June 16, 2005.~~

"ACC Environmental Consultants, "Asbestos Survey Reports, Port of Oakland, Inner Harbor, Area H," April 1998."

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29. The last sentence in the first paragraph under *Recycled Water* on DEIR p. IV.M-3 is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> "The Water Supply Management Program established goals of delivery a total of 14 mgd, or 5.1 billion gallons a year of recycled water by 2020~~an additional 8 mgd of recycled water by 2020, for a total of 5.8 billion gallons a year~~." *(C-9)*

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30. The third sentence in the second paragraph under *Inflow/Infiltration Correction Program* on DEIR p. IV.M-5 is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> "The program has resulted in three ~~four~~ new wet weather treatment facilities, two storage basins, 7.5 miles of new interceptors, and expansion of the main wastewater treatment plant." *(C-8)*

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31. The last three sentences in the second paragraph on DEIR p. IV.M-11 are revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> "Recycled water delivery to the project area is expected by 2009 ~~2005~~. Recycled ~~Reclaimed~~ water infrastructure will be installed by the project sponsor throughout the proposed site and along the project frontage for future connection to the EBMUD recycled ~~reclaimed~~ water network that will be extended to the project site. Similar to water lines, recycled ~~reclaimed~~ water lines will be installed above the water table." *(C-10)*

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32. The following revision is made to the third paragraph on DEIR p. IV.M-11 and replaces the entire second paragraph under *Water Supply System* on p. IV.M-1 (additions shown as underlined; deletions as ~~strikeout~~):

> "Existing water lines in the project vicinity are expected to be adequate to serve the project's anticipated water demand. As discussed in the Setting, the projects site is served by a ~~12-inch~~ EBMUD water line within the Embarcadero right-of-way, which forms a "looped" system between 5th and 9th Avenues, with a 12-

inch main in 9th Avenue and the Embarcadero that traverses the project site~~line serving the area west of 5th Avenue and that terminates at the Lake Merritt Channel bridge~~. The Estuary Park portion of the site to the west of Lake Merritt Channel is serviced by a 12-inch branch from a separate looped system located in the Embarcadero and Fallon Street. There is an 8-inch water main in Fallon Street and 6-inch water mains in 5th and 6th Avenues. ~~This 12-inch branch runs from the intersection of the Embarcadero and Fallon Street to the limit of the Lake Merritt Channel bridge~~." *(CC-1)*

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33. The following text is added to the fourth paragraph on DEIR p. IV.M-11 (addition shown as underlined):

"As part of the project, water mains designed and supplied by EBMUD would be installed onsite to serve the project demands. A main extension and pipeline improvements or relocations offsite may also be required. All improvements would occur in coordination with EBMUD." *(C-2)*

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34. The following corrections are made starting on DEIR p. V-28 (additions shown as underlined; deletions as ~~strikeout~~):

L. Public Services and Facilities

Compared to the project, the Open Space / Partial Preservation Alternative would introduce fewer new residents (2,938 compared to 5,270) and households (1,728 compared to 3,100[4]) to the project site. Approximately 32.9~~33.4~~[5] acres of new park would be added to the project site (compared to 20.7~~19.25~~ new acres with the project), which would result 11.4 acres per 1,000 residents on the project site. Overall, this alternative would result in the same less-than-significant impacts on public services and facilities that would occur with the project.

[4] 1,658 households compared to 2,976 project households, with 4 percent vacancy rate applied.
[5] Total 40.6 acres proposed, minus existing 7.7~~7.2~~ acre Estuary Park and Jack London Aquatic Center

35. The following corrections are made starting on DEIR p. V-37 (additions shown as underlined; deletions as ~~strikeout~~):

L. Public Services and Facilities

Compared to the project, the Reduced Development / Preservation Alternative would introduce fewer new residents (881 compared to 5,270) and households

(518 compared to 3,100)[13] to the project site. Approximately 32.2~~32.7~~[14]-acres of new park would be added to the project site (compared to 20.7~~19.25~~ new acres with the project), which would result 37.1 acres per 1,000 residents on the project site. Overall, this alternative would result in the same less-than-significant impacts on public services and facilities that would occur with the project. *(G-7)*

[13] 497 households compared to 2,976 project households, with 4 percent vacancy rate applied.
[14] Total 39.9 acres proposed, minus existing 7.7~~7.2~~-acre Estuary Park and Jack London Aquatic Center
(G-7)

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36. **Figure III-2** on the following page shows the typographic correction made to DEIR Appendix C Figure C-1b regarding the existing conditions peak hour volumes for Intersection #21 (8th and Webster Streets) (additions shown as underlined; deletions as ~~strikeout~~).

SOURCE: Fehr & Peers

Oak to Ninth Avenue . 202622

Figure III-2
Corrected Existing Conditions Peak Hour
Traffic Volumes at 8th Street and Webster Street

REVISED TABLE II-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE OAK TO NINTH REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Significant and Unavoidable Impacts *(Significant, with Mitigation, or not in Lead Agency's Control)*		
B. Transportation, Circulation, and Parking		
B.1b: The LOS F conditions at the signalized intersection of *5th Street and Broadway*, which would prevail during the PM peak hour under 2010 baseline conditions, would worsen with the addition of traffic generated by Phase 1 of the project. The project-generated increases in vehicle delay on a critical movement would exceed the four-second threshold of significance.	No feasible mitigation measures are available that would fully improve operations at 5th Street and Broadway to acceptable levels. While improvements such as reconfiguring lanes on Broadway and adding directional signage, as discussed in the JLS EIR, would improve traffic flow conditions on some movements, downstream bottlenecks in the Webster Tube would continue to cause substantial backups and delay on 5th Street approaching Broadway, and the previously described unacceptable LOS F conditions would continue. The constrained capacity of the tube is an issue of multi-jurisdictional concern (solutions are being explored by the cities of Oakland and Alameda, Caltrans, and the Alameda County Congestion Management Agency), and no feasible measures to increase the tube's capacity have been identified to date (e.g., the tube cannot simply be widened as can a roadway).	**Significant and Unavoidable**
B.1c: The signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp* would degrade from LOS E to LOS F during the PM peak hour with the addition of traffic generated by Phase 1 of the project.	B.1c: Optimize the traffic signal timing at the signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented (because the City of Oakland, as lead agency, could not implement Measure B.1c without the approval of Caltrans. However, in the event that Mitigation Measure B.1c could be implemented, the impact would be less than significant.
B.1e: Traffic generated by Phase 1 of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and I-880 Northbound Off-Ramp – 6th Avenue*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant, during the PM peak hour.	B.1e: Install traffic signals at the unsignalized intersection of *Embarcadero and I-880 Northbound Off- Ramp – 6th Avenue*. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.1e without the approval of Caltrans. However,

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.	in the event that Mitigation Measure B.1e could be implemented, the impact would be less than significant.
B.2a: The signalized intersection of *Atlantic Avenue and Webster Street* would degrade from LOS E to LOS F during the AM peak hour with the addition of traffic generated by buildout of the project.	B.2a: The project applicant shall pay its fair share contribution to the cost of improvements proposed by the City of Alameda at the signalized intersection of Atlantic Avenue and Webster Street. Intersection reconfiguration would consist of adding and restriping lanes to provide the following lanes per approach: • Webster Street (from Oakland) – 1 Left-turn lane, 2 Through lanes, and 1 Right-turn lane (non-channelized right turn) • Webster Street (to Oakland) – 2 Left-turn lanes, 1 Through lane, and 1 Through/Right-turn lane • Atlantic Avenue (towards Alameda Point) – 1 Left-turn lane, 1 Through lane, and 1 Through/Right-turn lane • Atlantic Avenue (away from Alameda Point) – 2 Left-turn lanes, 2 Through lanes, and 1 Right-turn lane This mitigation measure was identified by the City of Alameda as the required improvement to accommodate redevelopment of the former Naval Air Station. The project would contribute to the implementation of this mitigation measure through payment of a fair share cost of the improvement (to be determined). During the AM and PM peak hours, the project's contribution to the estimated growth in traffic between the existing and cumulative traffic volumes (including project traffic). would be 5 and 6 percent, respectively. The project applicant would pay this fair share amount to the City of Alameda, which would then be responsible for the implementation of this improvement. ~~B.2a: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *Atlantic Avenue and Webster Street*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.~~	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2a without the approval of the City of Alameda). However, in the event that Mitigation Measure B.2a could be implemented, the impact would be less than significant.

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
B.2c: The LOS F conditions at the signalized intersection of *5th Street and Broadway*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen with the addition of traffic generated by buildout of the project. The project-generated increases in vehicle delay would exceed the two-second threshold of significance.	No feasible mitigation measures are available that would fully improve its operations to acceptable levels. While improvements such as reconfiguring lanes on Broadway and adding directional signage, as discussed in the JLS EIR, would improve traffic flow conditions on some movements, downstream bottlenecks in the Webster Tube would continue to cause substantial backups and delay on 5th Street approaching Broadway, and the previously described unacceptable LOS F conditions would continue. The constrained capacity of the tube is an issue of multi-jurisdictional concern (solutions are being explored by the cities of Oakland and Alameda, Caltrans, and the Alameda County Congestion Management Agency), and no feasible measures to increase the tube's capacity have been identified to date (e.g., the tube cannot simply be widened as can a roadway).	**Significant and Unavoidable**
B.2d: The signalized intersection of *5th and Oak Streets at the I-880 Southbound On-Ramp* would degrade from LOS E to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project.	B.2d: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *5th and Oak Streets at the I-880 Southbound On-Ramp*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2d without the approval of Caltrans. However, in the event that Mitigation Measure B.2d could be implemented, the impact would be less than significant.
B.2e: The signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp* would degrade from LOS E to LOS F during the AM peak hour with the addition of traffic generated by buildout of the project, and the LOS F conditions that, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (total intersection average vehicle delay would exceed the two-second threshold of significance) with the addition of traffic generated by buildout of the project.	No feasible mitigation measures are available. The 2010 analysis concluded that the impact from Phase 1 development could be mitigated through optimization of signal timing (see Mitigation Measure B.1c). However, with the additional growth in background traffic and the growth in project traffic that would occur from 2010 to 2025, this retiming could not fully mitigate the impact from Project Buildout. Given the constrained right-of-way at this location, the addition of turn lanes or other similar improvements would not be feasible.	**Significant and Unavoidable**
B.2h: The LOS F conditions at the signalized intersection of *Lakeshore Avenue and MacArthur Boulevard*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (an increase in the average vehicle delay for a critical movement of more than four seconds) with the addition of traffic generated by buildout of the project.	No feasible mitigation measures are available. Assessment of possible mitigation measures indicates that optimization of signal timing at this intersection would reduce average vehicle delays by about 15 seconds, but would not fully mitigate the project's impact. Other improvements, such as additional turn lanes, do not appear feasible given the constrained right-of-way at the intersection.	**Significant and Unavoidable**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
B.2l: Traffic generated by buildout of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and I-880 Southbound On-Ramp – 10th Avenue*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour.	B.2l: Install traffic signals at the unsignalized intersection of Embarcadero and I-880 Southbound On- Ramp – 10th Avenue. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Prior to the installation of this traffic signal, a complete traffic signal warrant analysis would be conducted at this location to verify that this location meets MUTCD signal warrants, which include both daily and peak-hour volume, accidents, and pedestrian volumes. Signal installation shall meet City of Oakland and Caltrans design standards.	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2l without the approval of Caltrans. However, in the event that Mitigation Measure B.2l could be implemented, the impact would be less than significant.
B.3a: Traffic generated by buildout of the project would contribute at least five percent of the cumulative traffic increases at the signalized intersection of *Atlantic Avenue and Webster Street* in Alameda during the AM and PM peak hours, as measured by the difference between existing and cumulative (with project) conditions.	B.3a: Implement Mitigation Measure B.2a (contribute fair-share contribution to intersection improvements proposed by the City of Alameda). ~~B.3a: Implement Mitigation Measure B.2a (optimize traffic signal timing).~~	This cumulative impact would be **significant and unavoidable**, both because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2a without the approval of the City of Alameda), and because even though the increased average delay for the above-described mitigated condition would be less than the threshold of significance established by the City of Oakland, implementation of Mitigation Measure B.2a would not reduce volumes at this intersection, and the project's percent contribution would remain cumulatively considerable.
B.3c: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *5th Street and Broadway* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	No feasible mitigation measures are available that would fully improve its operations to acceptable levels. While improvements such as reconfiguring lanes on Broadway and adding directional signage, as discussed in the JLS EIR, would improve traffic flow conditions on some movements, downstream bottlenecks in the Webster Tube would continue to cause substantial backups and delay on 5th Street approaching Broadway, and the previously described unacceptable LOS F conditions would continue. The constrained capacity of the tube	**Significant and Unavoidable**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	is an issue of multi-jurisdictional concern (solutions are being explored by the cities of Oakland and Alameda, Caltrans, and the Alameda County Congestion Management Agency), and no feasible measures to increase the tube's capacity have been identified to date (e.g., the tube cannot simply be widened as can a roadway).	
B.3d: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *5th and Oak Streets at the I-880 Southbound On-Ramp* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3d: Implement Mitigation Measure B.2d (optimize traffic signal timing).	This cumulative impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2d without the approval of Caltrans. However, in the event that Mitigation Measure B.2d could be implemented, the impact would be less than significant.
B.3e: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp* during the AM and PM peak hours, as measured by the difference between existing and cumulative (with project) conditions.	No feasible mitigation measures are available. The 2010 analysis concluded that the impact from Phase 1 development could be mitigated through optimization of signal timing (see Mitigation Measure B.1c). However, with the additional growth in background traffic and the growth in project traffic that would occur from 2010 to 2025, this retiming could not fully mitigate the impact from Project Buildout. Given the constrained right-of-way at this location, the addition of turn lanes or other similar improvements would not be feasible.	**Significant and Unavoidable**
B.3f: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of Lakeshore Avenue and Foothill Boulevard during the AM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3f: Implement Mitigation Measure B.2g (optimize traffic signal timing).	This cumulative impact would be **significant and unavoidable** because even though the increased average delay for the above-described mitigated condition would be less than the threshold of significance established by the City of Oakland, implementation of Mitigation Measure B.2g would not reduce volumes at this intersection, and the project's percent contribution would remain cumulatively considerable.
B.3g: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of Lakeshore Avenue and MacArthur Boulevard during the PM peak hour, as	No feasible mitigation measures are available. Assessment of possible mitigation measures indicates that optimization of signal timing at this intersection would reduce delays, but would not fully mitigate the project's impact. Other improvements (to	Significant and Unavoidable

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
measured by the difference between existing and cumulative (with project) conditions.	achieve an acceptable LOS D or better condition), such as additional turn lanes, are not feasible because there is not sufficient right-of-way available for additional lanes at the intersection.	
B.3k: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the unsignalized intersection of *Embarcadero and I-880 Southbound On-Ramp* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3k: Implement Mitigation Measure B.2l (install traffic signals).	This cumulative impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2l without the approval of Caltrans. However, in the event that Mitigation Measure B.2l could be implemented, the impact would be less than significant.
B.3m: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *14th Avenue and 7th/East 12th Streets (Southbound)* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3m: Implement Mitigation Measure B.2n (optimize traffic signal timing).	This cumulative impact would be **significant and unavoidable** because even though the average delay for the above-described mitigated condition would be lower than under the No Project condition, implementation of Mitigation Measure B.2n would not reduce volumes at this intersection, and the project's percent contribution would remain cumulatively considerable.
B.9: The project would contribute to 2025 changes to traffic conditions on the regional and local roadways.	Direct mitigation of the project's significant impact on the freeway segment is not feasible. Factors that limit the mitigation of impacts include constrained right-of-way, no regional or local traffic impact fee mechanism to collect and disperse funds for roadways improvements, and the inherent difficulties with widening the freeways, such as the need to widen over crossings and structures adjacent to the freeway.	**Significant and Unavoidable**
C. Air Quality and Meteorological Conditions.		
C.7: The project together with anticipated future cumulative development in Oakland and the Bay Area in general would contribute to regional air pollution.	C.7: To reduce the significance of the operational impacts of the project, the project sponsor shall, as feasible and practical, implement a combination of the following mitigation measures:	With implementation of the above mitigation measures, the cumulative air quality impact would be **significant and unavoidable**. Based on the effectiveness of these measures as determined by the BAAQMD,

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
		the above mitigation measures would reduce the operational impacts of the project by reducing motor vehicle trips by the project by 15 to 20 percent (BAAQMD, 2004). However, no feasible mitigation is available to reduce the residual impact to a less than significant level.
E. Cultural Resources		
E.3: The project would result in the substantial demolition of the Ninth Avenue Terminal, which is an historic resource as defined in CEQA Guidelines Section 15064.5.	E.3a: Photograph the affected historic resource through large-format, black and white photographs meeting the Photographic Specifications of the Historic American Building Survey (HABS). The documentary photographs would be archived locally at the Oakland History Room (OHR) of the Oakland Public Library along with a copy on archival paper of the Oakland Landmark and S-7 Preservation Combining Zone Application Form for the Ninth Avenue Terminal. Digital copies of the photographs would be forwarded to the Oakland Cultural Heritage Survey. Even with extensive documentation, however, the demolition of a substantial portion of the building would result in the permanent loss of the historic resource that is associated with Oakland's history.	**Significant and Unavoidable**
	E.3b: Although the historic resource would no longer retain its historic significance, adaptive use and rehabilitation of the Bulkhead Building would comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties. The current concept depicts a design that appears to comply, although their conceptual nature precludes the ability to reach an informed conclusion. The project sponsor would be subject to submitting more detailed designs, including, but not limited to, proposed window treatments, materials palette, awnings, signage, and interior configurations for review. For the latter, particular attention would be paid to the significance of the interior's "Expansive, unimpeded space with exposed trusses," and the statement "A key feature of the transit shed is its expansive interior with exposed trusses." In addition, the first story of the existing office in the Bulkhead Building, mentioned in Attachment 2 of the Oakland Landmark and S-7 Preservation Combining Zone Application Form for the Ninth Avenue Terminal, would be retained and rehabilitated. The review should be conducted by a professional meeting the standards for Historic Architecture or Historic Preservation Planning as set	**Significant and Unavoidable**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	forth in the Secretary of the Interior's Professional Qualification Standards, 1997 Proposed Changes (not adopted). The results of the review should be forwarded to the Secretary of the Landmarks Preservation Advisory Board, City of Oakland, for final approval.	
E.4: The project would substantially alter the wharf structure supporting the Ninth Avenue Terminal and surrounding areas, which is an historic resource, as defined in CEQA Guidelines Section 15064.5.	(See E.3a and E.3b.)	**Significant and Unavoidable**
E.5: The project would construct a new mixed-use, multi-story development within approximately 100 feet of the remaining Bulkhead Building which may not be architecturally compatible with this structure as a potential future Oakland City Landmark.		**Significant and Unavoidable**
E.8: The substantial demolition of the Ninth Avenue Terminal, in combination with the previous loss of the other two Oakland Municipal Terminals, would result in cumulative impacts to historic resources.	E.8: The project sponsor shall set aside a minimum of 200 square feet of floor area within the Bulkhead Building for an historical exhibit depicting the history of the Oakland Municipal Terminals. At a minimum, the exhibit would consist of the following: 1) Historic photographs of the Grove Street Terminal, Outer Harbor Terminal and Ninth Avenue Terminal. 2) Contemporary photographs of the Ninth Avenue Terminal taken as recommended in Mitigation Measure E.3a. 3) Examples of manifests, log books, invoices and other artifacts that may be in the possession of the Port of Oakland or private companies, if available. These may be reproductions. 4) Other displayable objects and narrative information.	**Significant and Unavoidable**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	5) An educative and documentary audio/visual history on the Oak to Ninth area and accessory areas as appropriate, including: i. Visual explanation of wharf design versus other types of pier design; j. Oral histories of people who worked at the building and/or other maritime industries in the area; k. Historic film clips. l. History of the development of the harbor; m. History of the development of the Port Board; n. PWA and WPA involvement at the Port; o. World War II uses; p. A visual film documentation of the existing warehouse/industrial character of the area, including views from the water to the City. q. Written transcripts on archival quality paper for any audio or visual exhibits prepared for this mitigation 6) The proposed park design, to be located where the Ninth Avenue Terminal demolition is proposed, should incorporate landscaping, sculptural elements, paths, lighting, etc. that conceptually reference the expanse of the building's footprint and height.	

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
G. Noise		
G.1: Project construction activities would intermittently and temporarily generate noise levels above existing levels in the project vicinity. Project construction noise levels could exceed City of Oakland standards and cause disturbances in noise-sensitive areas, such as residential areas.	G.1a: The project applicant shall require construction contractors to limit standard construction activities as required by the City of Oakland Building Services Division. Such activities are generally limited to between 7:00 AM and 7:00 PM Monday through Friday, with pile driving and/or other extreme noise-generating activities (greater than 90 dBA) limited to between 8:00 AM and 4:00 PM Monday through Friday, with no extreme noise generating activity permitted between 12:30 PM and 1:30 PM. No construction activities shall be allowed on weekends, except that interior construction shall be permitted after buildings are enclosed, without prior authorization of the Building Services Division, and no extreme noise-generating activities shall be allowed on weekends and holidays. G.1b: To reduce daytime noise impacts due to construction, the project applicant shall require construction contractors to implement the following measures: • Equipment and trucks used for project construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds, wherever feasible). • Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible; this could achieve a reduction of 5 dBA. Quieter procedures, such as use of drills rather than impact tools, shall be used whenever feasible. • Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures to the extent feasible.	**Significant and Unavoidable**

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	• If feasible, the noisiest phases of construction (such as pile driving) shall be limited to less than 10 days at a time to comply with the local noise ordinance. G.1c: To further mitigate pile driving and/or other extreme noise-generating construction impacts, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted for review and approval by the City of Oakland Building Services Division to ensure that maximum feasible noise attenuation will be achieved. G.1d: Prior to the issuance of each building permit, along with the submission of construction documents, the project applicant shall submit to the City Building Services Division a list of measures to respond to and track complaints pertaining to construction noise.	
G.4: The project would locate noise-sensitive multifamily residential uses and public parks in a noise environment where noise levels are above what is considered "normally acceptable" according to the City of Oakland General Plan Noise Element. (Potentially Significant)		**Significant and Unavoidable**
Significant Impacts *(Reduced to Less Than Significant, with Mitigation)*		
A. Land Use, Plans, and Policies		
A.1: The project would develop new and different uses and buildings immediately adjacent to and surrounding Fifth Avenue Point and may result in the physical division of an existing community.	A.1: The project applicant shall incorporate into the project site plan design elements that 1) address the relationship (setback, height and upper-story stepbacks, etc.) of new buildings located adjacent to Fifth Avenue Point to minimize the physical division of the outparcels from the existing Oak-to-Ninth District; 2) provide safe, direct, and well-designed pedestrian and bicycle access between the outparcels and the new public open spaces, trails, and marina uses on the project site; 3) provide appropriate landscaping and/or other feature(s) to provide appropriate buffering between the outparcels and the project site, where necessary and feasible. The proposed Planned	Less than Significant

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	Waterfront Zoning District (PWD-1) regulations discussed in Impact A.2 shall incorporate, as appropriate, specific design standards to address the aforementioned elements in areas abutting Fifth Avenue Point.	
A.2: The project would not be consistent with the current existing Estuary Plan land use classification and zoning districts for the project site.	A.2a: The project sponsor shall apply for and obtain City approval for a General Plan Amendment to the Planned Waterfront Development-1 land use classification in the Estuary Policy Plan to 1) include residential as a permitted land use, 2) incorporate the density, FAR, and the other land use and development standards (as appropriate to include in the General Plan) outlined in the proposed Planned Water Development-1 Zone-1, and 3) explicitly state the intended treatment of the Ninth Avenue Terminal. If approved, the General Plan Amendment would eliminate the project's inconsistency with the Estuary Policy Plan. A.2b: The project sponsor shall apply for and obtain City approval for an amendment to the Oakland Planning Code to add the "Planned Waterfront Zoning District" (PWD-1) and associated regulations, and to amend the Oakland General Plan and Zoning Map to apply the PWD-1 District to the geographic area of the project site. The project would be required to adhere to the PWD-1 District regulations, development standards, design guidelines, and other requirements, including allowable uses, requirements for open space, streets, building heights, maximum densities, maximum commercial space, and parking. If approved, the change in zoning from the existing industrial (M-40 Zone) and special (S-2/S-4 Zone) districts to the PWD-1 District would eliminate the project's inconsistencies with the existing zoning as well as any zoning inconsistency with the General Plan.	Less than Significant
A.3: The project would introduce new land uses, and residential densities, and large building masses, forms, and significant height to the project site. The project may likely increase noise, light and glare, and traffic, and that may reduce or eliminate existing views from public vantage points. As a result, the project would result in a substantial change in existing environment and existing land uses.	A.3a: The project sponsor shall implement all mitigation measures identified throughout this EIR to address the significant physical impacts associated with the environmental changes that would occur as a result of the project, reducing each impact to less than significant, where feasible. A.3b: The project sponsor shall implement the specific regulations and standards of the proposed Planned Waterfront Zoning District (consistent with Mitigation Measures A.1 and A.2b), if approved. To specifically address the physical impacts	Less than Significant

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	resulting from the change in land use and environment in proximity to Fifth Avenue Point and adjacent residential development, the project shall adhere to the regulations and standards for allowable uses, open space, streets, setbacks, building heights and upper-story stepbacks, maximum densities, maximum commercial space, pedestrian and bicycle access, and landscaping and buffering.	
B. Transportation, Circulation, and Parking		
B.1: Traffic generated by Phase 1 of the project would affect traffic levels of service at local intersections in the project vicinity in 2010.		
B.1a: Traffic generated by Phase 1 of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and Oak Street*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant.	B.1a: Install traffic signals at the unsignalized intersection of Embarcadero and Oak Street. The signals shall have fixed-time controls with permitted left-turn phasing, which would not require a separate left-turn arrow. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.	Less than Significant
B.1d: Traffic generated by Phase 1 of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and 5th Avenue*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour.	B.1d: Install traffic signals at the unsignalized intersection of *Embarcadero and 5th Avenue*. The signals shall have fixed-time controls with permitted left-turn phasing, which would not require a separate left-turn arrow. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.	Less than Significant
B.2: Traffic generated by buildout of the project would affect		

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
traffic levels of service at local intersections in the project vicinity in 2025.		
B.2b: Traffic generated by buildout of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and Broadway*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour.	B.2b: Install traffic signals at the unsignalized intersection of *Embarcadero and Broadway*. The signals shall have fixed-time controls with permitted left-turn phasing, which would not require a separate left-turn arrow. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.	Less than Significant
B.2f: The LOS F conditions at the signalized intersection of *West Grand Avenue and Harrison Street*, which would prevail during the AM peak hour under 2025 baseline conditions, would worsen (total intersection average vehicle delay would exceed the two-second threshold of significance) with the addition of traffic generated by buildout of the project.	B.2f: Optimize the traffic signal timing for the AM peak period at the signalized intersection of *West Grand Avenue and Harrison Street*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant
B.2g: The LOS E conditions at the signalized intersection of *Lakeshore Avenue and Foothill Boulevard*, which would prevail during the AM peak hour under 2025 baseline conditions, would worsen (an increase in the total intersection average vehicle delay of more than four seconds) with the addition of traffic generated by buildout of the project.	B.2g: Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Lakeshore Avenue and Foothill Boulevard*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant
B.2i: The LOS E conditions at the signalized intersection of *Lakeshore Avenue and Lake Park Avenue*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (an increase in the average vehicle delay for a critical movement of more than six seconds) with the addition of traffic generated by buildout of the project.	B.2i: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *Lakeshore Avenue and Lake Park Avenue*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant
B.2j: The LOS F conditions at the intersection of *Embarcadero and 5th Avenue*, which would prevail during the PM peak hour under 2025 baseline unsignalized conditions, would continue under traffic signal control (installed by 2010 [see Mitigation	B.2j: Widen Embarcadero to provide two through travel lanes in each direction along the project site frontage (i.e., from north of 4th Avenue to 9th Avenue), with separate left-turn lanes provided at the intersections, and provide appropriate lane	Less than Significant

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Measure B.1d]) with the addition of traffic generated by buildout of the project.	configurations on the streets that intersect Embarcadero within the above-cited limits.	
B.2k: The intersection of *Embarcadero and I-880 Northbound Off-Ramp* (to be signalized by 2010 [see Mitigation Measure B.1e]) would degrade from LOS B to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project.	B.2k: Implement Mitigation Measure B.2j.	Less than Significant
B.2m: The signalized intersection of *5th Avenue and 7th/8th Streets* would degrade from LOS D to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project.	B.2m: Optimize the traffic signal timing for the PM peak period at the signalized intersection of 5th Avenue and 7th/8th Streets. Additionally, the westbound and eastbound (5th Avenue) approaches of the intersection would be restriped within the current paved approach, and on-street parking spaces adjacent to the intersection would be removed, to provide separate left-turn, through, and through/right-turn lanes. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant
B.2n: The signalized intersection of *14th Avenue and 7th/12th Streets (Southbound)* would degrade from LOS E to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project.	B.2n: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *14th Avenue and 7th/12th Streets (Southbound)*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant
B.2o: The signalized intersection of *Foothill Boulevard and 14th Avenue (Westbound)* would degrade from LOS D to LOS E during the AM peak hour with the addition of traffic generated by buildout of the project.	B.2o: Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Foothill Boulevard and 14th Avenue (Westbound)*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant
B.2p: The LOS F conditions at the signalized intersection of *Foothill Boulevard and 14th Avenue (Eastbound)*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (total intersection average vehicle delay would exceed the two-second threshold of significance) with the addition of traffic generated by buildout of the project.	B.2p: Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Foothill Boulevard and 14th Avenue (Eastbound)*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant

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B.2q: The LOS E conditions at the signalized intersection of *16th Street and 23rd Avenue*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (an increase in the average vehicle delay for a critical movement of more than six seconds) with the addition of traffic generated by buildout of the project.	B.2q: Optimize the traffic signal timing for the PM peak period at the signalized intersection of *16th Street and 23rd Avenue*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant
B.3: Traffic generated by buildout of the project would contribute to cumulatively significant impacts at local intersections in the project vicinity in 2025.		
B.3b: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the unsignalized intersection of *Embarcadero and Broadway* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3b: Implement Mitigation Measure B.2b (install traffic signals).	Less than Significant
B.3h: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *Lakeshore Avenue and Lake Park Avenue* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3h: Implement Mitigation Measure B.2i (optimize traffic signal timing).	Less than Significant
B.3i: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the unsignalized intersection of *Embarcadero and 5th Avenue* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3i: Implement Mitigation Measure B.2j (widen Embarcadero).	Less than Significant
B.3j: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the unsignalized intersection of *Embarcadero and I-880 Northbound Off-Ramp* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3j: Implement Mitigation Measure B.2j (widen Embarcadero).	Less than Significant
B.3l: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *5th Avenue and*	B.3l: Implement Mitigation Measure B.2m (optimize traffic signal timing).	Less than Significant

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
7th/8th Streets during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.		
B.3n: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *Foothill Boulevard and 14th Avenue (Westbound)* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3n: Implement Mitigation Measure B.2o (optimize traffic signal timing).	Less than Significant
B.3o: Traffic generated by buildout of the project would contribute more than five percent of the cumulative traffic increases at the signalized intersection of *16th Street and 23rd Avenue* during the PM peak hour, as measured by the difference between existing and cumulative (with project) conditions.	B.3o: Implement Mitigation Measure B.2q (optimize traffic signal timing).	Less than Significant
B.4: The project would generate demand for alternative transportation service for the area.	B.4a: The project applicant shall redesign the project site plan to include transit facilities, including bus turnouts on the Embarcadero at a minimum, to ensure that bus service could be accommodated if agreement with AC Transit were to be met to extend service to the project site. Additional facilities would include bus stops within the project, or even a dedicated transit center at which public buses and/or private shuttles could stop. B.4b: The project applicant shall operate a private shuttle service to complement AC Transit service that might be extended to the project site. The shuttle service shall run between the project site and nearby activity centers and transit nodes (e.g., Lake Merritt BART station) with~~have~~ an adequate number of shuttle stops located onsite, and shall operate on a frequency sufficient to attract use of the service by project residents and employees.	Less than Significant
B.7: The project would increase the potential for conflicts among different traffic streams.	B.7: The project applicant shall redesign the site plan as follows: • Reconfigure the intersections of Embarcadero/7th Avenue and Embarcadero/9th Avenue intersection for right-in/right-out movements only (to ensure proper spacing between signalized intersections).	Less than Significant

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	• Install a traffic signal at the intersection of Embarcadero and 8th Avenue. • Install signal interconnect on Embarcadero between 5th and 10th Avenues to allow for coordination of traffic signals along Embarcadero (to minimize queuing [back-ups] on Embarcadero). • The design of pedestrian facilities including sidewalks, crosswalks, and curb ramps shall comply with ADA standards and other applicable legislation. • Maintain or reconstruct the fence along the Embarcadero that limits access to the railroad tracks adjacent to the project site. • Install additional bicycle and pedestrian warning signage at the existing at-grade crossing along 5th Avenue.	
B.10: Project construction would temporarily affect traffic flow and circulation, parking, and pedestrian safety.	B.10: Prior to initiation of each phase of development ~~the issuance of each building permit~~, the project applicant and construction contractor shall meet with the Traffic Engineering and Parking Division of the Oakland Public Works Agency and other appropriate City of Oakland and non-City agencies (e.g., Caltrans) to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction. The project applicant shall develop a construction management plan for review and approval by the City Traffic Engineering Division. The plan shall include at least the following items and requirements: • A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. In addition, the information shall include a construction staging plan for any right-of-way used on the Embarcadero, including sidewalk and lane intrusions and/or closures.	Less than Significant

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	• Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur. • Location of construction staging areas for materials, equipment, and vehicles (must be located on the project site). • Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation and safety; and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant. • Temporary construction fences to contain debris and material and to secure the site. • Provisions for removal of trash generated by project construction activity. • A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an onsite complaint manager. • Provisions for monitoring surface streets used for truck routes so that any damage and debris attributable to the trucks can be identified and corrected. • Provisions for coordination with BART to reduce, as needed, adverse effect on access to the Lake Merritt BART Station.	
C. Air Quality and Meteorological Conditions		
C.1: Activities associated with demolition, site preparation and construction would generate short-term emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions.	C.1a: During construction, the project sponsor shall require the construction contractor to implement the following measures required as part of BAAQMD's basic and enhanced dust control procedures required for sites larger than four acres (aggregate): Basic Control Measures – The following controls should be implemented at all construction sites: • Water all active construction areas at least twice daily.	Less than Significant

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	• Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. • Sweep daily (with water sweepers) all paved access roads, parking areas and staging area at construction sites. • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. Enhanced Control Measures – The following measures shall be implemented during project construction because the site is greater than four acres in area: • All “Basic” control measures listed above. • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more). • Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.). • Limit traffic speeds on unpaved roads to 15 miles per hour. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways. • Replant vegetation in disturbed areas as quickly as possible. The following control measures shall be implemented during project construction because the site is large in area and located near sensitive receptors: • Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site. • Install wind breaks, or plant trees/ vegetative wind	

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	breaks at windward side(s) of construction areas. • Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 miles per hour. • Limit the area subject to excavation, grading and other construction activity at any one time. C.1b: Demolition and disposal of any asbestos containing building material would be in accordance with the procedures specified by Regulation 11, Rule 2 (Asbestos Demolition, Renovation and Manufacturing) of BAAQMD's regulations. *Rideshare Measures* C.7a: Encourage all tenants (commercial and residential) at the site to implement carpool/ vanpool programs (e.g., carpool, ride matching for employees, assistance with vanpool formation, provision of vanpool vehicles, guaranteed ride home program, etc.). Distribute information about the Alameda County Congestion Management Agency's Guaranteed Ride Home Program to tenants of the building to facilitate alternative transportation modes. As part of the program, a person who uses an alternate mode of travel, including transit or a carpool, is provided with free taxi service in the case of unexpected circumstances. These circumstances might include unscheduled overtime or a family illness or emergency. C.7b: Encourage commercial tenants to implement employee rideshare incentive programs providing cash payments or pre-paid fare media such as transit passes or coupons. *Transit Measures* C.7c: Construct transit facilities, such as bus turnouts/bus bulbs, benches, shelters, etc., as determined appropriate by AC Transit, consistent with Transit Mitigation Measure B.4a. C.7d: Encourage commercial tenants to meet standard, minimum employee ridesharing requirements or to provide incentives to encourage employees to rideshare. C.7e: Encourage commercial tenants to implement a parking cash-out program for employees (e.g., non-driving employees receive transportation allowance equivalent to the value of subsidized parking).	

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	Shuttle Measures	
	C.7f: The project applicant shall operate a private shuttle service between the project site and nearby activity centers and transit nodes (e.g., Lake Merritt BART station) with an adequate number of shuttle stops located onsite, and on a frequency sufficient to attract use of the service by project residents and employees.	
	Bicycle and Pedestrian Measures	
	C.7g: Provide bicycle lanes and/or paths, connected to the community-wide network.	
	C.7h: Provide secure, weather-protected bicycle parking for employees.	
	C.7i: Provide direct, safe, attractive pedestrian and bicycle access to transit stops and adjacent development.	
	C.7j: Provide adequate street lighting within the street right of way immediately adjacent to and within the project site.	
	C.7k: Provide secure short-term bicycle parking for retail customers and other non-commute trips.	
D. Hydrology and Water Quality		
D.1: Project construction would involve activities (excavation, soil stockpiling, boring and pile driving, grading, and dredging, etc.) that would generate loose, erodable soils that, if not properly managed, could violate any water quality standards or waste discharge requirements; result in substantial erosion or siltation; create or constitute substantial polluted runoff; or otherwise substantially degrade water quality.	D.1: The project sponsor shall comply with all NPDES requirements, RWQCB General Construction Permit requirements, and all City regulations and Creek Protection Permits requirements.	Less than Significant
D.2: Project construction activities would include dredging in Clinton Basin, which could require disturbance, removal, and disposal of contaminated sediment that may result in adverse impacts to aquatic organisms and water quality.	D.2: The project sponsor shall obtain and comply with all water quality certification and requirements required for dredging activities, which shall include a Section 404 permit process pursuant to the Army Corps of Engineers (Corps) and pursuant to the oversight, permitting, and approval of the Dredged Material Management Office (DMMO).	Less than Significant

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
D.5: Site development under the project would involve new landscaping and open lawns. If not properly handled, chemicals used to establish and maintain landscaping and open lawn areas, such as pesticides and fertilizers, could flow into the waterways and result in water quality impacts to the Oakland Estuary, and eventually San Francisco Bay.	D.5: The project sponsor shall prepare a landscape management plan (LMP) for all public open spaces that includes, but is not necessarily limited to, a description of application, storage, and safety measures involving the use of pesticides and fertilizers. The LMP shall include but not be limited to the following: • Transportation and storage: Pesticides and fertilizers shall be transported and stored as per state and federal guidelines. They shall be stored in designated bermed areas onsite. • Pesticide Application: Pesticides and fertilizers shall be handled and applied according to the procedures set by the manufacturer. The LMP shall address methods to optimize and reduce the use of pesticides and fertilizers and present strategies to incorporate environmentally-safe (organic) pest and growth enhancement materials. These strategies shall address eventually eliminating the use of chemicals such as diazinon that harm water quality. The RWQCB has found that the pesticides have a reasonable potential to cause or contribute to exceedances of water quality standards. Therefore, the NPDES permit requires the City of Oakland (as a permittee) to address pesticides. The project sponsor shall adhere to the Diazinon Pollutant Reduction Plan or the Pesticide Plan submitted by the ACCWP to the RWQCB. The goals of the Pesticide Plan and of its resulting implementing actions are to reduce or substitute pesticide use (especially diazinon use) with less toxic alternatives (ACCWP, 2003). • The Plan shall identify pesticide and fertilizer application schedules. • Container Disposal: The contractor shall dispose of empty containers carefully. The containers shall never be disposed at locations that would contaminate natural waterways. The LMP and its recommendations for use, control, and eventual reduction of nonorganic pesticide and fertilizer use shall be approved by the City prior to installing the landscape and shall be implemented throughout the life of the project.	Less than Significant

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D.6: The project sponsor could deplete groundwater supplies or interfere with groundwater recharge and cause contamination of surface.	D.6: The project sponsor shall comply with NPDES permit requirements by the RWQCB for dewatering activities.	Less than Significant
E. Cultural Resources		
E.1: Construction of the project could cause substantial adverse changes to the significance of currently unknown cultural resources at the site, potentially including an archaeological resource pursuant to CEQA Guidelines Section 15064.5 or CEQA Section 21083.2(g), or the disturbance of any human remains, including those interred outside of formal cemeteries.	E.1a: An archival cultural resource evaluation shall be implemented prior to the start of construction or other ground-disturbing activities to identify whether historic or unique archaeological resources exist within the project site. The archival cultural resource evaluation, or "sensitivity study," shall be conducted by a cultural resource professional approved by the City and who meets the Secretary of the Interior's Professional Qualifications Standards for Prehistoric and Historical Archaeology. The purpose of the archival cultural resource evaluation is to: (1) identify documentation and studies to determine the presence and location of potentially significant archaeological deposits; (2) determine if such deposits meet the definition of a historical resource under CEQA Guidelines Section 15064.5 or a unique archaeological resource under CEQA Section 21083.2(g); (3) guide additional archaeological work, potentially including pre-construction subsurface archaeological investigation if warranted, to recover the information potential of such deposits; and (4) define an archaeological monitoring plan, if warranted. A pre-construction meeting shall occur with the cultural resource professional and the City regarding the findings of the evaluation, and shall include consultation with and considerations of the Department of Toxic Substances (DTSC), the Lead Agency for the environmental cleanup activities on the project site. If excavation is the only feasible means of data recovery, such excavation shall be in accord with the provisions of CEQA Guidelines Section 15126.4(b)(3)(C). Any additional archaeological work and or monitoring shall be pursuant to a plan approved by the City. If a pre-constructing testing program is deemed necessary by the qualified professional as a result of the archival study, it shall be guided by the archival study and shall use a combination of subsurface investigation methods (including backhoe trenching, augering,	Less than Significant

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	and archaeological excavation units, as appropriate). If monitoring of any areas during ground disturbing activates is determined to be required based on the results of the archival evaluation and the pre-construction testing, the monitoring will be conducted by a qualified cultural resources professional and the monitoring plan will include appropriate provisions for evaluating any archaeological deposits, consultation with the City, and any necessary data recovery program. Mitigation Measure E.1b: Prior to the commencement of ground distributing activities, all construction personnel shall receive environmental training from a cultural resource professional approved by the City and who meets the Secretary of the Interior's Professional Qualifications Standards for Prehistoric and Historical Archaeology. The purpose of the environmental training is to inform all construction personnel of the possibility of encountering historical resources. All construction personnel specifically involved in onsite activities that may uncover prehistoric resources shall be trained in the identification of prehistoric resources and immediate actions required if potential resources are found. Mitigation Measure E.1~~a~~c: Pursuant to CEQA Guidelines 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore, in the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project proponent and/or lead agency shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the City. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to	

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	current professional standards.	
	Mitigation Measure E.1~~b~~d: In the event that human skeletal remains are uncovered at the project site during construction or ground-breaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and follow the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.	
E.2: The project may adversely affect unidentified paleontological resources at the site.	E.2: The project sponsor shall notify a qualified paleontologist of unanticipated discoveries, who shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in Section 15064.5 of the CEQA Guidelines. In the event of an unanticipated discovery of a breas, true, and/or trace fossil during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards (SVP 2004)). The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The paleontologist shall submit the excavation plan to the City for review and approval.	Less than Significant

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
F. Geology, Soils, and Seismicity		
F.1: In the event of a major earthquake in the region, seismic ground shaking could potentially injure people and cause collapse or structural damage to proposed structures.	F.1: A site-specific, design level geotechnical investigation for each site area (which is typical for any large development project) shall be required as part of this project. Each investigation shall include an analysis of expected ground motions at the site from known active faults. The analyses shall be in accordance with applicable City ordinances and policies and consistent with the most recent version of the California Building Code ,which requires structural design that can accommodate ground accelerations expected from known active faults. In addition, the investigations shall determine final design parameters for the walls, foundations, foundation slabs, and surrounding related improvements (utilities, roadways, parking lots and sidewalks). The investigations shall be reviewed and approved by a registered geotechnical engineer. All recommendations by the project engineer and geotechnical engineer shall be included in the final design. Recommendations that are applicable to foundation design, earthwork, and site preparation that were prepared prior to or during the project design phase, shall be incorporated in the project. The final seismic considerations for the site shall be submitted to and approved of by the City of Oakland Building Services Division prior to the commencement of the project.	Less than Significant
F.2: In the event of a major earthquake in the region, seismic ground shaking could potentially expose people and property to liquefaction and earthquake-induced settlement.	F.2: Prepare an updated site specific, design level geotechnical investigation for each building site to consider the particular project designs and provide site specific engineering recommendations for mitigation of liquefiable soils. Liquefiable soils under the conditions described in the geotechnical report shall be mitigated using various proven methods to reduce the risk of liquefaction. Liquefaction mitigation measures include subsurface soil improvement, deep foundations, structural slabs, and soil cover. Site improvement methods to address potential liquefaction include dynamic compaction, compaction grouting, jet grouting, and vibroflotation can significantly reduce the risk of liquefaction. Deep foundations extending below the liquefiable layers can be designed to support structures despite the occurrence of liquefaction. Structural slabs are designed to span across areas of non-support, such as in the case of liquefaction or settlement. The presence of a sufficiently thick, engineered fill layer over liquefiable soil can reduce the potential for damage at the ground surface due to liquefaction by helping to bridge across isolated liquefaction zones. Other	Less than Significant

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	methods of mitigating potential liquefaction hazards suggested in the *California Geological Survey's (CGS) Geology Guidelines for Evaluating and Mitigating Seismic Hazards* (CGS Special Publication 117, 1997) include edge containment structures (berms, dikes sea walls, retaining structures, compacted soil zones), removal or treatment of liquefiable soils, modification of site geometry, lowering the groundwater table, in-situ ground densification, deep foundations, reinforced shallow foundations, and structural design that can accommodate predicted displacements (CDMG, 1997). These measures shall be evaluated during the site specific geotechnical investigation and the most effective, practical and economical methods should become part of the project. Prior to incorporation into the project, geotechnical engineering recommendations regarding the mitigation and reduction of liquefaction for each site shall be reviewed for compliance with the CGS Geology Guidelines. The purpose of these guidelines is to protect the public safety from seismic effects such as liquefaction.	
F.3: Development at the project site could be subjected to settlement.	F.3: As with standard geotechnical practices, site specific geotechnical investigations and reports would be required in order to obtain permits from the City of Oakland. Such geotechnical investigations and reports prepared for the project site shall include generally accepted and appropriate engineering techniques for determining the susceptibility of the project site to settlement and reducing its effects. Where settlement and/or differential settlement is predicted, mitigation measures such as lightweight fill, geofoam, surcharging, wick drains, deep foundations, structural slabs, hinged slabs, flexible utility connections, and utility hangers could be used. These measures shall be evaluated and the most effective, feasible, and economical measures shall be recommended. Engineering recommendations shall be included in the project engineering and design plans. All construction activities and design criteria shall comply with applicable codes and requirements of the 1997 UBC with California additions (Title 22), and applicable City construction and grading ordinances.	Less than Significant
F.4: Development at the project area may include use of dredged material as fill which would be subject to settlement and subsidence.	F.4: Any dredged material used for fill will have to undergo an appropriate process of consolidation and stabilization to render it suitable for the support of engineered fill. A geotechnical investigation and report will be required in order to obtain	Less than Significant

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	permits from the City of Oakland in addition to the Dredged Material Management Office permitting requirements. The geotechnical investigations and reports prepared for the project site shall include generally accepted and appropriate engineering techniques for determining the susceptibility of the project specific site to settlement and reducing its effects. Engineering recommendations shall be included in the project engineering and design plans. The use of dredged materials as fill shall be limited to open space areas.	
F.5: Construction activities at the project area could loosen and expose surface soils. If this were to occur over the long term, exposed soils could erode by wind or rain causing potential loss of topsoil. In addition, shoreline areas exposed to wave action could be subject to erosion and loss of topsoil.	F.5: Consistent with Mitigation Measure D.1 (which addresses construction-related water quality impacts), the project sponsor shall comply with all applicable NPDES requirements, RWQCB General Construction Permit requirements, and all City regulations, including Creek Protection Permits, as detailed in Mitigation D.1.	Less than Significant
G. Noise		
G.2: Noise from project-generated traffic and other operational noise sources, such as mechanical equipment and truck loading/unloading, could exceed City of Oakland Noise Ordinance standards and disturb project occupants and nearby residents.	G.2: The project applicant shall incorporate the following design features into the final site plans: • Building equipment (e.g., HVAC units) shall be located away from nearby residences, on building rooftops, and properly shielded within an enclosure that effectively blocks the line of sight of the source from receivers in order to meet City of Oakland Noise Ordinance standards. • Truck delivery areas shall be located as far from adjacent residences as possible. To the extent feasible, project buildings shall be located so that they block noise related to truck deliveries and waste collection from residential or other sensitive receptors.	Less than Significant
G.3: The project would locate noise-sensitive multifamily residential uses in a noise environment where noise levels are above what is considered “normally acceptable” according to the City of Oakland General Plan Noise Element.	G.3a: To comply with the requirements of Title 24 and achieve an interior noise level of less than 45 dBA, noise reduction in the form of sound-rated assemblies (i.e., windows, exterior doors, and walls) shall be incorporated into project building design. Final recommendations for sound-rated assemblies will depend on the specific building designs and layout of buildings on the site and shall be determined during the design phase. (Oak to 9th Residential Development, Oakland, California, Environmental Noise Assessment by Charles M. Salter Associates, Inc., November 2002. Table 4 of the Salter	Less than Significant

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	Associates document lists conceptual window and wall Sound Transmission Class (STC) ratings for different noise environments and gives an estimate of the STC requirements needed to meet interior noise criteria.) G.3b: Due to the proximity of the project to a railroad crossing, a written disclosure of railroad crossing noise, particularly usage of train horns and bells on warning devices during the daytime and nighttime hours, shall be provided to potential residents of the project	
H. Hazardous Materials		
H.1: Disturbance and release of contaminated soil during remediation, demolition and construction phases of the project, or transportation of excavated material, contaminated groundwater or dredged sediment could expose construction workers, the public, or the environment to adverse conditions related to hazardous materials handling.	H.1a: The applicant shall retain a qualified environmental consulting firm to prepare a cleanup plan for the contaminated soil and groundwater which would be based on a comprehensive remedial investigation report for the project area. This plan shall be approved by the appropriate regulatory agencies which may include but not be limited to the DTSC and the RWQCB. The plan shall also include the preparation of a health and safety plan to protect the workers and the public during all remediation and construction activities proposed. Following agency approval of the plan, remediation and removal work shall be conducted according to all applicable OSHA worker safety regulations. Remediation activities at the site may include, without limitation, closure or removal of subsurface structures, excavation and disposal of contaminated materials, natural and enhanced bioremediation of soil and groundwater, restoration and improvement of shoreline structures, limited dredging of sediments, and institutional and engineering controls to prevent exposure to and migration of contaminated materials. Throughout the course of remediation and construction activities, the handling, transport, and storage of any hazardous waste or potentially hazardous waste shall be conducted appropriate to all local and state agency protocols. H.1b: Prior to offsite disposal, the project applicant shall adequately profile excavated soils to establish the proper classification of the soils for hazardous or non-hazardous waste disposal. The soils shall be handled, stored and transported according to all applicable regulations for the appropriate classification. H.1c: Soil generated by construction activities shall be	Less than Significant

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	stockpiled onsite and sampled prior to reuse or disposal at an appropriate facility. Any reuse of soils shall be conducted by prior approval from the appropriate state oversight agency. H.1d: Groundwater generated during construction dewatering shall be contained and transported offsite for disposal at an appropriate facility, or treated, if necessary, prior to discharge into the sanitary sewer to levels acceptable to the East Bay Municipal Utilities District. H.1.e: Prior to dredging any materials from the Clinton Basin, the project applicant shall retain a qualified environmental consulting firm to prepare a Sampling and Analysis Plan (SAP) as described by the Corps of Engineers (PN 99-4). The SAP shall be approved by the Dredged Material Management Office (DMMO) and shall include a proposal for a disposal location and a disposal alternatives analysis. Following agency approval of the plan, sediment removal work shall be conducted in accordance with all applicable OSHA worker safety regulations. In addition, the handling, transport, and storage of any hazardous waste or potentially hazardous waste shall be conducted consistent with all local and state agency protocols.	
H.2: Disturbance and release of hazardous structural and building components (i.e. asbestos, lead, PCBs, USTs, and ASTs) during demolition and construction phases of the project or transport of these materials could expose construction workers, the public, or the environment to adverse conditions related to hazardous materials handling.	H.2a: A pre-demolition ACM survey shall be performed by a state-certified asbestos consultant prior to demolition of any of the structures located on the project site. The survey shall include sampling and analysis of suspected ACMs. Abatement of known or suspected ACMs shall occur prior to demolition or construction activities that would disturb those materials. Pursuant to an asbestos abatement plan developed by a state-certified asbestos consultant and approved by the City, all ACMs shall be removed and appropriately disposed of by a state certified asbestos contractor. H.2b: The project applicant shall implement a lead-based paint abatement plan, prepared by a qualified consultant, which shall include the following components: • A pre-demolition LBP survey for all structures proposed for demolition at the project site. The survey shall include sampling and identification of suspected materials	Less than Significant

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	containing LBP. • Development of an abatement specification plan which shall be based on survey work and detail proposed abatement work areas and procedures. • A site Health and Safety Plan. • Containment of all abatement work areas to prohibit offsite migration of paint chip debris. • Removal of all peeling and stratified lead-based paint on building surfaces and on non-building surfaces to the degree necessary to safely and properly complete demolition activities per the recommendations of the survey. The demolition contractor shall be identified as responsible for properly containing and disposing of intact lead-based paint on all equipment to be cut and/or removed during the demolition. • Appropriately remove paint chips by vacuum or other approved method. • Collection, segregation, and profiling waste for disposal determination. • Appropriate disposal of all hazardous and non-hazardous waste. H.2c: A pre-demolition PCB survey shall be performed prior to demolition of any of the structures located on the project site. The survey shall include sampling and identification of suspected PCBs. Abatement of known or suspected PCBs shall occur prior to demolition or construction activities that would disturb those materials. In the event that electrical equipment or other PCB-containing materials are identified prior to demolition activities they shall be removed, and shall be disposed of by a licensed transportation and disposal contractor at an appropriate hazardous waste facility. H.2d: When known or previously unidentified USTs are encountered during construction, construction in the immediate	

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	area shall cease until the UST is removed with oversight from the City of Oakland Fire Department Hazardous Materials Unit or other applicable oversight agency. If there is any indication that the tank has leaked, then the lead agency shall direct any appropriate remediation measures. Removal of the UST shall include, to the extent deemed necessary by the lead agency, over-excavation and disposal of any impacted soil that may be associated with such tanks to a degree satisfactory to the oversight agency.	
H.3: Hazardous materials used onsite during construction activities (i.e., solvents) could be released to the environment through improper handling or storage.	H.3: The use of construction best management practices shall be implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following: • Follow manufacturer's recommendations on use, storage and disposal of chemical products used in construction; • Avoid overtopping construction equipment fuel gas tanks; • During routine maintenance of construction equipment, properly contain and remove grease and oils. • Properly dispose of discarded containers of fuels and other chemicals.	Less than Significant
I. Biological Resources / Wetlands		
I.2: Construction activities required for the project would result in a substantial adverse effect on potentially jurisdictional wetlands or waters of the U.S. under the jurisdiction of the Corps, waters of the state under the jurisdiction of the Regional Water Quality Control Board (RWQCB), and wetlands under the jurisdiction of BCDC jurisdiction.	I.2a: *Corps-Verified Wetland Delineation*. A preliminary identification of potentially jurisdictional areas was conducted in 2004 (LSA, 2004), and the project sponsor submitted the draft potentially jurisdictional wetland delineation to the Corps in July 2005. The project sponsor shall obtain Corps verification of the preliminary identification of jurisdictional areas prior to submitting permit applications. A verified wetland delineation would be required prior to the submittal of regulatory permit applications. Mitigation Measure I.2b: *Wetland Avoidance*. Section 404 first requires that projects avoid or minimize adverse effects on jurisdictional waters to the extent practicable. To the extent feasible, the final project design shall minimize effects on	Less than Significant

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	wetlands and other waters in accordance with Section 404 of the Clean Water Act. Areas that are avoided shall be subject to Best Management Practices (BMPs), as described in Mitigation Measure I.2.d below. Such measures shall include installation of silt fencing, straw wattles or other appropriate erosion and sediment control methods or devices. Equipment used for the removal of debris and concrete rip-rap along the estuary edge will be operated from land using backhoes and cranes. Construction operations along Clinton Basin and Shoreline Park shall be barge-mounted or shall involve water-based equipment such as scows, derrick barges and tugs. Additionally, the existing restoration project at the southwest end of Clinton Basin, implemented by the Port of Oakland, shall be protected during construction activities. The extent of this area shall be clearly marked by a qualified biologist prior to the start of any grading or construction activities and a buffer zone established. All construction personnel working in the vicinity of the restoration area shall be informed of its location and buffer zone. I.2c: Obtain Regulatory Permits and other Agency Approvals. Prior to the start of construction activities for the project, the project applicant shall obtain all required permit approvals from the Corps, the RWQCB, BCDC, and all other agencies with permitting responsibilities for construction activities within jurisdictional waters of other jurisdiction areas. Permit approvals and certifications shall include, but not be limited to Section 404/Section 10 permits from the Corps, Section 401 Water Quality Certification from the RWQCB, and BCDC permit. *Section 404 / Section 10 Permits.* Permit approval from the Corps shall be obtained for the placement of dredge or fill material in waters of the U.S., if any within the interior of the project site, pursuant to Section 404 of the federal Clean Water Act. Construction along the estuary edge below MHW elevation will be considered dredging by the Corps and will require a Section 10 permit. In addition, dredging of Clinton Basin will also require a Section 10 permit. *Section 401 Water Quality Certification*. Approval of Water Quality Certification (WQC) and/or Waste Discharge Requirements (WDRs) shall be obtained from the RWQCB for	

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	work within jurisdictional waters. Preparation of the Section 401 Water Quality Certification applications will require an application and supporting materials including construction techniques, areas of impact, and project schedule. *BCDC Permit*. Permit approval from BCDC placing solid material, pilings floating structures boat docks, or other fill and/or dredging or other extraction of material from the Bay and the 100-foot shoreline band inland from mean high tide line along the length of the project site. Activities would include dredging for rebuilding the marina in Clinton Basin, and replacing the 5th Avenue marina with a new marina that will contain approximately 170 boat slips. The proposed project will include the removal of approximately 33,780 square feet of solid Bay fill as part of the shoreline design and the placement of 74,110 square feet of solid Bay fill for the creation of a village green at Clinton Basin. The project also includes the removal of approximately 129,920 square feet of pile-supported fill with the removal of a portion of the Ninth Avenue Terminal wharf. Additionally, floating fill will be required to create the two proposed marinas. The project will be required to comply with all BCDC permit conditions that typically include requirements to construct, guarantee and maintain public access to the bay, specified construction methods to assure safety or to protect water quality, and mitigation requirements to offset the adverse environmental impacts the project. I.2d: *Best Management Practices (BMP*s). The project applicant shall implement standard BMPs to maintain water quality and control erosion and sedimentation during construction, as required by compliance with the General National Pollution Discharge Elimination System (NPDES) Permit for Construction Activities and established by Mitigation Measure D.1 to address impacts on water quality. Mitigation measures would include, but would not be limited to, installing silt fencing along the edges of the project site to protect estuarine waters, locating fueling stations located away from potential jurisdictional features, and isolating construction work areas from the identified jurisdictional features. The project applicant shall also implement, BMPs to avoid impacts onwater quality resulting from dredging activities within the Bay, and that as identified in the *Long-Term Management Strategy for the Placement of*	

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	Dredged Material in the San Francisco Bay Region (LTMS) (Corps, 2001). These BMPs include: silt fencing and gunderbooms or other appropriate methods for keeping dredged materials from leaving the project site.	
	I.2e: *Compensatory Mitigation.* The project applicant shall provide compensatory mitigation for temporary impacts to, and permanent loss of, waters of the U.S., including wetlands, as required by regulatory permits issued by the Corps, RWQCB, and BCDC. Measures shall include, but not be limited to 1) onsite mitigation through wetland creation or enhancement, 2) development of a Mitigation and Monitoring Plan, and 3) additional wetland creation or enhancement or offsite mitigation:	
I.3: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on fisheries resources in the Oakland Inner Harbor.	I.3a*: Protection of Fish and Migrating Salmonid*s. The project applicant shall implement measures for protection of salmonids and Pacific herring during dredging projects and for indirect impacts on the San Francisco Bay "Essential Fish Habitat" (EFH) that are identified in the Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region (LTMS) (Corps, 2001).	Less than Significant
I.4: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on nesting habitat for breeding raptors and passerine birds, including Cooper's hawk.	I.4a*: Timing of Construction.* To the extent feasible, construction activities shall be conducted outside the breeding season for birds and raptors (August 1-January 30) Trees and shrubs that could provide potential nesting habitat may be removed during this period to avoid future nesting within the project site.	Less than Significant
	I.4b: *Preconstruction Surveys. If seasonal avoidance is infeasible, the following measures* shall be required to avoid potential adverse effects on nesting special-status raptors and other nesting birds:	
	• A qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within 500 feet of construction activities. Preconstruction surveys should occur no later than two weeks prior to the start of construction activities.	
	• If active nests of raptors or other bird species are found during preconstruction surveys, a no-disturbance buffer	

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of these buffer zones and types of construction shall be determined in consultation with the CDFG and shall be based on existing noise and human disturbance levels at the project site. • If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees, shrubs, and buildings that have been determined to be unoccupied by special-status birds or that are located more than 500 feet from active nests may be removed.	
I.5: The project could have a substantial adverse effect, either directly or through habitat modifications, on special-status nesting and roosting bats.	I.5: Before demolition of abandoned or underused buildings on the project site, such as the Ninth Avenue Terminal building, a qualified biologist who is familiar with bat biology and who is able to recognize signs of bats using abandoned buildings shall conduct pre-demolition building surveys in order to adequately make a determination on the presence of bat nurseries. If abandoned or underused buildings slated for destruction are being used by bats as nursery sites, demolition shall be postponed until young are reared and able to forage on their own. This determination shall be made by a qualified biologist specializing in bat biology. If bats are found to be roosting in abandoned or underused buildings on the project site, the bats shall be actively relocated to a temporary roosting structure (preferably onsite) during demolition activities. In addition, permanent bat roosting structures (“bat boxes”) shall be created in order to properly mitigate the effects of a loss of roosting structure. The design of the bat boxes shall conform to the specifications appropriate to the species of bats found on the project site and vicinity, and shall be approved by a qualified bat biologist knowledgeable in the design of bat boxes. The bat boxes shall conform to the architectural design of the project buildings to reduce the visibility and obtrusiveness of the boxes and to avoid vandalism or disturbance to bat colonies.	Less than Significant

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Less Than Significant, and as noted, Beneficial or No Impacts *(No Mitigation Required)*		
B. Transportation, Circulation, and Parking		
B.5: The project would create demand for bicycle parking.	None Required.	
B.6: The project would increase the potential for pedestrian safety conflicts.	None Required.	
B.8: The project would contribute to 2010 changes to traffic conditions on the regional and local roadways.	None Required.	
C. Air Quality and Meteorological Conditions		
C.2: The project would result in an increase in regional ROG, NOx, and PM emissions due to project-related traffic.	None Required.	
C.3: Project traffic would increase localized carbon monoxide concentrations at intersections in the project vicinity.	None Required.	
C.4: Operation of project facilities would produce objectionable odors that would affect a substantial number of people.	None Required.	
C.5: Construction and operation of the project would expose existing sensitive receptors in the project vicinity and planned multifamily residential land uses associated with the project to health risks from diesel emissions.	None Required.	
C.6: The proposed project could result in hazardous wind conditions.	None Required.	
C.8: The proposed project could result in cumulative hazardous wind conditions.	None Required	
D. Hydrology and Water Quality		
D.3: Development of the project would result in a substantial decrease in impervious area. The project would implement post-construction BMPs to increase stormwater infiltration; to treat and direct stormwater runoff or discharge into a	None Required / Beneficial Effect.	

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
stormwater system and the estuary; and to prevent illicit discharge. Therefore, the project would not violate regulatory water quality standards or waste requirements.		
D.4: Project operation would involve increased use of the marinas at the project site. As required by the RWQCB, the project design would incorporate post construction BMPs to treat stormwater and control discharge of wastes from the vessels used at the marinas. Therefore, the project would not violate water quality standards or waste discharge requirements.	None Required.	
D.7: The project would not result in flooding due to its proximity to a 100-year flood hazard area, or expose people or property to other substantial risks related to flooding, seiche, tsunami, or mudflow.	None Required.	
D.8: The project would result in a net decrease in impervious surfaces and would reconfigure and stabilize the shoreline along the project site, thereby decreasing the volume of stormwater runoff. Therefore the project would not increase runoff and result in substantial flooding on or offsite, or exceed the capacity of the existing stormwater drainage system.	None Required / Beneficial Effect.	
D.9: The increased construction activity and new development resulting from the project, in conjunction with population and density of other foreseeable development in the city, would not result in cumulative impacts with respect to hydrology and water quality.	None Required.	
E. Cultural Resources		
E.6: The project would demolish the remaining buildings on the project site	None Required.	
E.7: The project would construct a new mixed-use, multi-story development, diminishing the industrial character of the project site and vicinity, and altering the existing setting of the Fifth Avenue Point neighborhood.	None Required.	
F. Geology, Soils, and Seismicity		
F.6: The project would not expose people or structures to substantial risk or hazards as a result of 1) expansive soils, or 2) conditions that would potentially result in landslides or 3) surface fault rupture.	None Required.	

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
F.7: The project would not create substantial risks to life or property as a result of being located above a well, pit, swamp, mound, tank vault, or unmarked sewer line; above landfills for which there is no approved closure and post-closure plan, or unknown fill soils; or soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.	None Required.	
F.8: The development proposed as part of the project, when combined with other reasonably foreseeable development in the vicinity, would not result in significant cumulative impacts with respect to geology, soils or seismicity.	None Required.	
G. Noise		
G.5: The proposed project, together with anticipated future development in Oakland, could result in long-term traffic increases that could cumulatively increase noise levels.	None Required.	
H. Hazardous Materials		
H.4: Project operations would generate and involve the handling of general commercial/retail and household hazardous waste in small quantities, and therefore would not cause an adverse effect on the environment.	None Required.	
H.5: The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	None Required.	
H.6: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	None Required.	
H.7: Development proposed as part of the project, when combined with other foreseeable development in the vicinity, would not result in cumulative hazardous materials impacts.	None Required.	
I. Biological Resources / Wetlands		
I.1: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on special-status mammal species, specifically the Pacific harbor seal.	None Required.	

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
I.6: Increased lighting and shading associated with the new project buildings could have a substantial adverse effect, either directly or through habitat modifications, on biological resources.	None Required.	
I.7: The removal of any protected trees identified within the project site would be conducted in compliance with the City of Oakland's Tree Preservation and Removal Ordinance.	None Required.	
I8: Construction activity and new development resulting from the project, in conjunction with other foreseeable development in the city and along its shoreline, could result in impacts on wetlands, other waters of the U.S., and special-status species.	None Required.	
J. Population, Housing, and Employment		
J.1: The project would not displace substantial numbers of existing housing units; nor would the project displace substantial numbers of people, necessitating construction of replacement housing.	None Required / No Impact.	
J.2: The project would displace existing businesses and jobs, but not in substantial numbers necessitating construction of replacement facilities, or resulting in substantial increases in distances traveled.	None Required.	
J.3: The project would not induce substantial population growth directly by proposing new housing, or indirectly through infrastructure improvements.	None Required.	
J.4: The project would not induce substantial population growth in a manner not contemplated in the General Plan, with infrastructure requirements not previously considered or analyzed.	None Required.	
J.5: The project would not induce substantial population growth as a result of business and employment growth proposed in the project.	None Required.	
(Non-CEQA) Potential for new retail development to cause ripple effects of store closures and long-term vacancies that result in physical deterioration and urban decay	N/A	

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
(Non-CEQA) Potential for housing market effects to lead to displacement or physical deterioration of housing or neighborhoods	N/A	
K. Visual Quality and Shadow		
K.1: The project would construct new buildings that would be taller and have more bulk than existing buildings in the area along pedestrian and vehicular routes and adjacent to the Oakland Estuary, and would substantially demolish the Ninth Avenue Terminal building. This would substantially, but not adversely, alter the existing visual character and quality of the project area.	None Required / Beneficial Effect.	
K.2: The project would construct new buildings that would be taller and have more bulk than existing nearby buildings which would result in changes to views from nearby public viewpoints, but that would not adversely affect scenic vistas of which the project site is a part.	None Required.	
K.3: The project would increase the amount of light and glare emitted from the project site but would not result in substantial adverse effects to day or nighttime views.	None Required.	
K.4: The project would create additional shadow on adjacent areas west and north of the project site, however, the project would not cast shadow on historic resources (retained Ninth Avenue Terminal Bulkhead Building), would not introduce landscaping conflicting with the California Public Resource Code; would not cast shadow on buildings using passive solar heat, solar collectors for hot water heating, or photovoltaic solar collectors; and would not cast shadow that impairs the use of any public or quasi-public park, lawn, garden, or open space.	None Required.	
K.5 The project would require approval of a general plan amendment and rezoning (among other discretionary approvals), but would be consistent with the policies and regulations addressing the provision of adequate light to appropriate uses.	None Required.	
L. Public Services and Recreation Facilities		
L.1: The increased population and density resulting from the project would not involve or require new or physically altered	None Required.	

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
governmental facilities in order to maintain acceptable service ratios, response time, or other performance objectives for police protection services.		
L.2: The increased population and density resulting from the project would not involve or require new or physically altered governmental facilities in order to maintain acceptable service ratios, response time, or other performance objectives for fire protection and emergency medical services and facilities.	None Required.	
L.3: The students generated by the project would not require new or physically altered school facilities in order to maintain acceptable service ratios or other performance objectives at local public schools.	None Required.	
L.4: The project would create new parks, and the increased population resulting from the project would not result in increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of these facilities would occur or be accelerated, nor would the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.	None Required / Beneficial Effect	
L.5: The project would increase the on-site resident population and increase the demand for library services; however, the increase in demand for such services would not result in the need to construct or expand libraries that might have an adverse physical effect on the environment.	None Required.	
L.6: The increased population and density resulting from the project, in conjunction with population and density of other foreseeable development in the city, would result in a cumulative increase in the demand for public services and parks. However, the project's contribution to such impacts would not be cumulatively considerable.	None Required.	
M. Utilities and Service Systems		
M.1: The project would not exceed water supplies available to serve the project from existing entitlements and resources and require or result in the construction of water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	None Required.	

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
M.2: The project's projected wastewater demand would not result in the city of Oakland exceeding its citywide allocation under the Wet Weather Program or East Bay Municipal Utility District's (EBMUD) capacity to serve the project's projected demand in addition to its existing commitments within its service area.	None Required.	
M.3: The project would not require or result in construction of new offsite stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	None Required.	
M.4: The project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs, and therefore the project would not require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects. The project would not impede the City of Oakland's ability to meet the waste diversion requirements of the California Integrated Waste Management Act or the Alameda County Waste Reduction and Recycling Initiative, nor cause the City to violate other applicable federal, state, or local statutes and regulations related to solid waste.	None Required.	
M.5: The project would not violate applicable federal, state, or local statutes and regulations relating to energy standards. The project would not result in a determination by the energy provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments, nor require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects.	None Required.	
M.6: The increased development resulting from the project, in conjunction with population and density of other foreseeable development in the city, would result in increased demand for utilities and service systems. However, the project's contribution to such impacts would not be cumulatively considerable.	None Required.	

CHAPTER IV
Commenters on the Draft EIR

A. Organizations and Persons Commenting in Writing

The following agencies, organizations, and individuals submitted written comments on the Draft EIR (DEIR) during the public comment period, September 1, 2005 through October 24, 2005. City of Oakland staff received the correspondence below by mail, email, fax, or other delivery by 4:00 p.m. on October 24, 2005, the publicly-noticed end of the public comment period on the Draft EIR. Correspondence received after closer of the public comment period are included and noted.

PUBLIC AGENCIES

Designator	Public Agency and Signatory	Correspondence Received	Correspondence Dated
A	State of California Public Utilities Commission. Kevin Boles, Utilities Engineer, Railroad Crossings Engineering Section	9/23/05	9/20/05
B	East Bay Regional Park District. Brad Olson, Environmental Programs Manager	10/10/05	10/05/05
C	East Bay Municipal Utility District. William R. Kirkpatrick, Manager of Water Distribution Planning	10/17/05	10/07/05
D	State of California Department of Transportation. Timothy Sable, District Branch Chief	10/21/05	10/21/05
E	San Francisco Bay Conservation and Development Commission. Brad McCrea, Bay Design Analyst	10/24/05	10/24/05
F	San Francisco Bay Area Rapid Transit District. Kathleen Kelly, Executive Manager, Planning & Budget	10/24/05	10/24/05
G	City of Alameda, California. Greg McFann, Acting Planning and Building Director	10/24/05	10/24/05
H	Alameda County Congestion Management Agency. Saravana Suthanthira, Associate Transportation Planner	10/24/05	10/24/05
I	State of California State Lands Commission. Dwight E., Sanders, Chief, Division of Environmental Planning and Management	10/24/05	10/24/05
		Agency Correspondence Received after 10/24/05	
2	Capitol Corridor Joint Powers Authority. Eugene K. Skoropowski, Managing Director	10/28/05	10/24/05

4	Alameda County Parks, Recreation and Historical Commission. Abe Friedman, Chair	10/28/05	10/24/05
6	California Department of Fish and Game. Robert Floerke, Regional Manager, Central Coast Region	10/28/05	11/4/05
PUC	State of California Public Utilities Commission. Kevin Boles, Utilities Engineer, Railroad Crossings Engineering Section	12/22/05	12/22/05

ORGANIZATIONS

Designator	Organization and Signatory Name	Correspondence Received	Correspondence Dated
J	League of Women Voters of Oakland. Helen Hutchison, President	10/11/05	10/05/05
K	Friends of the Ninth Avenue Terminal. Leal Charonnat, Secretary	10/24/05	10/21/05
L	Save the Bay. David Lewis, Executive Director	10/22/05	10/19/05
M	Sierra Club, Northern Alameda County Regional Group. Joyce Roy, Member of Executive Committee	10/24/05	10/24/05
N	Jack London Aquatic Center. Robert Kidd, President	10/24/05	10/24/05
O	Oakland Heritage Alliance. Naomi Schiff	10/24/05	10/24/05
P	San Francisco Bay Trail. Lee Chien Huo, Bay Trail Planner	10/24/05	10/24/05
Q	Waterfront Action. Sandy Threllfall, Executive Director	10/24/05	10/23/05
R	Friends of Oakland Parks and Recreation. Tom Guarino, President	10/24/05	No Date
S	The Jack London District Association. Simon Waddington, Secretary	10/24/05	10/24/05
T	East Bay Asian Local Development Corporation. Lynette Lee, Executive Director	10/24/05	No Date
	East Lake Merchants Association. Jose Macias, President		
DD	Fifth Avenue Institute. Charles M. Weber, Jr., Director	10/24/05	10/23/05
1	Piedmont Avenue Neighborhood Improvement League	10/24/05	10/17/05
		Organization Correspondence Received after 10/24/05	
7	Coalition of Advocates for Lake Merritt	No Date	9/28/05
U	California Dog Owner's Group. Katin Mac Donald, President	10/26/05	10/24/05
V	Friends of the Ninth Avenue Terminal. Leal Charonnat, Secretary	10/26/05	10/18/05
W	Golden Gate Park Audubon Society. John Bowers, Member, Conservation Committee	10/26/05	10/24/05

3	Alameda County League of Conservation Voters	11/4/05	No Date

LETTERS FROM INDIVIDUALS

Designator	Signatory Name	Correspondence Received	Correspondence Dated
X	Leal Royce Charonnat, Architecture + Engineering, 1 – 5th Avenue, Oakland, CA 94606	10/10/05	10/06/05
Y	East Bay Regional Park District. John Sutter, Director, Ward 4 [add attachment, Letter AA]	10/19/05	10/14/05
Z	Michael Cosentino, 1070 Marina Village Parkway, Alameda, CA	10/18/05	1018/05
AA	Margaret Elizares, 7501 Sunkist Drive, Oakland, CA 94605	10/24/05	10/19/05
BB	Anna Naruta, M.A., Ph.D. Candidate, Oakland CA, 94604	10/24/05	10/23/05
CC	Pamela And Charles Weber, #3 Fifth Avenue, Oakland, CA 94606	10/24/05	10/23/05
EE	Eva Tolmach	10/24/05	10/23/05
FF	Nancy Nadel, Councilmember District #3	10/24/05	10/24/05
GG	Patty St. Louise, 499 Embarcadero, 94606	10/24/05	No Date
HH	Kirk E. Peterson & Associates Architecture, 5253 College Avenue, 94618	10/24/05	10/24/05
II	Robert A. Karn, Sea Scout Ship Makai, Castro Valley, 94546	10/24/05	10/24/05
JJ	Joanna Adler, Business Owner and Resident of Jack London District, 94606		
		Individual Correspondence Received after 10/24/05	
5	Rajiv Bhatia, MD, MPH, 99 Roble Road, 94618	10/24/05	10/28/05

LETTERS AS PLANNING COMMISSION HEARING EXHIBITS

Designator	Signatory Name	Correspondence Received	Correspondence Dated
KK	Wendy Tinsley, Jack London District Association, President, 247-4th Street, 94606	9/28/05	9/28/05
LL	Kathleen Jensen, 122 Cypress Street, 94501	9/28/05	9/25/05

B. Persons Commenting at the Public Hearings

Planning Commission (PH)

The following persons offered public comment on the Draft EIR during the City of Oakland Planning Commission public hearing held at the Oakland City Hall on September 28, 2005:

- Commissioner McClure
- Commissioner Boxer
- Commissioner Lee
- Commissioner Lighty
- Commissioner Jang
- Leonor Godinez
- Andy Nelson
- Muang Saechoa
- Chandu Mae
- Antonio Varruz
- Quan Tut
- Gloria Lomeli
- Disheng Huang
- Reverend Jim Hopkins
- Andre Spearman
- Jennifer Lin
- Ms. Kuan
- Iliana DeLa Torres
- Rod Divelbliss
- Tersita Cruz
- Doug Block
- Susan Yee
- Orna Sasson
- Charles Lerrigo
- Naomi Schiff
- Ken Katz
- Darrel Carey
- Pamela Weber
- Charles Weber
- Helen Hutchison
- Joyce Roy, speaking on behalf of the Sierra Club
- Windy Tinsley
- Pamela Drake
- Sandra Threlfall, representing Waterfront Action
- John Sutter
- Chris Durazo
- James Vann, on behalf of the Coalition of Advocates for Lake Merritt (CALM)
- Sanjiv Handa

Parks and Recreation Commission (PR)

The following persons offered public comment on the Draft EIR during the City of Oakland Parks and Recreation Commission (PRAC) public hearing held at on October 12, 2005:

- Chair Commissioner Webb
- Commissioner Abad
- Commissioner Ricards
- Commissioner McClure
- Commissioner Magid
- Commissioner Nelson
- Commissioner Armendariz
- Commissioner Taylor
- Keith Miller
- Helen Hutchison
- Sandra Threlfall
- John Sutter
- Marina Carlson
- Margaret Elizares
- Joyce Roy, speaking on behalf of the Sierra Club
- Joyce Roy, speaking on behalf of Oakland Heritage Alliance (OHA)
- Caroline Kim
- Charles Weber
- Steve Lowe

Landmarks Preservation Advisory Board (LB)

The following persons offered public comment on the Draft EIR during the City of Oakland Landmarks Preservation Advisory Board (LPAB) public hearing held at Oakland City Hall on October 17, 2005.

- Joyce Roy
- Steve Lowe
- Charles Weber, speaking for the Fifth Avenue Institute
- Anna Naruta
- Keith Miller
- Sandra Threlfall
- Naomi Schiff
- Chair Board Member Armstrong
- Board Member Peterson
- Board Member Muller
- Board Member Parish

CHAPTER V

Master Responses to Comments on the Draft EIR

A number of recurring topics emerged from several comments received on the Draft EIR (DEIR). These topics are presented in this chapter, and a master response is provided for each. Although the comments on a particular topic may vary, taken together, the number of similarly-focused comments received on a topic warranted a single, comprehensive response. The master responses are intended to reduce repetition and extensive cross-referencing within the responses to comments provided in Chapters VI through IX of this document.

Master Response A: Preparation of a Specific Plan

A number of comments question the City's and the project sponsor's decision to proceed with a specific project proposal, instead of preparing a specific plan, for the Oak to Ninth Avenue Project site. The comments assert three main points: 1) the Estuary Policy Plan requires preparation of a specific plan and thus proceeding without a specific plan violates the general plan; 2) a specific plan would allow for community design of the project instead of responding to a proposal prepared by a developer; and 3) a specific plan would allow for public, Planning Commission and City Council review and input on development of the project site that is otherwise curtailed with a specific project proposal. This response first addresses the Estuary Policy Plan requirements and then reviews the statutory elements of, and requirements for, a specific plan in order to provide a context for understanding the nature and content of a specific plan and the legal requirements attendant to its adoption. Thereafter, the response documents how the project and the process for approval provides at least the equivalent level of information and public review as a specific plan and then addresses each of the main assertions contained in the comments.

Estuary Policy Plan Direction

In response to the first of the three main concerns raised in the comments that the lack of a specific plan violates the general plan, the applicable policy in the Estuary Policy Plan (Policy OAK-5) states: "Initiate more specific planning of the entire Oak to Ninth district." The text explaining the policy states that a specific plan "should be prepared prior to development" in order to account for site constraints, to resolve simultaneously a number of issues, to analyze the feasibility of various developments, and to develop a funding strategy for the open space. The text further notes that meeting these goals will require preparing a realistic development program and site plan. The policy itself only calls for more specific planning, not necessarily a specific

plan, and the proposed project would achieve each of the articulated reasons for the further detailed planning determined to be necessary for the site. The language that a specific plan "should be" prepared is directory not mandatory. Given that the detailed project proposal and comprehensive analysis in the DEIR meet the intent of the policy, proceeding without a specific plan does not violate the general plan. Moreover, the City could decide to amend this policy to clarify its intent prior to approval of the project in which case the potential for any conflict will be avoided.

Specific Plan Requirements

Under California state law, a specific plan is a planning tool available to local agencies that provides for the systematic implementation of the general plan for all or part of an area covered by the general plan. (Gov. Code § 65451.) As set forth in the Draft EIR (p. IV.A-16-17), a specific plan must include text and diagrams which provide detail about five aspects of the proposed development: 1) the distribution, location, and extent of the land uses, including open space; 2) the distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy and other essential facilities to serve the land uses located in the specific area; 3) the standards and criteria for development and for the conservation, development and utilization of natural resources; 4) an implementation program, including financing measures, for carrying out the specific plan; and 5) a statement of the relationship of the specific plan to the general plan. (Gov. Code § 65451.)

The process for adopting a specific plan is generally the same as for adoption of a general plan. Specific requirements include: 1) the planning agency must provide opportunities for public involvement through public hearings and any other means the city deems appropriate (Gov. Code § 65351); 2) the plan must be referred to other agencies that may be affected by its adoption (Gov. Code §§ 65352, 65352.5); 3) a noticed, public hearing must be held by the planning commission prior to adoption of a recommendation to the legislative body (Gov. Code § 65354); and 4) a noticed, public hearing by the legislative body must be held prior to adoption of the specific plan. Unlike general plans, there are no restrictions on how often a specific plan may be amended.

As noted in the DEIR (p. IV.A-17), the specific project proposal analyzed in the DEIR includes all the information required for a specific plan. In many respects the Oak to Ninth Avenue project proposal analyzed in the DEIR provides greater detail on a broader range of topics than required for a specific plan and in this way provides the public and decision makers with information that may not be available at a specific plan level of planning. The following discussion reviews the project's and DEIR's compliance with the five informational requirements of a specific plan.

The project characteristics are described in detail in Chapter III of the DEIR (Project Description) and include the distribution, location, and density of land uses, including the open space. Figure III-3 provides an illustrative development plan. Figure III-4 provides a proposed development program and parcelization plan showing detailed information for each of the proposed parcels, including acreage, retail space, residential units, density, and parking. The proposed building massing and height is also provided (Table III-4). A discussion of the open space plan, including

improvements, uses, and the size of each open space area is provided together with Figure III-7 illustrating the open space plan. Additionally, the DEIR provides a description of the shoreline improvements and site remediation process. This information meets or exceeds the first informational requirement for a specific plan.

The DEIR also includes extensive information about the proposed infrastructure for the project. The DEIR describes the internal circulation and public access to the site (p. III-19, Figure III-3) and describes the offsite improvements that would be implemented as mitigation measures (Section IV.B, Transportation, Circulation and Parking). Additionally, this Final EIR (FEIR) includes the project sponsor's Transportation Demand Management Program. The plans for utilities, including water, sanitary sewer, stormwater drainage, solid waste service, gas, and electricity are described in detail in DEIR Section IV.M (Utilities and Service Systems). That section reviews existing conditions, relevant regulations, the capacity of service providers, the proposed infrastructure plans for the project, and potential project impacts (no significant impacts were identified). Requirements for the storm drainage system are also discussed in DEIR Section IV. D (Hydrology and Water Quality). The shoreline improvements are described and analyzed on p. III-19 and in Section IV.D. Thus, the DEIR not only describes all the infrastructure systems required for a specific plan, but also provides setting information, impact analysis, and, if necessary, mitigation measures. In this way, the information in the DEIR meets or exceeds the second requirement for a specific plan.

The standards and criteria for development will be provided in a new Planned Waterfront Zoning District (PWD-1) that will establish land use regulations, development standards, and design guidelines. The PWD will be reviewed in connection with the City's consideration of the project. The DEIR describes the PWD on pages III-22, III-26, and IV.A-38-39. Additionally, the DEIR describes existing federal, state and local regulations that will apply to the project and provides for numerous mitigation measures that set forth specific standards and criteria intended to mitigate any potential environmental impact associated with development of the site and conservation and use of the site's natural resources. These combined sources provide extensive, detailed standards and criteria that fulfill or exceed the requirement for a specific plan.

The DEIR contains a phasing plan for the project (pp. III-22-23), a description of the state-mandated process for preparing and implementing the remediation of the site (p. III-21 and Section IV.H, Hazardous Materials), a description of the implementation, ownership and maintenance of the open space areas (p. III-18), and a description of the regulatory approvals required for implementation (pp. III-26-29). This information provides the equivalent of an implementation program required for a specific plan.

The DEIR provides an extensive review of the project's relationship to the general plan. DEIR Section IV.A, (Land Use, Plans and Policies), examines the key policies of the Land Use and Transportation Element, the Estuary Policy Plan, the Historic Preservation Element, the Open Space, Conservation and Recreation Element, the Oakland Safety Element, the Noise Element, the Bicycle Master Plan, the Pedestrian Mater Plan and the Scenic Highways Element. Other sections of the DEIR further examine relevant policies from these Elements. Appendix F contains

a comprehensive listing of the applicable general plan policies and policies from the plans of other agencies. Thus, the DEIR adequately addresses this requirement for a specific plan.

Procedural Requirements of the Specific Plan

With respect to the procedural requirements for adoption of a specific plan, the process for review of the project proposal exceeds the legal requirements for the City's consideration of a specific plan. The project has been developed during a nearly five-year planning process that has thus far involved extensive community outreach by the project sponsor. Presentations, meetings, and workshops with over 100 neighborhood associations, business groups, civic and political organizations, governmental and quasi-governmental agencies and organizations, environmental and waterfront groups, labor and employment-focused groups, and a number of non-profit organizations and local press have resulted in the project sponsor speaking directly to over 4,000 people and to groups representing over 20,000 people about the project. Information about the project exists on over 10 internet websites. Community meetings also included a community outreach process conducted by Circlepoint on behalf of the City.

Since publication of the Notice of Preparation (NOP) of the DEIR, and as of publication of this FEIR, public hearings related to the project have occurred at the Landmarks Preservation Advisory Board and subcommittee (3), the Park and Recreation Advisory Commission (1), the Planning Commission and subcommittees (4), and a joint special hearing of the Planning Commission, Landmarks Preservation Advisory Board, Park and Recreation Advisory Commission, the Redevelopment Agency and the City Council for a tour of the Ninth Avenue Terminal shed and wharf. Upcoming public hearings are scheduled for the Park and Recreation Advisory Commission, and both the Planning Commission and the City Council will hold additional hearings prior to acting on the project proposal. The noticing for public hearings on the project includes approximately 600 individuals, agencies and organizations. Additionally, the DEIR was distributed to the state, regional, and other local agencies that could be affected by the project. This process exceeds the requirements for public involvement and hearings required for a specific plan.

Community Input Opportunity

In response to the second of the three main concerns raised in the comments that a specific plan would allow the community, rather than a private developer, to design the project, the discussion above reveals that state law does not provide such assurances. Specific plans are often prepared by private developers to facilitate the implementation of their development plans. How a specific plan is prepared is left to the discretion of the local agencies. Although the author of some of the comments may desire a community design for the site, there is no legal requirement or other assurance that the preparation of a specific plan would guarantee community design of a site. Also, as noted above, the community has had, and will continue to have, numerous opportunities for input into the City's decision on the project. The DEIR includes alternatives that were suggested or influenced by members of the public and these will be considered by the decision makers in acting on the project approvals. It is also important to note that a City-sponsored, community design of the site would have been prohibitively expensive given the expert

evaluations and reports required to realistically consider, resolve and plan for the complex conditions on and around the site and to prepare the environmental review of a specific plan. With a private project sponsor, these planning and entitlement costs are borne by the developer.

Specific Plan Public Review

In response to the third main concern, the discussion above (*Procedural Requirements of the Specific Plan*) demonstrates that the public review requirements for a specific plan are limited: at least one hearing before the planning commission and one hearing before the city council. The opportunities for public involvement and comment available for the project are not merely equivalent to, but in fact far exceed, the legal requirements for a specific plan. Thus, the project has not curtailed any public review that would have been required for a specific plan.

Master Response B: Analysis of Reuse Alternatives for the Ninth Avenue Terminal

Several comments state that the DEIR should identify and analyze additional uses or a mix of uses that could be located within the retained Ninth Avenue Terminal as part of the preservation alternatives. This master response reviews the criteria by which the project alternatives in the DEIR were selected and discussed, identifies the information about possible reuses that are currently before the City for consideration, and clarifies the conditions that must occur for the project to avoid the significant and unavoidable impact resulting from substantial demolition of the Terminal.

Alternatives Selection and Scope

The DEIR includes a comprehensive list of project suggestions that were submitted to the City as response to the Notice of Preparation (NOP) or during preparation of the DEIR. Most of the suggestions, including those pertaining to possible reuses for the Ninth Avenue Terminal, were incorporated into the project alternatives selected for analysis in the DEIR (p. V-2 to V-3). As an introduction to the list of suggestions, the DEIR describes that, consistent with the CEQA Guidelines, "although many other alternatives to the project could be formulated, for purposes of this EIR, the City of Oakland has considered the selected alternatives to constitute 'a range of reasonable alternatives to the project…which would feasibly attain most of the basic objectives of the project' (CEQA Guidelines Section 15126(a))." The alternatives (and components of possible alternatives) in the DEIR are considered to generally align with the overall goals and policies of the Estuary Policy Plan, present possible project alternatives, and incorporate many of the suggestions for the project. Specifically, the *Ninth Avenue Terminal: A Feasibility Study for Adaptive Reuse* describes several examples of uses that could occur in the fully- or partially-retained Ninth Avenue Terminal (Perry et al., 2005). Other commenters on the DEIR subsequently also submitted further information on this topic.

The DEIR includes three alternatives that retain all or part of the Terminal: Alternative 2 (Enhanced Open Space / Partial Ninth Avenue Terminal Preservation and Reuse), Alternative 3 (Reduced Development / Ninth Avenue Terminal Preservation and Reuse), and the Preservation Sub-Alternative (Full Ninth Avenue Terminal Preservation and Reuse). The Terminal reuses assumed in each of these DEIR project alternatives include a potential mix of cultural, educational and recreational uses as envisioned in the Estuary Policy Plan and that are assumed to be allowable Tidelands Trust-compliant uses (as confirmed as of publication of the DEIR; see below). The extent that any specific or mix of cultural, educational, and recreational reuse activities would result in significant environmental impacts has been identified and fully analyzed in the relevant topical sections of Chapter IV of the DEIR (Setting and Impact Analysis).

A number of comments assert that the State Lands Commission may provide additional flexibility to the allowable Tidelands Trust uses within historic structures. At the present time, the project site is held by the Port subject to the public trust for commerce, navigation, and fishery because the lands within the site either were (a) tidelands or submerged lands originally acquired by the State of California in its sovereign capacity when it joined the Union in 1850 and subsequently granted by the State in trust to the City of Oakland; or (b) other lands acquired by the Port with revenues derived from tide or submerged lands that the City held in trust under grants from the State. Although the Project contemplates a land exchange and sale of lands authorized by state law which will lift the public trust from portions of the site, significant portions of the project site, including the site of the existing Ninth Street Terminal Building, will remain subject to the public trust.

Lands subject to the public trust in California are subject to use restrictions imposed by the common law and the provisions of any applicable trust grant. California's common law public trust use restrictions are the product of many years of judicial decisions, opinions and informal advice provided by the California Attorney General, and interpretations of the public trust by the members and staff of the California State Lands Commission. Furthermore, in addition to trust grants, other legislative acts such as those creating BCDC and the California Coastal Commission also define the scope of the use restrictions under the public trust. As a consequence, there is no "approved list" of trust-consistent uses that can easily be referred to for guidance. Rather decisions have been made a on a case-by-case basis

However, certain uses (such as residential and general office use) historically have been deemed not to be consistent with the public trust. Other uses, such as retail use, have been deemed trust-consistent under some circumstances (where it clearly caters to those who are seeking a recreational experience on the waterfront, e.g., shops selling maritime goods or that serve waterfront visitors and enhance the waterfront experience), but not trust-consistent under other circumstances (where the retail caters to those who simply want to shop, e.g. "big box" retail).Nonetheless, the State Lands Commission and other agencies charged with interpreting and applying the public trust have permitted general office use, generally deemed a non-trust-consistent use, within historic buildings under certain, limited circumstances where necessary to preserve and rehabilitate those buildings. In this context, "historic buildings" has meant buildings that played a significant role in the maritime heritage of San Francisco Bay. The

historic buildings where this has occurred are the Ferry Building, Pier 1, and Piers 1½, 3, and 5, all in San Francisco.

With respect to Oak to Ninth, the Legislature has found that the property to be retained in trust should only be used for trust-consistent uses such as "open space, public access, water-related recreation, such as a marina and boat launch, commercial services to visitors as necessary, such as food service, plant and animal habitat, such as wetlands, circulation to and along the waterfront, or similar uses, as the port and the commission determine may be required to support the activities and goals of the Estuary Policy Plan or the Oak Street to 9th Avenue legislative grants." (Stats. 2004, ch. 542, § 4(j)(2).)

City Consideration of Possible Reuses

To determine whether a reuse alternative is feasible, reasonable assumptions would be made regarding the appropriate or preferred specific reuses. The City will consider these questions as it balances the competing policy and other issues facing the project (see e.g., Master Response H). The record contains detailed reuse information submitted during the EIR scoping process and public hearings on the DEIR, during other non-EIR-related public input opportunities that have paralleled the EIR process, and from educational study (i.e., the aforementioned *Ninth Avenue Terminal: A Feasibility Study for Adaptive Reuse*) to enable decisionmakers and public to evaluate these issues and to assist City decisionmakers in deliberations on the project. Also, a number of comments within this FEIR document provide more detailed information regarding possible reuse opportunities for all or part of the Terminal. To further assist the City, the project sponsor has prepared an economic feasibility and constraints report (capital and operational) of retaining all or parts of the Ninth Avenue Terminal.

To summarize, pursuant to CEQA, the DEIR adequately identifies and analyzes a range of uses for the Terminal that would allow the City to make an informed decision about the physical environmental impacts of the preservation alternatives to the project. Ultimately, the City will make its determination on the demolition or preservation and specific reuses of the Terminal along with any required supporting findings and statement of overriding considerations for the CEQA-related impacts. It should be noted that the City made such findings and statement of overriding considerations in connection with its adoption of the Estuary Policy Plan for which a significant unavoidable cultural resources impact was identified for full or partial demolition of the Terminal.

Master Response C: Significant and Unavoidable Transportation Impacts

Several comments expressed concerns about the DEIR-identified significant and unavoidable traffic impacts, which in the commenters' opinion indicate a less-than-thorough investigation of feasible mitigation measures to avoid unacceptable traffic conditions.

The DEIR noted significant and unavoidable traffic impacts at nine intersections (in some cases, a project impact was found to occur at the same intersection under both 2010 [interim project] and 2025 [project buildout] conditions, as well as a cumulative impact).

For each significant impact, possible improvements were explored and tested for feasibility to achieve an acceptable level of service, or at least to mitigate the project's impact (i.e., to reduce the increased delay to a point smaller than the thresholds of significance in the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines). The explorations entailed extensive field reviews, and reviews of previous studies (such as the Jack London Square Redevelopment EIR).

The significant and unavoidable impacts fell into the following two broad categories (one with subcategories):

1. Roadways or intersections that are located within the City of Oakland (under City of Oakland jurisdiction), but where improvements could not be physically improved; and
2. Roadways or intersections that are not under the jurisdiction of the City of Oakland and instead are:

    a. Located in the City of Oakland, but in the State roadway system, and therefore implementation of mitigation would require approval by Caltrans; or
    b. Located in the City of Alameda, and therefore implementation of mitigations would require approval by the City of Alameda.

1. Infeasible to Mitigate Impacts Within City of Oakland (City jurisdiction)

At five intersections in the City of Oakland, the above-described explorations concluded that intersection operations could not be improved to acceptable levels and further improvements are infeasible at these locations. For example, mitigating the project impact at Broadway/5th Street (2010, 2025 and cumulative) and Jackson/6th Streets (2025 and cumulative) would require a substantial reconfiguration of the roadway system, which is beyond the ability of this project and other individual projects to fund. As noted in the DEIR, a set of potential improvements have been identified to improve the operations of Broadway/5th and Jackson/6th. The initial planning and engineering studies for these improvements, Caltrans Project Study Report (PSR) and Project Report (PR) are complete, but insufficient funds are available at this time to complete these improvements. These improvements also implement the Near-Term Improvement Strategies outlined in the SR 260 Deficiency Plan. Additional improvements are planned at these locations, which will implement other strategies outlined in the SR 260 Deficiency Plan. These improvements represent a comprehensive approach to improve the operation of the interchange system and the associated surface streets. As such, these improvements are beyond the ability of the City of Oakland to implement without concurrence of Caltrans, the City of Alameda, and other stakeholders in the area.

At other intersections (Lakeshore Avenue / MacArthur Boulevard [2025 and cumulative], Lakeshore Avenue / Foothill Boulevard [cumulative], and 14th / 7th-12th Streets [cumulative]),

the absence of sufficient right-of-way available for additional lanes was the cited in the DEIR as the reason why improvements other than signal timing optimization are not feasible.

At the Lakeshore Avenue / MacArthur Boulevard intersection, fully mitigating this impact would require the addition of turn lanes and the extension of existing lanes to provide additional storage for the various turning movements at this intersection. There is insufficient physical space to implement these improvements because of the proximity of adjacent intersections such as Lakeshore Avenue / Lake Park Avenue and the I-580 structure which crosses over this intersection. The park and its associated pedestrian facilities along Lakeshore Avenue further limit potential improvements at this intersection. The project's contribution to traffic volumes at this intersection would range from 2 percent (contribution to future total traffic volumes) to 15 percent (contribution to growth in traffic volumes).

The intersection of Lakeshore Avenue /Foothill Boulevard is similarly constrained. At this intersection, the intersection is bounded by a City park on two of the three approaches. These parks include the linear park along Lake Merritt as well as a tennis facility at the corner of Lakeshore Avenue and Foothill Boulevard. Across from the tennis facility is a condominium building with surface parking. Improving operations at this intersection would require the addition of a turn lane on Foothill Boulevard, which can not be constructed without adversely affecting either the park or the condominium building and its associated parking lot. The project's contribution to traffic volumes at this intersection would range from 2 percent (contribution to future total traffic volumes) to 9 percent (contribution to growth in traffic volumes).

Sufficient right-of-way is also not available to fully mitigate project impacts at the intersection of 14th Avenue / 7th – 12th Street. This intersection is constrained by the railroad right-of-way adjacent to I-880 and an existing Burger King restaurant with surface parking. For example, it would be difficult to add a second southbound left turn lane without negatively impacting the Burger King parking lot. Improvement options at this location are restricted by the nearby intersection of 14th Avenue / East 12th Street, which is located only 250 feet away. The project's contribution to traffic volumes at this intersection would range from 5 percent (contribution to future total traffic volumes) to 12 percent (contribution to growth in traffic volumes).

2a. Feasible to Mitigate Impacts Within City of Oakland, but in Caltrans jurisdiction

At two intersections in the City of Oakland (Embarcadero / 6th Avenue at the I-880 Northbound Off-Ramp [2010], and Embarcadero / 10th Avenue at the I-880 Southbound On-Ramp [2025 and cumulative]), the above-described explorations concluded that operations at these unsignalized intersections could be improved to acceptable levels by installing traffic signals and adding turn lanes along the Embarcadero. Under the DEIR mitigation measures, the project applicant would be responsible for fully funding the design and construction of these improvements. However, the City of Oakland does not have the final say over any improvements at these intersections within Caltrans jurisdiction. Caltrans would only allow improvements at intersections under its jurisdiction after preparation of an encroachment permit, which cannot be prepared until the project is approved by the City of Oakland. As stated on DEIR pp. IV.B-31 and IV.B-42, in the event that Caltrans approves these improvements, the impacts would be less than significant.

At two other intersections (Jackson / 6th Streets [2010] and 5th / Oak Streets at the I-880 Southbound On-Ramp [2025 and cumulative]), the above-described explorations concluded that operations at these signalized intersections could be improved to acceptable levels by optimizing the traffic signal timing. Under the DEIR mitigation measures, the project applicant would be responsible for fully funding these improvements. However, as described above, the City of Oakland does not have the final authority over any improvements at these intersections within Caltrans jurisdiction. As stated on DEIR pp. IV.B-29 and IV.B-37, in the event that Caltrans approves the implementation of these mitigation measures, the impacts would be less than significant.

2b. Feasible to Mitigate Impacts Within City of Alameda

The proposed mitigation for the significant impact at the intersection of Webster Street / Atlantic Avenue (2025 and cumulative) in the City of Alameda is the reconstruction of the intersection to provide added travel lanes. In cooperation with the City of Alameda, the DEIR mitigation measure would require the project applicant to pay a fair-share portion of the cost of these intersection improvements. However, as described above regarding Caltrans, the City of Oakland does not have the final authority over any improvements at this intersection within Alameda jurisdiction. As stated on DEIR p. IV.B-35, in the event that Alameda approves this mitigation measure, the impact would be less than significant.

Based on the above information, is likely that the project would be able to mitigate at least four of the proposed improvements through optimization of traffic signals or construction of new traffic signals along the project frontage.

Master Response D: Transportation Demand Management (TDM)

Several comments expressed concerns about the limited alternative transportation options available to project residents, employees, and visitors (and related questions about what transit/shuttle services and bicycle facilities would be provided); and about how parking would be managed for access to recreational uses.

A draft Transportation Demand Management (TDM) Plan has been prepared for the proposed project by Nelson\Nygaard Consulting Associates, a firm specializing in TDM research and applications, and key aspects are summarized in this Master Response. Preparation of a final TDM Plan will likely be a condition of approval for the project.

The draft TDM plan for the project sets out a series of measures by which the developer and property manager could reduce vehicle travel to and from the site, promote transit, walking and cycling, and manage onsite parking for project residents, employees, visitors and recreational users. These measures would help mitigate impacts identified in the DEIR, but because the actual success rate related to TDM measures is not readily quantifiable, can vary among development

projects, and cannot be ensured, significant impacts identified in the DEIR are not assumed to be fully mitigated by the TDM Plan.

One overarching recommendation is to employ a full-time TDM coordinator (two full-time positions may be warranted in Phase 2 of the project), based in the property management office. He or she would take overall responsibility for implementing and adjusting the TDM program; promoting it to the public; and selling parking permits.

Other required and recommended TDM measures of note are the following:[1]

Transit Measures

Required Measures:

- Create a shuttle bus line that would begin operation with the first residential move-ins. The shuttle would connect the Oak to Ninth development with the Aquatic Center, Jack London Square and downtown Oakland, operating at 15- or 30-minute intervals. This route would connect with AC Transit Line 72 in Jack London Square as well as Amtrak, the Ferry Terminal, the 12th Street BART station (and other AC Transit bus routes).

Recommended Measures:

- Implement AC Transit's proposed extension of Line 11 service, providing service every 20 minutes during the week to both Lake Merritt and 12th Street BART stations.
- Work with AC Transit to consider the extension of Line 72 from its current terminus at the Jack London Amtrak station to the Oak to Ninth development site.
- Provide high-quality stop amenities and wayfinding for Oak to Ninth residents and visitors to the site. Bus shelters should be provided at all stops, and signage should indicate key locations within the development, especially the Bay Trail.
- Provide enhanced transit information specifically tailored to residents and visitors.
- Develop an "eco-pass" deeply-discounted transit pass, ideally using Translink, which would enable Oak to Ninth residents to access all Bay Area transit systems without any out-of-pocket expenses for fares.

Parking Management Measures

As assessed by Nelson\Nygaard Consulting Associates, based on representative hourly accumulation patterns for different land uses (in Urban Land Institute's *Shared Parking*), the proposed parking supply would fully accommodate the peak weekday parking demand at project

[1] The "required" measures are considered essential for the project's success and the "recommended" measures would help reduce adverse effects, but are not considered essential. The full Draft Transportation Demand Management Plan is presented as Appendix A to this document.)

build-out. On weekend days, there would be parking spaces available on-street and in the Parcel G Garage (which would be open to the public). All of these spaces could be used by recreational visitors to the site.

Required Measures:

- Charge for parking separately from the costs of residential units, and offer residents the option of a reserved, dedicated space at a higher price, or a discounted, shared space.

Recommended Measures:

- Provide at least two City CarShare vehicles, and provide free memberships to residents and employees, with the caveat that City CarShare would be willing to provide this service at the project site.
- Charge non-residents an hourly or daily rate for parking. Price all on-street parking using meters or pay-on-foot technology.
- Charge the right price to maintain availability, through adjusting prices to ensure that spaces are available.
- Provide smartcard access to residential garages, ensuring security for residents while allowing employees to use this parking
- Manage on-street parking, for example through pricing and/or time limits; charge the right price to maintain availability, adjusting prices to ensure that spaces are available
- Regularly monitor parking occupancy to effectively manage the parking supply.
- Depending on parking demand in Phase I, consider the potential to lease additional space for overflow parking for special events. Caltrans, for example, has historically been willing to lease space under freeways for this purpose.

Bicycle Measures

Required Measures:

- Provide an on-site network of bicycle and pedestrian paths, with appropriate signage, to ensure public access to the shoreline, in line with Bay Trail design standards

  At the Oak to Ninth Project, Class I bike paths would primarily provide for recreational use, following the shoreline, as part of the Bay Trail.[2] Class II bike lanes, meanwhile,

[2] There are three types of bikeways, as defined by Caltrans' *Highway Design Manual*: Class I Bike Path, which provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with crossflow minimized; Class II Bike Lane, which provides a striped lane for one-way bike travel on a street or highway; and Class III Bike Route, which provides for shared use with pedestrian or motor vehicle traffic.

would provide a higher-speed, direct route along the Embarcadero. Fifth Avenue, Main Street and Eighth Avenue would carry some bicycle traffic, and would be treated as Class III bicycle routes, although not necessarily signed.

- Provide a sufficient number of long-term bicycle parking spaces to meet demand, with cages and/or lockers in the residential garages

Recommended Measures:

- Provide good connections to the City bicycle network, particularly to BART and Downtown Oakland, through ensuring safe crossings at Ninth Avenue and Fourth Avenue **NOTE: Does Natalie (per her email comments) want this deleted, or left as "recommended?**

- Provide long-term bicycle parking at an initial ratio of 1 space per 5 units, adjusted upwards as necessary to cater to demand

- Provide secure short-term bicycle parking, with bicycle racks provided along retail frontages in line with City of Oakland placement standards

- Provide distinctive gateway signage to direct cyclists off the Embarcadero to follow the shoreline

---

Master Response E: Traffic Signal Retiming as Mitigation

Several comments questioned the DEIR's reliance on traffic signal retiming and optimization to mitigate significant traffic impacts. Some comments questioned why optimization was not simply assumed to occur without the need for mitigation measures, while others questioned whether signal retiming alone would be enough to mitigate the impact.

The DEIR's level of service (LOS) analyses for intersections with pretimed traffic signal timing held those existing settings unchanged for future conditions. That approach is conservative because jurisdictions have the ability to adjust signal timings as circumstances change the relative traffic volumes on the roadways comprising the intersections. However, because the City of Oakland does not have funds available to track and implement traffic signal optimization, and for purposes of isolating potential project impacts at signalized study intersections in the DEIR, existing signal timing was held constant, and mitigation measures to optimize the signal timing at adversely affected intersections were identified to highlight the need for such action and to provide a mechanism to collect funds from the project applicant towards that end.

Signal retiming and optimization involves changing the timing of an individual traffic signal to better reflect existing and projected traffic volumes. Changes can include changing the cycle

length (i.e., the total time a traffic signal cycles through all phases) or reallocating green time between different phases of a traffic signal. For example, adding green time to a left-turn movement can provide additional capacity to that movement. The impact of signal timing changes was tested using *Synchro for Windows* software, which implements the *2000 Highway Capacity Manual* methodologies and procedures. Documentation of the recommended signal timing changes, and of the improved conditions, at the affected intersections is provided in LOS output sheets in the appendix to the technical resource document (*Oak to Ninth Project Final Traffic Study*, August 26, 2005) on-file at the City of Oakland office.

Master Response F: Pedestrian Activity at Nearby Rail Crossings

Several comments expressed concerns about pedestrian safety under project conditions, specifically related to nearby railroad crossings.

It is recognized that there is a potential for pedestrians from the project to cross the railroad tracks in front of the project, along either 5th Avenue or other sections of the tracks that are located near Embarcadero. There are also vehicular at-grade crossings in the study area where service or drill tracks cross on- and off-ramps to I-880 (at 6th and 9th Avenue), but no pedestrians are expected to cross the tracks at these latter locations. The DEIR did not specifically address pedestrian impacts at railroad crossings because there are existing safety measures (i.e., crossing gates, warning lights, and chain link fencing along the Embarcadero) that would limit the ability of pedestrians from the project to cross the tracks. Additional pedestrian safety improvements could be installed at the existing at-grade crossing at 5th Avenue. These improvements could be installed concurrently with the construction of the traffic signals and in conjunction with other safety improvements. Appropriate pedestrian and bicycle safety improvements could include additional directional signage and some channelization, which would limit pedestrian access across the tracks in conjunction with the proposed fencing along Embarcadero near the 5th Avenue crossing.

The installation of arms or gates to limit pedestrian access is not recommended since arms or gates could trap pedestrians along the tracks. For example, if gates are installed along 5th Avenue, a broken lock of a gate malfunction would prevent a person traveling north along 5th Avenue from leaving the track area. A gate malfunction would also force a pedestrian to divert to the travel lanes on 5th Avenue, thereby mixing with the vehicles traveling to and from Embarcadero.

The citizens of Oakland have investing significantly to establish Lake Merritt Channel as the primary public access route to and from the shoreline in the area of the project site through the approval of Measure DD bond in 2002. The Measure DD bond program expenditure plan has appropriated $27 million in 2003 for improvements to improve public access along Lake Merritt Channel, $2 million of which is specifically budgeted for improvements that include bicycle and

pedestrian access (among other shoreline and wetland improvements) along the Channel. Although funded, these improvements are not yet in the design phase, however, the City approved the reallocation of funding for Lake Merritt Channel projects in a way that would allow these improvements to be designed and constructed earlier in the bond series than originally scheduled. Related to these improvements, construction of a pedestrian/bicycle bridge over the railroad tracks at the southern length of the Channel (below I-880) is being considered and would span across Embarcadero and reach the proposed park on the east side of the Channel (Channel Park). This effort is not currently funded, however, in 2005, the City adopted a resolution authorizing the application for, acceptance and appropriate of $10 million from the California Coastal Conservancy (CCC) to assist in the planning, design and implementation of this concept and construction of the additional Measure DD projects discussed below.

Measure DD has appropriated $25 million for projects to improve water flow (10th Street culvert/bridge) and flood control (7th Street flood control pump station), thereby creating and improving pedestrian (and boat) access along the Channel. Measure DD has also appropriated approximately $47.3 million for improvements to 12th Street that will improve vehicular and pedestrian/bicycle circulation with new bridges and significant improvements and reconfiguration of traffic lanes. The 7th Street, 10th Street and 12th Street projects are currently in design phase and construction is anticipated to occur 2006 through 2008-2009.

In addition to the improvements to the bicycle and pedestrian paths that are being funded by the Measure DD bond program (and potentially supplemented by the CCC), Caltrans will be constructing and improving various facilities along the Lake Merritt Channel as required by the San Francisco Bay Conservation and Development Commission (BCDC). These improvements were identified by BCDC during the review and approval of the permits for the I-880 Seismic Retrofit. Caltrans will be required to construct approximately 600 linear feet of new public paths adjacent to the Lake Merritt Channel while upgrading other existing paths near the Channel. The BCDC permits also require Caltrans to contribute $500,000 to develop a connection to the shoreline from existing residential and commercial areas.

The combined improvements funded by the Measure DD bond program, Caltrans, and potentially the CCC will encourage bicyclists and pedestrians to travel along the Lake Merritt Channel to the shorelines, consistent with the City's priority vision for waterfront access in the project area. In addition, future shuttle services and potential transit service that would serve the project site would also be available to facilitate access to inland areas.

On DEIR p. IV.B-57, the following text is added to the discussion of *Pedestrian Safety Impacts* (as a new paragraph):

> "An additional aspect of pedestrian safety is the issue of pedestrians crossing the existing UPRR railroad tracks located adjacent to Embarcadero near the project site. Pedestrians could cross either along 5th Avenue or across the railroad tracks to the north or south of 5th Avenue. Currently, the 5th Avenue crossing has safety equipment including crossing gates and warning lights. These facilities limit access by pedestrians as well as vehicles. There is also a chain link fence along Embarcadero, which limits crossings by pedestrians

at other locations. With the development of the project site, these existing facilities would be maintained. While portions of 5th Avenue would be restriped by the project, no changes would be made to the existing crossing gates or warning signals. The project would also install additional warning signage related to bicyclists and pedestrians at the 5th Avenue and Oak Street crossing. Additionally, the project would maintain the existing chain link fence along the Embarcadero."

On p. IV.B-62 of the DEIR, the following is added to the list of requirements shown in bullet format as part of Mitigation Measure B.7:

- Maintain or reconstruct the fence along the Embarcadero that limits access to the railroad tracks adjacent to the project site.
- Install additional bicycle and pedestrian warning signage at the existing at-grade crossing along 5th Avenue.

Master Response G: Phasing of Open Space and Trail Improvements

Several comments suggest that the proposed parks and open space and Bay Trail improvements proposed by the project should be, or in some cases, are required to be, implemented during the initial development phases of the project. A number of comments misstate that the proposed improvements, particularly the Bay Trail, would not be implemented until 2018. To clarify, pages III-22-24 of the DEIR describe that, starting with Shoreline Park in 2012, the proposed new parks/open spaces and Bay Trail segments would be developed across the project site, moving east to west, with the proposed improvements to Estuary Park and its adjacent existing Bay Trail segment occurring last, by 2018.

To address the points raised by the numerous comments, this response 1) addresses the factors that drive the timing of open space and trail improvements, 2) demonstrates that over time the project would provide adequate open space for the development occurring within each phase, and 3) clarifies the legislative requirements of Measure DD regarding implementing Bay Trail improvements.

Timing Open Space Improvements

As described in the DEIR, the project sponsor will be required to complete extensive site improvements to prepare the site for development. Most relevant to the introduction of new public parks/open spaces and trail facilities is the site remediation and regrading that must occur. The soils and groundwater of the project site have varying levels of contamination, and the project sponsor would prepare and implement a phased remediation process for cleanup of the site to appropriate levels. This process is described on pages III-20-21 of the DEIR and in greater

detail in Section IV.H (Hazardous Materials). Regarding proposed open space areas in particular, page IV.H-19 of the DEIR explains that some of these areas will be raised to approximately five feet above existing grade given the existing site conditions and the need to underground utilities at elevations above the groundwater table. In short, the site remediation and related site grade changes must be completed before new open spaces, particularly those on the contaminated sites east of Lake Merritt Channel, can be created and accepted for public use. This, as well as the extent of right-of-way, in-water and shoreline construction work that would occur during each phase, precludes the implementation of certain open spaces and trail segments sooner than proposed.

Open Space Provision by Phase

Project Phasing Described in Draft EIR

Table V-1 shows new project population and new open space acreage that would be developed, by major phase of the project as presented in the DEIR. The DEIR (pp. III-22-24) presented a conservative project phasing and plan appropriate for the environmental analysis. (Text corrections to the *Project Phasing* discussion in the DEIR are included in Chapter IV of this document, Changes to the Draft EIR, and shown corrected in **Table IV-1**).

Table V-1 compares the project phasing, as described in the DEIR, to the City's adopted standard of 4 acres of local-serving parks per 1,000 residents, the appropriate standard for site specific project evaluation per the General Plan.[3] As shown, no new open space or trail segments would be implemented in the initial phase of the project (by 2010). This is primarily due to the anticipated time that would be required for the significant improvements necessary for Shoreline Park and Gateway Park (Ninth Avenue Terminal demolition, pier and shoreline improvements, Clinton Basin bulkhead walls, etc.). These two new parks and initial trail segment between Brooklyn Basin and Clinton Basin would be implemented by 2014, during the second major phase of work. With these initial new parks, the subsequent phases of development would meet or exceed the City's standard of 4 acres per 1,000 residents.

It is also important to note that Estuary Park is an existing 3.5-acre lawn area/playing field along the waterfront with an adjacent waterfront Bay Trail segment that extends from Jack London Square (to the west). As described in Chapter III of the DEIR (Project Description), the park currently provides picnic facilities, public restrooms, a fishing and observation pier, and playing fields that are used by local soccer and other leagues, and /or for special events. Continued public use of this park would not be precluded during development of the project east of Lake Merritt Channel, and would remain available as viable open space until the project sponsor implements the proposed improvements described in the DEIR (revegetation, shoreline protection, and Bay Trail extension along the west shore of the Channel). However, the acreage provided by this area is not included in the following analysis, thus the findings are conservative.

[3] "A local-serving park acreage standard of 4 acres per 1,000 residents is proposed. This standard can be applied at both a citywide and community level." Open Space, Conservation and Recreation Element (OSCAR) of the General Plan (1996), p. 4-9.

TABLE V-1

RESIDENT POPULATION AND PARK ACREAGE BY PHASE (UNDER PHASING PRESENTED IN DEIR)

Phase / Year	New Residents for Phase	Cumulative Residents	New Park Acreage for Phase	Cumulative New Park Acres	Park Acres per 1,000 Residents (compared to 4 per 1,000 standard)
Phase I – III (by 2010, 3 yrs from 1st permit)	1,859	1,859	0	0	-
Phase IV – V (by 2014, 7 yrs from 1st permit)	1,425	3,284	12.86 [a]	12.86	3.9
Phase VI – VII (by 2017, 10 yrs from 1st permit)	1,287	4,571	7.82 [b]	20.68	4.5
Phase VIII (by 2018, 11 yrs from 1st permit)	490	5,061	0 [c]	20.68	4.1

[a] 9.74-acre Shoreline Park by 2012; and 3.12-acre Gateway Park and Bay Trail Brooklyn Basin to Clinton Basin by 2014.
[b] 2.30-acre South Park by 2015; and 5.52-acre Channel Park and Bay Trail Clinton Basin to Lake Merritt Channel by 2017.
[c] Improvements to existing Estuary Park and adjacent Bay Trail; extension of existing Bay Trail along the west shore of Lake Merritt Channel.

SOURCE: Oakland Harbor Partners; Hausrath Economic Group (Table D.3-1, DEIR Appendix D.3)

Draft Modified Project Phasing

Table V-2 shows the same information according to the draft modified phasing program developed as part of the ongoing Development Agreement discussions among the City, the Redevelopment Agency, and the project sponsor. This modified phasing program would lengthen the overall duration of the project development (through 2024 versus 2017), but would not change the impact analyses in the DEIR, which were based on the more conservative phasing. For example, the 2010 project in the DEIR (and as modified below) affect the same number of dwelling units and new residents, however, instead of occurring by approximately 3 years after the initial building permit for the project (2010), this development would occur approximately 5 years after issuance of the initial building permit for the project (2012). Although the overall development would be longer, the draft modified phasing program would accelerate the development of certain public improvements related to the Embarcadero and the 5.9-acre pile-supported section of Shoreline Park, and the park and open space improvements would continue to be developed consistent with residential development and occupancy on the site. Also, the draft modified phasing program specifies minimum park acreage (by specific park) that must be developed prior to a specified number of dwelling units on the site.

As in **Table V-1** above, **Table V-2** compares the project phasing, as currently modified and subject to approval, to the City's adopted standard of 4 acres of local-serving parks per 1,000 residents. New open space would be implemented in the initial phase of the project with the

improvements to the pier-supported portion of Shoreline Park occurring before the 550th dwelling unit is permitted. Approximately 539 units would be developed within the initial development parcel, Parcel A (or 879 residents per the 1.63 persons per unit ratio established in the DEIR). The project would meet or exceed the City's standard of 4 acres per 1,000 residents throughout each subsequent phase of development. As in **Table V-1**, the acreage provided by existing Estuary Park is not included in the following analysis, thus the findings are conservative.

TABLE V-2

RESIDENT POPULATION AND PARK ACREAGE BY PHASE (UNDER DRAFT MODIFIED PHASING)

Phase / Year	New Residents for Minimum Park Acreage Required	Cumulative Residents	New Park Acreage for Phase	Cumulative New Park Acres	Park Acres per 1,000 Residents (compared to 4 per 1,000 standard)
Phase I (by 2012, 5 yrs from 1st permit; pier-supported Shoreline Park by unit 550)	897	879	5.9	5.9	6.71
Phase II (by 2015, 8 yrs from 1st permit; Gateway, Clinton Basin Shoreline and remainder of Shoreline Park by unit 1,650)	1,811	2,690	6.96 [a]	12.86	4.78
Phase III (by 2018, 11 yrs from 1st permit; South Park by unit 2,340)	1,125	3,815	2.30	15.16	3.97
Phase IV (by 2021, 14 yrs from 1st permit; Channel Park by unit 2,800)	749	4,564	5.52 [b]	20.68	4.53
Phase V (by 2024, 17 yrs from 1st permit; Estuary Park by unit 3,100)	497	5,061	0 [c]	20.68	4.1

[a] Includes 3.84-acres of non-pile-supported Shoreline Park, 3.12-acre Gateway Park, and Bay Trail from Brooklyn Basin to Clinton Basin.
[b] Includes Bay Trail from Clinton Basin to Lake Merritt Channel.
[c] Improvements to existing Estuary Park and adjacent Bay Trail; includes extension of existing Bay Trail along the west shore of Lake Merritt Channel.

SOURCE: Oakland Harbor Partners; Hausrath Economic Group (Table D.3-1, DEIR Appendix D.3)

City Discretion and Measure DD

The proposed schedule for creating new and improving existing parks/open spaces and Bay Trail facilities is a component of the project that City decisionmakers will consider and have the discretion to modify during their review of the project. The DEIR includes a thorough analysis of the potential environmental impacts that could occur with development of the project. To the extent that new parks/open spaces or trail facilities would not interfere with required site work or preparation, altering the timing of these improvements would not result in a new or more severe significant impact.

The new and improved parks/opens spaces and trail segments are proposed as part of the project and are not required a mitigation measures to reduce significant project impacts to parks and recreational facilities, as some comments assert. The project would result in a less than significant impact on this topic, as discussed on pages IV.L-15 through 18, and requires no mitigation. Additionally, Measure DD, which is intended to finance a series of improvements related to parks and open spaces (including specifically Estuary waterfront parks and trails and Lake Merritt Channel; see Master Response C) does not require the project sponsor to implement the parks/open space, and trail improvements proposed as part of the Oak to Ninth Avenue Project within a specific timeframe. Since its adoption in 2002, the Measure DD bond program has been programmed for implementation any time by any entity. The project sponsor does not propose to utilize Measure DD funds to implement the 20.68 new acres of new parks/open space and trail facilities on the project site, however, this has no bearing on the environmental impacts or analysis provided in the DEIR. These facilities will, however, be owned and operated by the City of Oakland.

Master Response H: Non-CEQA Topics and Considerations

Many comments were received on the DEIR that address issues or topics that do not pertain the adequacy of the analysis presented in the DEIR document or to physical environmental issues that are within the purview of the California Environmental Quality Act (CEQA) (Section 15064). These comments occur throughout the comment letters provided in Chapter VII of this Final EIR, and are particularly represented by the spoken comments provided during the Planning Commission Public Hearing on the DEIR on September 28, 2005 (see Chapter VIII). Overall, these comments pertain to policy considerations or design considerations to be considered by the City decisionmakers who will ultimately consider and act on all aspects of the project.

Policy Considerations

Policy considerations are those that pertain to discretionary matters that the City must balance in its deliberations of the project. Policy topics are not typically related to the quantifiable, physical environmental issues addressed in the EIR document, which are objectively assessed against the significance criteria provided by the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines. Many policy topics raised directly relate to the Oakland General Plan policies discussed in Section IV.A of the DEIR (Land Use, Plans and Policies). Others pertain to ongoing project performance or project sponsor obligations over time that typically addressed through terms of a Development Agreement between the City and the project sponsor.

Affordable Housing and Local Construction Jobs

The most frequently recurring policy considerations address the project's provision of affordable housing and dedication of project-generated construction jobs to Oakland residents. These topics

address economic and social considerations that the City must consider. According to Section 15131 of the State CEQA Guidelines, "Economic or social information may be included in an EIR or may be presented in whatever form the agency desires." Section 15131(a) states, "Economic or social effects of a project shall not be treated as significant effects on the environment." However, Section 15131(b) states in part, "Economic or social effects of a project may be used to determine the significance of physical changes caused by the project." Taken together, the economic or social impacts of the proposed project shall be evaluated in an EIR if there is evidence that the economic or social effects of the project will produce significant physical environmental impacts. To the extent that the economic and social effects of the project could result in physical changes to the environment, such potential environmental impacts have been identified and fully analyzed in the relevant topical sections of Chapter IV of the DEIR (Setting and Impact Analysis). Specifically, Section IV.J of the DEIR (Population, Employment, and Housing) addresses how the project could create or displace housing, people, businesses, and jobs, and the related indirect physical impacts of each.

Since publication of the DEIR, Development Agreement discussions among the City, the Oakland Redevelopment Agency, and the project sponsor are underway and include negotiations on a number of affordable housing units to be provided within the Oak to Ninth Avenue Project site and a number within the Central City East Redevelopment Plan Area in an effort to help the City meet its requirements under state law.

Design Considerations

Similar, and often overlapping with policy considerations, are design-related considerations that generally address the physical land use compatibility and design aspects (site planning, urban design, and architectural) of the project. These topics are measured against the City's established criteria and findings that the project must satisfy to obtain City approval of required discretionary permits, including a general plan amendment, rezoning, conditional use permit, preliminary development plan (PDP) and final development plan (FDP).

Summary of Policy and Design Considerations Raised

Policy and design considerations that recur in the DEIR comments in Chapter VII through Chapter IX this document include the following (listed randomly):

- **Provision of affordable housing as part of the project** (discussed above)
- **Dedication of project-generated construction jobs to Oakland residents** (discussed above)
- **Specific Plan / Estuary Plan Compliance**
  Master Response A considers preparation of a specific plan. The Estuary Policy Plan provides a set of policies for the Oakland Estuary waterfront and specifically for the Oak-to-Ninth Avenue District (within which the project site is located). As stated before, the level of the project's consistency with these policies is presented in Section IV.A (Land Use, Plans,

and Policies) of the DEIR (pp. IV.A-11 through A-16, and IV.A-36 and A-37). Final determinations of the project's consistency with the Estuary Policy Plan will be made by the City decisionmakers in acting on the project approvals.

- **Possible Terminal Reuses Not Specified in the DEIR** (see Master Response B above)

- **Appropriate Mechanism to Ensure Public Open Space**
  Comments raise concern with how the proposed parks and open spaces would be owned, operated, managed, and programmed in the future to ensure that these spaces remain as public spaces (literally and perceptually) despite being located adjacent to private development. All parks and open space areas within the project would be owned and operated by the City of Oakland. A comprehensive signage program will also clearly convey these new public spaces that will be part of the city's network of waterfront parks and trails.

  The DEIR (pp. III-18 and IV.L-17 and 18) explains that the project sponsor will be responsible for installing open space improvements and providing for the maintenance of the open spaces in a manner that meets or exceeds minimum standards provided by the City. Maintenance by the project sponsor may be accomplished through the establishment of 1) a project homeowners' association, 2) a Community Facilities District or Community Services District (in conjunction with the City), or 3) other mechanism approved by the City. This proposed distribution of open space responsibilities between the City, the project sponsor, or other entity is at the City's discretion and would be implemented through the required conditions of approval for the project or a Development Agreement between the City and the project sponsor.

- **Phasing of Parks/Open Space and Trail Improvements** (See Master Response G above)

- **Site and Building Design**
  The City will evaluate, revise, and have final discretion over all aspects of the project design, including, but not limited to, the orientation and placement of streets, buildings, open spaces, phasing, building design and characteristics, parking location, etc. To the extent aspects of the project design or site plan could result in physical changes to the environment, such potential environmental impacts have been identified and fully analyzed in the relevant topical sections of Chapter IV of the DEIR (Setting and Impact Analysis).

- **Adequacy of Proposed Park Acreage**
  Many comments point out that the project proposes less total acreage of new open space than envisioned in the Estuary Policy Plan for the Oak to Ninth District. Most comments assert that this would constitute a conflict with the Estuary Policy Plan. To first clarify, as discussed on page IV.A-13 through 14 in the DEIR, the Estuary Plan does not quantify a park and open space program. All open space acreage comparisons of the project to the Estuary Plan in the Oak to Ninth Avenue DEIR are based on the acreages provided in the parks and recreation facilities analysis in the Estuary Plan EIR. The project proposes a total of 20.68 total acres of new open space; the EIR analyzed a total of 35.7 acres of new open space (including only the proposed expansion to Estuary Park). Second, the parks and recreation impacts for the project

are analyzed in Section IV.L of the DEIR (Public Services and Recreational Facilities) and found to be less-than-significant according to the significance criteria prescribed by the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance.

The Estuary Plan does, however, include a host of policies that address the provision, location, and public accessibility of new open spaces in the project area. Thus, the City will evaluate the project in accordance with these policies (identified on pp. IV.A-11 through 13, and Appendix F of the DEIR).

CHAPTER VI

Other Responses to Written Comments on the Draft EIR

This chapter includes copies of the written comment letters received during the public review period on the DEIR and responses to those written comments. Letters received from public agencies are presented first, followed by those received from organizations, and then those received from individuals. The letters are generally listed chronologically according the "date received" indicated by the City of Oakland. Comment letters received after the public review period are noted as such and responded to herein.

Each letter is identified by an alpha designator. Specific comments within each letter are identified by an alphanumeric designator that reflects the correspondence designator (alpha) and the sequence of the specific comment (numeric). All responses immediately follow the letter.

Where responses have resulted in changes to the text of the DEIR, these changes also appear in Chapter IV of this FEIR.

COMMENT LETTER A

STATE OF CALIFORNIA

ARNOLD SCHWARZENEGGER, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

RECEIVED
SEP 23 2005
City of Oakland
Planning & Zoning Division

September 20, 2005

Margaret Stanzione
City of Oakland Com. & Eco. Dev. Agency
250 Frank H. Ogawa Plaza, Ste. 3315
Oakland, CA 94612

Dear Ms. Stanzione:

Re: SCH# 2004062013; Oak to Ninth Mixed Use Development

As the state agency responsible for rail safety within California, we recommend that any development projects planned adjacent to or near the rail corridor in the County be planned with the safety of the rail corridor in mind. New developments may increase traffic volumes not only on streets and at intersections, but also at at-grade highway-rail crossings. This includes considering pedestrian circulation patterns/destinations with respect to railroad right-of-way. A-1

Safety factors to consider include, but are not limited to, the planning for grade separations for major thoroughfares, improvements to existing at-grade highway-rail crossings due to increase in traffic volumes and appropriate fencing to limit the access of trespassers onto the railroad right-of-way. A-2

The above-mentioned safety improvements should be considered when approval is sought for the new development. Working with Commission staff early in the conceptual design phase will help improve the safety to motorists and pedestrians in the County.

If you have any questions in this matter, please call me at (415) 703-2795.

Very truly yours,

Kevin Boles
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection and Safety Division

cc: Pat Kerr, UP

Letter A – Public Utilities Commission

A-1 Plans for the proposed development project have taken into account the proximity of the rail corridor, and various considerations addressed in other studies are discussed in further detail in Response to Comment A-2 below.

A-2 Previous planning work for the proposed development project has considered a grade-separated crossing along 5th Avenue, which would improve operational and safety conditions. However, there are significant topographic, engineering, and environmental constraints that limit the ability of the project applicant or the City of Oakland to construct these grade separations. The major constraint is the I-880 structure, which precludes an above-grade crossing. A below-grade crossing would also be difficult to construct, given the intersecting streets and the distance required to return the roadway to the existing grade on both sides of an undercrossing. Given the obstacles to constructing a grade-separated crossing, this element was not included in the proposed project. Additional detail regarding above-grade and below-grade crossings is provided in Response to Comment M-3 in the Public Utilities Commission' subsequent comment on the DEIR.

See Master Response F regarding Pedestrian Activity at Nearby Rail Crossings. Specifically, instead of recommending changes to the existing at-grade crossing along 5th Avenue, the DEIR recommended a variety of intersection improvements along Embarcadero and 5th Avenue. These improvements are designed to limit queuing, which in turn would reduce the potential for the backup of vehicles to spill onto the railroad tracks. The DEIR also recommended that 5th Avenue be restriped as a four-lane roadway, which would provide additional capacity at the Embarcadero and 7th/8th Streets intersections. There is an existing fence along the Embarcadero that limits access to the railroad tracks adjacent to the project. The DEIR notes that the project would reconstruct the Embarcadero along the project frontage, but does not explicitly state whether or not this fence would be maintained. In addition, combined improvements funded by the Measure DD bond program, Caltrans and potentially the CCC will encourage bicyclists and pedestrians to travel along the Lake Merritt Channel to the shorelines, consistent with the City's priority vision for waterfront access in the project area. The project would install additional warning signage related to bicyclists and pedestrians at the 5th Avenue and Oak Street crossing.

The following is added to the list of requirements shown in bullet format on DEIR p. IV.B-62 as part of Mitigation Measure B.7:

- **Maintain or reconstruct the fence along the Embarcadero that limits access to the railroad tracks adjacent to the project site.**
- **Install additional bicycle and pedestrian warning signage at the existing at-grade crossing along 5th Avenue.**

COMMENT LETTER B

EAST BAY REGIONAL PARKS FOR THE FUTURE PARK DISTRICT

BOARD OF DIRECTORS
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October 5, 2005

Margaret Stanzione
City of Oakland
250 Frank Ogawa Plaza, Suite 3315
Oakland, CA 94612

Subject: Comments on DEIR for Oak to Ninth Mixed Use Development Project
Martin Luther King Jr. Regional Shoreline/San Francisco Bay Trail

Dear Ms. Stanzione,

Thank you for providing the East Bay Regional Park District ("District") with a copy of the Draft Environmental Impact Report (DEIR) for the proposed Oak to Ninth Avenue Project in Oakland. The following are the District's comments relevant to our interest in protecting open space, providing access to San Francisco Bay and completing the San Francisco Bay Trail.

Open Space

The proposed project would reduce open space from 41.5 acres in the Estuary Plan to 28.4 acres in the proposed project. This is about a 1/3 reduction in the planned open space when compared with the earlier 41.5 acres of open space contained in the Estuary Plan. It should also be noted that the existing 7.7 acre Estuary Park is included within the proposed 28.4 acres of open space in the project area; however, since Estuary Park already exists, it should not be counted as "new" open space. B-1 This change actually reduces the 28.4 acres of open space to just 20.7 acres. This is significant, because the proposed project will provide up to 3,100 residential units, providing housing for about 5,061 people, and about 200,000 sq. ft. of retail and work space for 623 employees. The proposed new 20.7 acre open space seems too small given these population figures and the much larger open space of 41.5 acres contemplated in the adopted Estuary Plan. B-2

Nearby existing City of Oakland parks, such as Lake Merit, are already heavily used by existing Oakland residents. Nearby regional park facilities, such as Martin Luther King Jr. Regional Shoreline along the fringes of San Leandro Bay contain only a small portion of developed upland and cannot provide sufficient open space for this large number of new residents in an already congested area of Oakland. B-3

Public Access to San Francisco Bay Shoreline

The proposed Oak to Ninth Street project will be located some distance from BART and major public transit centers, and as a result, most of the access to the shoreline will be from private vehicles. B-4 The proposed project calls for the construction of 3,500 parking spaces for up to 5,061 new residents and an unknown number of vehicles associated with proposed commercial facilities. B-5 The DEIR identifies only 75 parking spaces in open space areas, however, it does not appear to state how many of these are existing spaces and how many would be new parking spaces provided by the proposed project. It also identifies 375 on-street parking spaces; however, B-6

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it does not state what restrictions would be imposed on these spaces so that they are usable by the general public for shoreline access. Given that the anticipated number of residential vehicles in this area will likely exceed the proposed residential parking spaces, it's highly likely that residential parking will overflow into the public areas and will make non-residential parking on public streets and open space areas impracticable for shoreline access. The DEIR needs to provide specific design features and parking restrictions that will allow for adequate parking and public access to the shoreline. B-6 (CONT.) B-7

San Francisco Bay Trail

There are a number of multi-story structures proposed in the project area that may create visual or physical barriers to public access to the shoreline and to the San Francisco Bay Trail. Open visual corridors that create attractive views of the Bay from public areas are important for encouraging public access. Trail corridors that are located between tall buildings and trees can create a closed-in feeling that will discourage trail use because trails users may feel unsafe or the experience may not be enjoyable. B-8 B-9

Figure III-7 in the DEIR shows the shoreline parks and trails that currently exist or are proposed as part of this project. This figure does not appear to include a through Bay Trail connector along Embarcadero Road. The DEIR states on page IV.A-24 that Embarcadero Road will include a Class II trail, but it is not shown on Figure IIII-7 and the DEIR does not state if it will run the full length of the project frontage on Embarcadero Road. A through trail on Embarcadero Road is an important trail segment for Bay Trail users who do not wish to follow the circuitous route through the proposed development and instead wish to use the trail as a transit corridor from home to work, or are seeking a more expeditious trail route with less congestion. B-10

Another missing Bay Trail segment is through the private property in the center of the proposed development. The DEIR text on pages IV.4-33, IV.4-34 and several other locations states that the proposed project would create a "continuous public shoreline trail". Unfortunately, with the above mentioned gap, the trail will not be continuous, as stated in the DEIR. Constructing a trail to both edges of this private property and leaving a 200 foot gap in the trail will likely create trespass and safety issues for trail users and the private property owners. Figure III-7 does not appear to show an alternative means of access for Bay Trail users to get through or around this private property. It's difficult to see how such a gap in an otherwise complete shoreline-section of the Bay Trail would be acceptable to the San Francisco Bay Conservation and Development Commission (BCDC) or be consistent with Bay Trail policies. Without closure of this small gap, the project fails to achieve completion of this important Bay Trail segment. B-11

Thank you for the opportunity to comment on this DEIR. Should you have any questions, please call me at (510) 544-2622.

Sincerely,

Brad Olson
Environmental Programs Manager

cc. Board of Directors
Robert E. Doyle, Assistant General Manager
Laura Thompson, ABAG Bay Trail
Pat O'Brien, General Manager
Brad McCrea, BCDC

Letter B – East Bay Regional Parks District

B-1 The comment correctly states that the existing 7.7-acre Estuary Park and Jack London Aquatic Center is included within the total 28.4 acres of open space that the project proposes. As stated and footnoted in the DEIR on p. IV.L-16 and Table IV.L-2 (and consistently throughout), "Approximately 20.7[1] of the 28.4 total acres of permanent open space that would exist on the project site at buildout would be new, usable park area that does not currently exist." In no instance does the DEIR present the acreage of *new* open space proposed by the project as including the existing Estuary Park area.

B-2 The comment suggests that the proposed new 20.7 acres of open space "seems too small" given the resident and employee population and retail square footage the project would provide. The project's potential physical impact on parks and recreation facilities is measured by the significance criteria provided by the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines. They include:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impact L.4 (DEIR p. IV.L-15 through IV.L-18) discusses that the project would have a less-than-significant impact as measured by the above criteria. The impact discussion also explains how the proposed resident population and park acreage would exceed the City's adopted service standard for local-serving parks (4 acres per 1,000 residents) established by the Open Space, Conservation, and Recreation (OSCAR) Element of the General Plan. This is also, and most appropriately, addressed in the discussion of the project's consistency with OSCAR policies in Section IV.A (Land Use, Plans and Policies) on DEIR p. IV.A-20.

B-3 The comment points out that a number of City parks and regional park facilities in Oakland are now heavily used or offer limited open space for the resident population that the project would add. The DEIR presents that, according to the OSCAR, the estimated total acres of parkland within the city, including region-serving parks managed by the East Bay Regional Parks District (EBRPD), falls short of the City's citywide service standard and local-serving parks service standard (DEIR p. IV.L-7). It is anticipated that the 20.7 acres of new open space (and trail facilities) proposed by the project would augment the city's park acreage and, as stated on DEIR p. IV.L-7, be both region-serving and local-serving.

B-4 As stated on DEIR p. IV.B-11, the closest transit stops (the Lake Merritt BART station, the Amtrak station, and AC Transit bus stops at those two rail stations) are from 0.75 to 1.0 mile from the project site. It is acknowledged that unless AC Transit service is

[1] 28.4 acres total proposed, less 7.7 acres of the existing Estuary Park and Aquatic Center.

extended (to the project site *and private shuttle service is provided), access to the shoreline by people not living or working at the project site would be primarily from private vehicles. (See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures),

B-5 The parking spaces in surface lots in the open space areas of the site (about 30 spaces for Phase 1, and about 75 spaces for project buildout) would be newly provided by the proposed project.

B-6 See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management measures.

B-7 See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management measures.

B-8 The comment states that the proposed multistory structures may create visual or physical barriers to public access to the shoreline and Bay Trail. The project proposes new buildings that would range from six to eight stories tall (65 to 86 feet), with five highrise buildings up to 240 feet tall. The proposed building massing and height is described and depicted in Chapter III (Project Description) of the DEIR (p. III-8, Table III-3, and Figure III-5). The analysis of the project's impact on views is provided in Section IV.K (Visual Quality and Shadow) (pp. IV.K-10 through IV.K-39) and concludes that the impact on scenic vistas would be less than significant under the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines. As stated on DEIR p. IV.K-39, "the [proposed] tall buildings avoid significantly obstructing views of the hills and of the few existing immediate view corridors to the Estuary from the Embarcadero. Regarding shorter-range views to the shoreline from within the project or along the Embarcadero, in many cases the project would create new view corridors by removing of most of the Ninth Avenue Terminal and existing warehouse buildings and creating new public streets within the project site and new public trails and open spaces located along the waterfront (DEIR pp. IV.K-30 through IV.K-34, and Figure IV.K-12 discussed on DEIR p. IV.K-27).

Regarding potential physical barriers to public access, the DEIR discusses this within the context of Land Use and Transportation Element (LUTE) policies (*Open Space and Access* on DEIR p. IV.A-10), Estuary Plan Policies (*Open Space and Recreation* starting on DEIR p. IV. A-13), the *San Francisco Bay Plan* policies (DEIR p. IV.A-32), and the *San Francisco Bay Trail Plan / Oakland Waterfront Promenade and Bay Trail Alignment Feasibility Study and Design Guidelines* (DEIR p. IV.A-33). To summarize, the project is situated on a grid of new public streets that would intersect the Embarcadero. New continuous pedestrian and bicycle linkages (and amenities such as lighting, landscaping, etc.) would lead to the shoreline and open space areas to encourage and facilitate public access. Proposed trail improvements would facilitate future connections along Lake Merritt Channel and to existing Bay Trail segments that currently culminate east and west of the project site. Also, a comprehensive signage program would guide the public to the

trail and open space system. As stated on DEIR p. IV.L-18 in the discussion of parks and recreation impacts, "the City of Oakland would review the adequacy of the…public access to public parks, open spaces, and recreational facilities on the project site." This topic also would be subject to review by the Bay Conservation and Development Commission (BCDC) review to ensure adequate access to and along the shoreline.

B-9 The comment asserts that trail use will be discouraged due to the "closed-in feeling caused by locating trail corridors between tall buildings and trees." However the comment provides no supporting evidence to demonstrate that the project would deter potential trail users for this reason. As depicted in DEIR Figure III-7 (Proposed Shoreline Parks Network) (DEIR p. III-17), the continuity of the proposed trail alignment along the waterfront is prevented by a segment that would cross the existing outparcel property that is within, but not part of, the project site and that fronts the water. The proposed alignment is modified in this document (**Figure III-1,** Shoreline Parks and Trail Network, in Chapter) to depict the additional continuous alignment that would occur with respect to the outparcel and along Embarcadero. Unlike the alignment shown in the DEIR (to which the comment responds), the modified alignment lies between buildings only along the perimeter of the outparcel, adjacent to Parcels K, L, and M.

The proposed trail system within the project site would provide opportunities for new open views of the water that are currently blocked and inaccessible. Additionally, the trail would link an existing Bay Trail segment that currently ends at Estuary Park to Brooklyn Basin where the trail currently continues east to the Martin Luther King Regional Shoreline and beyond. The trail would also follow both sides of Lake Merritt Channel, crossing east-west over Lake Merritt Channel Bridge (over the Embarcadero), allowing for future City projects aimed at improved connections between Lake Merritt and the Estuary to connect to the project site. As stated above in Response to Comment B-8, a comprehensive sign program would guide the public to the system as well. Therefore, the proposal includes numerous aspects that are reasonably expected to attract future users. As stated in Response to Comment B-8, the City will review the project with regard to the appropriateness of the proposed trail alignment and the project also would be subject to review by BCDC.

B-10 The proposed trail alignment is modified in this document (**Figure III-1**, Shoreline Parks and Trail Network, in Chapter III) to depict the additional continuous alignment along Embarcadero at the project site.

B-11 The proposed trail alignment is modified in this document (**Figure III-1**, Shoreline Parks and Trail Network, in Chapter III) to depict the additional continuous alignment that would occur with respect to the outparcel in a way that would not "close" the 200-foot gap across the outparcel. Although a continuous shoreline trail alignment would be most fully consistent with policies and visions in the City's General Plan (and a number of other plans associated with access to the waterfront), the project sponsor does not own,

and does not intend to acquire, the outparcel. Therefore, the trail segment over the “gap” cannot be proposed as part of this project.

EAST BAY
MUNICIPAL UTILITY DISTRICT

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OCT 17 2005
City of Oakland
Planning & Zoning Division

October 7, 2005

Margaret Stanzione, Project Planner
City of Oakland
Community and Economic Development Agency
250 Frank H. Ogawa Plaza, Suite 3330
Oakland, CA 94612

Re: Draft Environmental Impact Report – Oak to Ninth Mixed Use Development Project, Oakland

Dear Ms. Stanzione:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the Draft Environmental Impact Report (EIR) for the Oak to Ninth Mixed Use Development Project located in the City of Oakland (City). EBMUD has the following comments.

WATER SERVICE

EBMUD's Central Pressure Zone, with a service elevation range between 0 and 100 feet, will serve the proposed development. EBMUD owns and operates distribution pipelines in Fallon Street, Embarcadero, 5th Avenue, 6th Avenue, and 9th Avenue, which provide continuous service to customers in the area. There is an 8-inch water main in Fallon Street, 6-inch water mains in 5th and 6th Avenues, and a 12-inch water main in 9th Avenue and Embarcadero that traverses trough the proposed development. Any proposed construction activity in these streets would need to be coordinated with EBMUD so that the integrity of these water mains is maintained at all times. C-1

A main extension, at the project sponsor's expense, will be required to serve the proposed development. Off-site pipeline improvements and/or relocations, also at the project sponsor's expense, will be required to serve the proposed development. When the development plans are finalized, the project sponsor should contact EBMUD's New Business Office and request a water service estimate to determine costs and conditions for providing water service to the proposed development. Engineering and installation of new and relocated water mains and services requires substantial lead-time, which should be provided for in the project sponsor's development schedule. C-2

The project sponsor should be aware that EBMUD will require documentation that the areas in which EBMUD crews are to work do not contain contaminated soils or groundwater. In addition to soil contaminants identified in the Draft EIR, EBMUD is concerned with the potential presence of asbestos containing material that may be present in fill or in existing pipes that are to be removed or otherwise abandoned. The potential for C-3 C-4

Recycled Paper

trace radioactive elements associated with former naval ship repair is also a concern. C-4 (CONT.)

EBMUD will also be concerned with the methods used to characterize utility corridors that require remediation. The depth and width of remediation within utility corridors must be acceptable to EBMUD. The techniques used to protect "clean fill" placed in remediated utility corridors from recontamination must be addressed. C-5

WASTEWATER

EBMUD is currently working with the City to resolve the subbasin allocation issue as stated on page IV.M-13 of the Draft EIR. The subbasin allocation should be resolved between EBMUD and the City and included in the Final EIR. The City's Infiltration/ Inflow (I/I) Correction Program sets a maximum allowable peak wastewater flow from each subbasin within the City and EBMUD agreed to design and construct wet weather conveyance and treatment facilities to accommodate these flows. EBMUD prohibits discharge of wastewater flows above the allocated peak flow for a subbasin because conveyance and treatment capacity for wet weather flows may be adversely impacted by flows above this agreed limit. C-6

The projected peak wet weather wastewater flows from this project needs to be determined to assess the available capacity within the subbasin and confirmation included in the Final EIR. Suggested language to include in the Final EIR is as follows: "The City of Oakland Public Works Department has confirmed that there is available wastewater capacity within subbasin *(insert subbasin number here)* for this project."

On page IV.M-4, the Draft EIR lists nearby EBMUD wastewater facilities in the area. Please note that all EBMUD facilities in the project area should remain undisturbed by the project. C-7

On page IV.M-5 paragraph 3, the Wet Weather Program has only developed three new wet weather treatment facilities, not four as stated in the Draft EIR. C-8

WATER RECYCLING

On page IV.M-3, Recycled Water, first paragraph, last sentence, replace "an additional 8 mgd of recycled water by 2020, for a total of 5.8 billion gallons a year." with "a total of 14 mgd, or 5.1 billion gallons a year of recycled water by 2020." C-9

On page IV.M-11, second paragraph, replace the last three sentences "Recycled water delivery ..... the water table." with "Recycled water delivery to the project area is anticipated by 2009. Recycled water infrastructure will be installed by the project sponsor throughout the proposed site and along the project frontage for future connection to the EBMUD recycled water system. Similar to water lines, recycled water lines will be installed above the water table." C-10

WATER CONSERVATION

The proposed project presents an opportunity to incorporate water conservation measures. EBMUD staff would appreciate the opportunity to meet with the project sponsor to discuss water conservation programs and best management practices applicable to the project area. A key objective of this discussion will be to explore timely opportunities to expand conservation via early consideration of EBMUD's conservation programs and best management practices applicable to the project C-11

If you have any questions concerning this response, please contact David J. Rehnstrom, Senior Civil Engineer, Water Service Planning, at (510) 287-1365.

Sincerely,

William R. Kirkpatrick
Manager of Water Distribution Planning

WRK:NJR:sb
sb05_281.doc

cc: Oakland Harbor Partners
4670 Willow Road
Pleasanton, CA 94588

Letter C – East Bay Municipal Utilities District

C-1 The following DEIR text describing the East Bay Municipal Utility District (EBMUD) distribution of water pipelines in the project area is revised. This change occurs in the third paragraph on DEIR p. IV.M-11 and replaces the entire second paragraph under *Water Supply System* on p. IV.M-1:

> **Existing water lines in the project vicinity are expected to be adequate to serve the project's anticipated water demand. As discussed in the Setting, the project site is served by a ~~12-inch~~ EBMUD water line within the Embarcadero right-of-way, which forms a "looped" system between 5th and 9th Avenues, with a 12-inch main in 9th Avenue and the Embarcadero that traverses the project site~~line serving the area west of 5th Avenue and that terminates at the Lake Merritt Channel bridge~~. The Estuary Park portion of the site to the west of Lake Merritt Channel is serviced by a 12-inch branch from a separate looped system located in the Embarcadero and Fallon Street. There is an 8-inch water main in Fallon Street and 6-inch water mains in 5th and 6th Avenues. ~~This 12-inch branch runs from the intersection of the Embarcadero and Fallon Street to the limit of the Lake Merritt Channel bridge~~.**

C-2 The following DEIR text change to recognize the potential for offsite water main improvements required. Text is added to the fourth paragraph on DEIR p. IV.M-11:

> **As part of the project, water mains designed and supplied by EBMUD would be installed onsite to serve the project demands. A main extension and pipeline improvements or relocations offsite may also be required. All improvements would occur in coordination with EBMUD.**

C-3 Comment is noted that the project sponsor shall provide EBMUD with documentation that EBMUD subsurface work areas do not contain contaminated soils or groundwater that would be considered a hazardous waste. As stated on DEIR p. IV. H-19, the project sponsor shall provide EBMUD with "necessary soil and groundwater quality reports and remediation plans prior to EBMUD's design or installation of pipeline on the project site." In addition, the DEIR describes that, since removal of all contaminated soils prior to construction activities would be prohibitive, the project proposes to excavate a utility trench for EBMUD utilities that will be backfilled with clean, imported material.

With regard to asbestos containing soils material in particular, Subsurface Consultants Inc. conducted investigations on the Ninth Avenue Terminal area on behalf of the Port in 1997 that included the collection and analyses of soil samples for the presence of asbestos. Seven of the eight samples had nondetectable concentrations of asbestos, and one sample (which included pieces of fibrous material) contained 25 to 30 percent asbestos. Consistent with the impacts identified in the DEIR and proposed mitigation measures, the final remediation plan required under Mitigation Measures H.1a will

address the clean-up of all contaminants identified in the comprehensive remedial investigation report for the project area, also required under that mitigation measure. The remediation plan would include a safety plan to protect workers and the public from during on remediation and construction activities. Mitigation measures are also identified for Impact H.1 that addresses the proper classification of soils prior to disposal.

References

Third Interim Report, Data Gap Studies of January/February 1997 and April/May 1997, Subsurface Consultants, Inc., 15 August 1997.

C-4 Trace radioactive elements have not been identified as a chemical of concern at the site from any of the previous Phase I studies conducted at the site. The ongoing environmental process of remediation is being overseen by the DTSC. Any new evidence showing the potential for trace radioactive elements at the site will be addressed by the DTSC and appropriately delineated and remediated as stated in Mitigation Measure H.1a on DEIR p. IV.H-19.

C-5 See Response to Comment C-3. In addition, as stated on DEIR p. IV. H-19, for trenches that extend into the Bay Mud and below groundwater, cutoff walls will be constructed "to control migration of potentially contaminated groundwater into the permeable backfill around utility pipes."

C-6 As stated in the discussion of Impact M.2 (DEIR p. IV.M-13), "The project's projected [wastewater] demand would exceed the current unused sub-allocation for the relevant subbasins (54-07, 59-03, and 64.07)." The City of Oakland Public Works Department, in coordination with EBMUD, is ongoing in an effort to ensure that there is available wastewater capacity within Subbasins 54-07, 59-03, and 64-07 for the project based, which may be the result of the City's reallocation of existing available city-wide allocation for wastewater flows under the Wet Weather Program, or and alternative method agreed upon by the City and EBMUD. The exceedance that would occur with the project is not a significant impact under CEQA, and therefore no mitigation measure is required. The City will, however, require that a final approved method to ensure adequate capacity within the relevant subbasins prior to it taking action on the project.

C-7 As described on DEIR p. IV.M-4, a 54-inch pipeline runs in an elevated trestle across Lake Merritt Channel and is visible at mean and low time. This pipeline leads to the dechlorination facility where sewage is treated. Treated sewage then flows through Estuary Park to discharge in the Estuary via a submerged outfall. The project would involve improvements to the existing shoreline, including that along Lake Merritt Channel along the project site. As described under Impact D.1 (Water Quality / Construction Impacts) on DEIR p. IV.D-20 (and shown in DEIR Figure IV.D-3), proposed improvements along Channel Park, near the elevated pipeline described above, would create or restore shoreline marshland and vegetated shoreline embankments. Work in this area would also involve site remediation and potentially the raising of existing

grade (see Master Response G). West of the Channel, the new structure and related circulation on Parcel N would occur, adjacent to the EBMUD dechlorination facility. It is not anticipated that any project construction would disturb these existing EBMUD facilities. Other existing facilities would be affected only to the extent necessary to install, extend, or relocate facilities to adequately serve the project.

C-8 Per the comment, on DEIR p. IV.M-5, the third sentence in the second paragraph under *Inflow/Infiltration Correction Program* is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> **The program has resulted in three ~~four~~ new wet weather treatment facilities, two storage basins, 7.5 miles of new interceptors, and expansion of the main wastewater treatment plant.**

C-9 Per the comment, on DEIR p. IV.M-3, the last sentence in the first paragraph under *Recycled Water* is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> **The Water Supply Management Program established goals of delivery a total of 14 mgd, or 5.1 billion gallons a year of recycled water by 2020~~an additional 8 mgd of recycled water by 2020, for a total of 5.8 billion gallons a year~~.**

C-10 Per the comment, on DEIR p. IV.M-11, the last three sentences in the second paragraph are revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> **Recycled water delivery to the project area is expected by 2009 ~~2005~~. Recycled ~~Reclaimed~~ water infrastructure will be installed by the project sponsor throughout the proposed site and along the project frontage for future connection to the EBMUD recycled ~~reclaimed~~ water network that will be extended to the project site. Similar to water lines, recycled ~~reclaimed~~ water lines will be installed above the water table.**

C-11 Comment noted. The DEIR recognizes EBMUD's water conservation programs and measures on DEIR p. IV.M-3 under *Water Conservation*. As would be required by the conditions of approval for the project, the project sponsor would consult EBMUD regarding these programs and best management practices specific to the project area. This would be in addition to the measures that the project would implement pursuant to the City's Landscape Water Conservation requirements described on DEIR p. IV.M-12.

COMMENT LETTER D

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
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October 21, 2005

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Ms. Margaret Stanzione
City of Oakland
Community Development Agency
250 Frank Ogawa Plaza, Suite 3315
Oakland, CA 94612

Dear Ms. Stanzione:

OAK TO 9TH MIXED-USE PROJECT – DRAFT ENVIRONMENTAL IMPACT REPORT

Thank you for including the California Department of Transportation (Department) in the environmental review process for the Oak to 9th Mixed-Use project. The following comments are based on the Draft Environmental Impact Report (DEIR). As lead agency, the City of Oakland is responsible for all project mitigation, including any needed improvements to state highways. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures. The project's traffic mitigation fees should be specifically identified in the DEIR. Any required roadway improvements should be completed prior to issuance of project occupancy permits. While an encroachment permit is only required when the project involves work in the State Right of Way (ROW), the Department will not issue an encroachment permit until our concerns are adequately addressed. Therefore we strongly recommend that the lead agency ensure resolution of the Department's CEQA concerns prior to submittal of the encroachment permit application. Further comments will be provided during the encroachment permit process; see the end of this letter for more information regarding the encroachment permit process. D-1 D-2 D-3

The Department acknowledges that the Oak to 9th Street project is consistent with established state planning priorities that: D-4

- Promote infill development and the appropriate reuse and redevelopment of previously developed land,
- Enhance landscapes, natural lands, recreation areas and other open space areas, and
- Encourage efficient development patterns by ensuring that infrastructure supports compact development adjacent to existing developed areas that are appropriately planned for growth and served by adequate transportation and other essential utilities and services.

COMMENT LETTER D

Forecasting

1. The DEIR does not include detailed information regarding the density (passenger cars/per mile/per lane) and level of service (LOS) on Interstate (I) 880 within the project vicinity for each of the 2010 and 2025 forecast years. We would like to ensure that the most current measure of effectiveness as shown in the Highway Capacity Manual 2000 – Basic Freeway Segments Analysis, e.g., density and its threshold, are adopted for purposes of determining LOS for freeway segments. D-5

2. I-880 on-and offramp LOS should be provided for both Year 2010 and Year 2025 scenarios, with and without the project. Figure IV.B-1. D-6

3. Average control delay values for all intersections operating at LOS F should be specified under both pre- and post-mitigation scenarios. Simply stating that delay is greater than 70 or 100 seconds per vehicle is not sufficient. D-7

Highway Operations

1. This project would further degrade the already heavily congested conditions at many study area intersections. As summarized in Table II-1, the existing LOS at locations such as 6th and Jackson Streets at the I-880 Northbound Onramp would be further impacted by this project. Since the allocation of green time for this intersection approach has not yet been determined, what is the conclusion that the impact would be less than significant (assuming implementation of Mitigation Measure B.1.c) based on? Wherever signal timing optimization is recommended mitigation, supporting Synchro analysis showing that the desired LOS improvements have been achieved through timing optimization should be provided. The analysis should comprehensively include all affected upstream and downstream intersections, rather than analyzing each intersection as an "independent free body". Furthermore, where optimization is not available or cannot be shown to provide sufficient improvement, additional mitigation should be fully explored, given the magnitude of project impacts. For example, project phasing could be modified to coincide with the timing of roadway improvements. Pages II-7 to II-48 of Table II-1, Impact B.1c. D-8

2. Residual impacts to 6th and Jackson Streets at the I-880 northbound onramp under Long-Term 2025 project buildout are unacceptable. The analysis states that intersection operations would degrade from LOS E to LOS F during the AM peak hour under this scenario, with signal timing optimization which would have been implemented under the 2010 Phase 1 development. While the analysis states that, "No feasible mitigation measures are available", at a minimum, additional mitigation which has been considered, but not pursued because it is infeasible, as well as phasing project buildout to coincide with available mitigation should be discussed. Page IV.B-37, Impact B.2e. D-9

3. Clarify how simple signal timing optimization could improve LOS from F to E at the I-880 southbound onramp at the 5th Street/Oak Street intersection in Year 2025. Page IV.B-48, Impact B.3d. D-10

4. Clarify how signal optimization would improve operations at the Atlantic Avenue/Webster Street intersection from LOS F to E. Operations at this intersection would degrade from LOS E to F during the AM peak hour with the addition of project buildout traffic. Pages IV.B-34,35, Impact B.2a. D-11

COMMENT LETTER D

5. 2025 traffic volumes for the Atlantic Avenue/Webster Street intersection should be verified. While existing volumes through the Webster Tube are in the 2000 to 3000 vehicles per hour (vph) range, the analysis forecasts volumes in the 1,000 vph range at the Webster Street approach to the Altantic Avenue/Webster Street intersection for the Year 2025 Plus Project scenario. D-12

6. The feasibility of adding a new approach leg opposite the existing northbound offramp at the I-880 northbound offramp/Embarcadero/6th Avenue intersection should be explained in the DEIR. Impact B.1e discusses installing a traffic signal and adding a fourth leg at this intersection. Page II-7, Table II-1. D-13

Construction Scheduling

1. The proposed Caltrans projects listed below are scheduled for construction during the same time that the Oak to 9th project will be under construction. All of these projects, which will be underway from 2007 to 2014, will involve periodic overnight lane closures that could potentially impact traffic on Embarcadero. The project's Transportation Management Plan (TMP) must be coordinated with Caltrans' contractors to ensure that lane and ramp closure congestion is not exacerbated by truck and equipment movements to and from the Oak to 9th Street project. Similarly, storm water and air quality control measures for the Oak to 9th Street project must not be allowed to conflict with measures applied by Caltrans' contractors. D-14
   - High Street Overhead (OH) Seismic Retrofit which involves the complete replacement of both High Street OHs,
   - Fruitvale OH Seismic Retrofit which replaces the bridge deck,
   - I-880 Pavement Rehabilitation which involves all I-880 lanes from the High Street Overhead to Harrison Street,
   - Fifth Avenue OH Seismic Retrofit which includes replacing the entire structure, and
   - Broadway/Jackson Street project which will modify an exit ramp and add a new southbound entrance ramp.

2. Construction of the Oak to 9th project shall not involve storing materials in protected areas under the 5th Street OH during the 5th Street OH Seismic Retrofit project. No hazardous materials shall be stored within Caltrans ROW at any time. D-15

3. Caltrans will acquire access control opposite the northbound Embarcadero exit/Embarcadero intersection as part of the Fifth Avenue OH Seismic Retrofit project. For safety reasons, Caltrans will ensure that no traffic from the Oak to 9th project could accidentally enter the offramp as a wrong way movement. If the proposed intersection at 7th Avenue were to be constructed, a median with back-to-back left-turn channelization and a positive barrier against north/south crossings would be required. This would require a wider median than is currently proposed. D-16

4. Additional storage at the Embarcadero/5th Avenue intersection is needed to prevent significant queues from ever crossing the terminus of the northbound Embarcadero exit ramp. Significant queues could also prevent use of the westbound right-turn and eastbound left-turn Embarcadero lanes from increased project volumes on 5th Avenue. Project traffic impacts would be exacerbated by Union Pacific Railroad's (UPRR) anticipated increase in the number of trains on the three UPRR track crossings under the 5th Avenue OH. D-17

COMMENT LETTER D

5. For storage, the section of 5th Avenue near the Oakland leased commercial parcel at the 5th Avenue/I-880 intersection and the Peralta Community College Corporate Yard and business office should be re-striped as a four-lane street with limited parking on the west side. The UPRR crossings should conform to the four-lane configuration, with sidewalks and crossing gates for pedestrians. This would minimize impacts from the increase in project traffic that would increase blockages of the driveways to these facilities. D-18

6. The relocation of the Embarcadero near 9th Avenue should include relocation of the utilities in and near the existing road, especially including PG&E's high-pressure natural gas transmission line. Anticipated construction of new freeway connections at that point would prohibit maintenance of those utilities in their current locations. Page II-47, M, Utilities and Service Systems. D-19

7. The proposed pedestrian trails on both sides of the Lake Merritt Channel must be coordinated with the Department's ROW, Landscape Architecture, and Environmental Planning Offices, in addition to local agencies such as the Bay Conservation and Development Commission (BCDC). Page III-14 and Figure III-7. D-20

Alternative Transportation

1. The project's funding and support of additional AC Transit bus service to the project site should be identified in the DEIR. To maximize convenience of the new transit service to project residents, employees and patrons, headways should be sufficient to facilitate commute and shopping trips, connectivity to BART and Amtrak should emphasized and bus stops, pull outs, and associated facilities should be designed for maximum convenience and safety. D-21

2. Pedestrian and bicycle facilities should also be designed to ensure safety and convenience, with an emphasis on connectivity to nearby transit and rail stations. Specifically, the potential for expanded pedestrian and bicycle connectivity to the downtown area and Lake Merritt BART through enhancements to the Lake Merritt channel should be fully explored in the DEIR. These could include improvements to landscaping, sidewalks/trails and lighting. D-22

3. The DEIR should also fully explore project trip reduction through a comprehensive Travel Demand Management (TDM) program. The TDM program should include target trip reductions through maximizing alternative transportation including car-pooling, transit and bicycle and pedestrian modes. A TDM Coordinator should be identified whose responsibilities would include coordinating TDM efforts and monitoring the program's effectiveness. D-23

4. Because the DEIR concludes that several of the project's traffic impacts are significant and unavoidable, the decisionmakers must make a statement of overriding considerations to certify the DEIR. Since the statement reflects the community's desire to balance competing public objectives, every reasonable effort should be made to ensure that all available mitigation has been thoroughly explored and applied where feasible. The alternative transportation measures detailed above form an integral part of this effort by supporting the project's smart growth objectives. D-24

COMMENT LETTER D

Parking

Many of the DEIR figures show parking under the freeway structure, but such parking is not discussed in the text of the document. Since parking under the freeway may not be appropriate and is subject to agreement with the Department, it should be discussed in detail in the DEIR. D-25

Hydraulics

Improvements and upgrading of the storm drainage infrastructure should be part of this project as the 2005 BKF study noted that existing City drainage facilities are in poor condition. Drainage improvements should account for the tributary drainage areas located west of the project site and should extend to State ROW, and should be coordinated and compatible with the Department's drainage systems. D-26

Access Restriction

There is a design requirement for access restriction at the northbound 6th Avenue/I-880 offramp. See Figure 504.8 in Chapter 500 of the Caltrans Highway Design Manual at the website link below for more information. Figure IV.B-3. D-27
http://www.dot.ca.gov/hq/oppd/hdm/hdmtoc.htm#hdm

Encroachment Permit

Work that encroaches onto the State ROW requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW must be submitted to the address below. Traffic-related mitigation measures should be incorporated into the construction plans during the encroachment permit process. See the website link below for more information. D-28
http://www.dot.ca.gov/hq/traffops/developserv/permits/

Sean Nozzari, District Office Chief
Office of Permits
California DOT, District 4
P.O. Box 23660
Oakland, CA 94623-0660

Please feel free to call or email Patricia Maurice of my staff at (510) 622-1644 or patricia_maurice@dot.ca.gov with any questions regarding this letter.

Sincerely,

Timothy C Sable

TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Ms. Terry Roberts, State Clearinghouse

Letter D – California Department of Transportation

D-1 The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring for mitigation measures identified in the DEIR will be addressed in the Mitigation Monitoring and Reporting Program, which will be prepared as part of the project review process, and will be adopted if the project is approved. Caltrans shall be consulted about any of the mitigation measures that would require Caltrans' approval prior to implementation.

D-2 Construction of road improvements proposed as part of the project, and those required to mitigate significant impacts, would be phased to the project development phasing as well as to when the identified impacts are expected to occur. The timing of this work will be addressed as part of the Mitigation Monitoring and Reporting Program (MMRP).

D-3 The City of Oakland will consult with Caltrans staff to resolve concerns raised by Caltrans related to work in the State right-of-way, requiring encroachment permits.

D-4 Comment is noted and acknowledges the project's consistency with established state planning priorities.

D-5 Evaluation of operating conditions on freeway segments in the project vicinity with and without the proposed project was undertaken in the DEIR using the methodology required by the Alameda County Congestion Management Agency (ACCMA), i.e., using volume-to-capacity (v/c) ratios to determine levels of service in accordance with the 1985 *Highway Capacity Manual* (HCM). The commenter is correct that the freeway analysis does not report density values based on the 2000 *Highway Capacity Manual*, but in general, analyses based on v/c ratios provide more conservative results than those based on density values. For example, analysis of the segment of southbound I-880 next to the project site yields a v/c ratio of 1.15 (LOS F); see Congestion Management Program Evaluation tables in Appendix C of the DEIR. Analysis of the same volume based on density (using the 2000 Highway Capacity Software) indicated a better level of service on this freeway segment (at LOS D). The main reason for this difference is that the 1985 HCM assumed that the maximum capacity of a freeway facility was 2,000 vehicles per lane per hour, and more recent research incorporated into the 2000 HCM shows that freeway facilities may have capacities that are 2,200 vehicles per lane per hour, or even higher. Based on these considerations, the DEIR is conservative in its reported results, and its evaluation of the project's effects on freeways is reasonable.

D-6 The DEIR analysis focused on off-ramp intersections with the local roadway network instead of the freeway ramps themselves because in the professional judgment of City staff and the EIR consultants, traffic flow conditions on a ramp are generally dependent on the level of service at the downstream connection to the local street. It is acknowledged, however, that further operational analysis may be needed to design improvements at intersections containing freeway ramps. .

D-7 The DEIR presents LOS and delay values under the various analysis scenarios in support of impact determinations. The *2000 Highway Capacity Manual* indicates that delay greater than 50 seconds for unsignalized intersections and 80 seconds for signalized intersections is LOS F, and the DEIR presents delay values to the tenth of a second unless the calculated delay is greater than 20 seconds higher than those thresholds. It is the judgment of City staff and the EIR consultants that presentation of such very high delay values in the text of the DEIR does not further an understanding of traffic conditions. The actual calculated delay values (for all analysis scenarios, including the conditions after implementation of the mitigation measures) are provided in LOS output sheets in the appendix to the technical resource document (*Oak to Ninth Project Final Traffic Study*, August 26, 2005) on-file at the City of Oakland office.

D-8 The finding of a less than significant impact if Mitigation Measure B.1c (Interim Project [2010] impact) were implemented at 6th and Jackson Streets is based on analysis of conditions with optimized signal timing. LOS output sheets for mitigated conditions are provided in the appendix to the technical resource document (*Oak to Ninth Project Final Traffic Study*, August 26, 2005) on-file at the City of Oakland office.

Regarding the request that analysis of signal retiming and optimizing should include all upstream and downstream intersections, the DEIR analysis of signal retiming took into account adjacent signals that are coordinated. For example, there is coordination between the MacArthur Boulevard and Lake Park Avenue intersections on Lakeshore Boulevard. At adjacent intersections that are currently uncoordinated, the impacts of nearby intersections were evaluated through a qualitative analysis.

See Master Response C regarding evaluation of feasible mitigation measures and the DEIR's identification of impacts as significant and unavoidable.

D-9 As stated on DEIR p. IV.B-38, mitigation possibilities beyond signal timing optimization were evaluated and the text describes how because of the constrained right-of-way at this location, addition of turn lanes or other similar improvements would not be feasible.

D-10 See Master Response E regarding optimization of signal timing, and its appropriate use as a mitigation measure.

D-11 See Master Response E regarding optimization of signal timing, and its appropriate use as a mitigation measure.

D-12 The traffic volumes at the Webster Street / Atlantic Avenue intersection are correct as reported from the manual turning movement counts conducted for the DEIR. Traffic volumes on Webster Street at Atlantic Avenue are not expected to be the same as the traffic volumes through the Webster tube because of dispersion of traffic existing the tube on various roads (e.g., Constitution Way).

D-13 The project applicant and their representatives have met with Caltrans staff several times to discuss the configuration of the intersection at the current off-ramp location along the Embarcadero. Both the project applicant and Caltrans staff have developed design alternatives for this intersection that would prevent vehicles from inadvertently entering the on-ramp, while providing access to vehicles entering and exiting the project site. It is anticipated that these discussions would continue over the next several months as consensus is reached on an intersection design.

D-14 As stated on DEIR p. IV.B-69, the City of Oakland would work in cooperation with Caltrans to mitigate cumulative effects that may occur during periods when the proposed project and the I-880 Seismic Retrofit project overlap. Mitigation Measure B.10 requires that the project applicant develop a Construction Traffic Management Plan and coordinate this plan with the City of Oakland. On p. IV.B-69 of the DEIR, the first sentence of Mitigation Measure B.10 is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> "**Mitigation Measure B.10: Prior to initiation of each phase of development ~~the issuance of each building permit~~, the project applicant and construction contractor shall meet with the Traffic Engineering and Parking Division of the Oakland Public Works Agency and other appropriate City of Oakland and non-City agencies (e.g., Caltrans) to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction."**

D-15 The construction management plan, required by Mitigation Measure B.10 (DEIR pp. IV.B-69 and IV.B-70), requires that the project applicant provide specific locations for equipment and material storage, which must be located on the project site. As such, equipment and material storage for the project would not occur in Caltrans Right-of-Way (ROW) or under Caltrans facilities.

D-16 See Response to Comment D-13, above.

D-17 As stated on DEIR p. IV.B-42 (Mitigation Measure B.2m), the westbound and eastbound (5th Avenue) approaches of the signalized intersection of 5th Avenue and 7th/8th Streets would be restriped within the current paved approach, and on-street parking spaces adjacent to the intersection would be removed, to provide separate left-turn, through, and through/right-turn lanes. These changes would provide additional capacity at this intersection. Also, text on DEIR pp. IV.B-59 through IV.B-62 documents recommended changes to the intersections along Embarcadero, based on a micro-simulation analysis of the project driveways and adjacent intersections. With the implementation of these changes, queuing along Embarcadero was found to be adequate for the anticipated traffic volumes resulting from the development of the project site.

D-18 See Response to Comment D-17, above.

D-19 The comment points out that existing utilities in and near the Embarcadero and 9th Avenue may need to be relocated to accommodate the proposed roadway and I-880 connections in this area. For the Oak to Ninth Project, the project sponsor would coordinate the timing and requirements of all utility relocations, improvements, expansions, and protections during construction, with the applicable utility providers and agencies, including but not limited to Caltrans, EBMUD, PG&E, telecommunication providers, and the City of Oakland.

D-20 Installation of proposed pedestrian trails along Lake Merritt Channel would be coordinated with all necessary review agencies, including Caltrans, BCDC, and the City of Oakland Public Works Agency and Parks and Recreation Department. The City of Oakland, with consideration by BCDC and to direction in the San Francisco Bay Trail Plan, shall determine and approve the appropriate and preferred trail alignment proposed by the project.

D-21 See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures.

D-22 See Master Response D for a description of the Transportation Demand Management Plan for the project, including bicycle facilities measures. The preferred mode of access to the Lake Merritt BART station would be through AC Transit service, which would serve the project site, the BART station, and downtown Oakland; see Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures. See Response to Comment F-10, below, regarding walking distance to the Lake Merritt BART station.

D-23 See Master Response D for a description of the Transportation Demand Management Plan for the project, including employment of a TDM coordinator.

D-24 See Master Response C for a description of significant and unavoidable traffic impacts.

D-25 Parking was inadvertently shown under the freeway structure on several DEIR figures. These “typos” have been eliminated from the affected figures.

D-26 As stated in the discussion of stormwater facility impacts (Impact E.3) on DEIR p. IV.M-14, the project will install new storm drain facilities throughout the project site in conformance with City of Oakland design criteria. The design of the new facilities would consider all drainage impacting the site, as determined by engineering studies prepared for the project and reviewed and approved by the City and all other affected agencies.

D-27 See Response to Comment D-13, above.

D-28 Comment noted. See Response to Comment D-3 above regarding the City of Oakland's pledge to consult with Caltrans staff to resolve concerns raised by Caltrans related to work in the State right-of-way, requiring encroachment permits.

COMMENT LETTER E

Making San Francisco Bay Better

October 24, 2005

Margaret Stanzione, Project Planner
City of Oakland
Community and Economic Development Agency, Planning Division
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, California 94612

SUBJECT: Draft Environmental Impact Report (DEIR) for
the Oak to Ninth Avenue Project
State Clearinghouse Number 2004062013

Dear Ms. Stanzione:

On September 2, 2005, San Francisco Bay Conservation and Development Commission staff received the Draft Environmental Impact Report (DEIR) prepared for the City of Oakland for the Oak to Ninth Avenue Project, proposed along the Oakland Estuary. The project would include approximately 3,100 residential dwelling units and approximately 200,000 square feet of ground-floor retail/commercial space on 13 development parcels. Approximately 28.4 acres of the site would be developed with parks and open space. The project would demolish up to 165,000 square feet of the existing Ninth Avenue Terminal. A continuous public pedestrian trail and Class I bicycle facility along the entirety of the project's waterfront would also be created as a segment of the Bay Trail. The majority of the uses and structures would be removed or demolished.

The Commission's staff has reviewed the DEIR and is submitting its comments regarding the document. Although the Commission itself has not reviewed the DEIR, the staff comments are based on the McAteer-Petris Act, the Commission's *San Francisco Bay Plan* (Bay Plan), the Commission's federally-approved management program for the San Francisco Bay, and the federal Coastal Zone Management Act (CZMA). E-1

Jurisdiction

The Commission's jurisdiction includes all tidal areas of the Bay up to the line of mean high tide (the inland edge of marsh vegetation in marshlands), all areas formerly subject to tidal action that have been filled since September 17, 1965, and the "shoreline band," which extends 100 feet inland from and parallel to the Bay shoreline.

Commission permits are required for certain activities, including construction, changes of use, dredging, and dredged material disposal, within its area of jurisdiction. Permits are issued if the Commission finds the activities to be consistent with the McAteer-Petris Act and the policies and findings of the Bay Plan. In addition to any needed permits under its state authority, federal actions, permits, and grants that affect the Commission's jurisdiction are subject to review by the Commission, pursuant to the federal Coastal Zone Management E-2

E

Act (CZMA), for their consistency with the Commission's federally-approved management program for the Bay. As stated in the DEIR, much of the project would occur within the Commission's jurisdiction and require Commission authorization. E-2, (CONT.)

BCDC Priority Use Areas

Bay Plan Map No. Five of the *San Francisco Bay Plan* designates a portion of land near Estuary Park (at the western end of the project site) as a Waterfront Park Priority Use Area. Within the Commission's jurisdiction at this site, the proposed development would be consistent with the priority use designation. However, the Commission has no regulatory authority landward of its 100-foot shoreline band. On February 20, 2003, the Commission adopted a resolution to amend the San Francisco Seaport Plan, the San Francisco Bay Plan and resolution 16 to delete the Port Priority Use Area and Marine Terminal designation from the Port of Oakland's Ninth Avenue break bulk terminal at the eastern end of the site. Therefore, there is no Priority Use designation for that portion of the project site. E-3

Fill

Among other requirements, Section 66605 of the McAteer-Petris Act requires that fill in the Bay should only be authorized when: (1) the public benefits from the fill clearly exceed public detriment from the loss of water areas; (2) the fill should be limited to water-oriented uses or minor fill to improve shoreline appearance or public access; (3) there is no alternative upland location; (4) the fill is the minimum amount necessary; (5) the fill minimizes harmful effects to the bay, such as the reduction or impairment of the volume surface area or circulation of water, water quality, fertility of marshes or fish and wildlife resources or other conditions impacting the environment; and (6) that the fill would, to the maximum extent feasible, establish a permanent shoreline.

The Bay Plan policies on recreation state, in part, that "small amounts of Bay filling may be allowed for shoreline parks and recreational areas that provide substantial public benefits and that cannot be developed without some filling." The Bay Plan policies on the control of filling and dredging in the Bay state in part, that "[a] proposed project should be approved if the filling is the minimum necessary to achieve its purpose, and if it meets one of the following...conditions...[t]he filling is in accord with the Bay Plan policies as to the Bay-related purposes for which filling may be needed (i.e., ports, water-related industry, and water-related recreation)...or...[t]he filling is in accord with the Bay Plan policies as to minor fills for improving shoreline appearance or public access." E-4

Section 10700 of the Commission's regulations state that the Commission may approve the placement of minor fill to improve shoreline appearance only if: (1) the fill is necessary because the present appearance of the Bay and shoreline in the area adversely affects enjoyment of the Bay and its shoreline and it is either physically impracticable or economically infeasible to improve the appearance without filling; (2) the amount of filling is the minimum necessary to improve shoreline appearance; (3) the proposed project would improve the shoreline appearance; and (4) the fill will not adversely affect enjoyment of the Bay and the fill will not have any adverse effect on present or possible future use of the area for any designated priority water-related use or for public access.

Section 10701 of the Commission's regulations state that the Commission may approve the placement of minor fill to improve public access only if: (1) the fill is necessary because the there is at present inadequate public access to the Bay shoreline in the area and it is either physically impracticable or economically infeasible to improve public access without filling; (2) the fill will improve public access to the Bay; and (3) the amount of the filling approved is the minimum necessary to provide improved public access to the Bay.

Page IV.I-24 of the DEIR states that the proposed project would include the removal of approximately 33,780 square feet of solid Bay fill as part of the shoreline design and the placement of 74,110 square feet of solid Bay fill for the creation of a Gateway Park at Clinton Basin. The project would also include the removal of approximately 129,920 square feet of pile-supported fill with the removal of a portion of the Ninth Avenue Terminal wharf. Additionally, floating fill would be required to create the two proposed marinas. E-5

When the Commission reviews the proposed project, it will determine whether the proposed fill is consistent with BCDC's laws and policies regarding fill in the Bay. However, at its May 9, 2005 Design Review Board meeting, the Commission's Design Review Board was asked to advise the Commission and the project sponsors on whether the proposed fill, particularly at the proposed Gateway Park, is needed and appropriately sized to create an attractive and usable shoreline park. Also, the Board was asked to advise the Commission on whether the proposed fill is necessary to improve shoreline appearance and public access and provides substantial public benefits as part of a shoreline park or recreational area that cannot be developed without some filling. At that meeting, the Board concluded that public access could be improved with some Bay fill at the end of Clinton Basin, however, the exact amount needs studying and should be determined based, in part, on the public's sense of arrival to the park and to the Bay. E-6

In the past, the Commission has required mitigation for some fill projects. The exact amount and type of mitigation depends, in part, on the nature, location and extent of the fill and the extent to which it would harmfully effect the Bay Area, such as, the reduction or impairment of the volume surface area or circulation of water, water quality, fertility of marshes or fish or wildlife resources, or other conditions impacting the environment.

Public Access

Section 66602 of the McAteer-Petris Act states, "...that existing public access to the shoreline and the waters of the San Francisco Bay is in adequate and that maximum feasible public access to the Bay, consistent with a proposed project, should be provided...." The Bay Plan's policies on public access state that, "...maximum feasible public access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline, whether it be for housing, industry, port, airport, public facility, wildlife area or other use, except in cases where public access would be clearly inconsistent with the project because of public safety considerations or significant use conflicts, including unavoidable, significant adverse effects on Bay natural resources." E-7

Over the years, the Commission has defined public access as including physical public access to and along the shoreline of the Bay and visual public access (views) to the Bay from other public spaces.

In addition to the comments stated above regarding fill in the Bay, the Commission's Design Review Board provided the following advice on public access issues at its May 9, 2005 meeting: (1) the project proponents should consider street geometries that relate to important views; (2) the Board has an expectation that building heights will vary; (3) eight-story buildings need to be considered as they relate to public views; (4) the urban edge of Clinton Basin would be interesting, is desirable and should be promoted; (5) public parking for open spaces and impacts on existing public parking need to be evaluated; (6) usable versus non-usable public spaces need to be better understood; and (7) increasing the height of the residential towers and lowering the podium buildings might improve public connections and views to the Bay. E-8

Page III-22 of the DEIR describes the anticipated phasing for the proposed project. Generally, it appears that public shoreline areas would be constructed when the adjacent development is built. This concept of "adjacency" is one that was authorized by the Commission for the Mission Bay project in San Francisco. However, it can also be desirable to have relatively simple interim trail improvements built along the shoreline where possible to allow public access along the Bay edge even in those areas where open space implementation is 10 or more years away. These temporary trail improvements are most effective when built with the first development phases. E-9

Page III-16 of the DEIR describes the proposal for creating an open space and a landscaped waterfront plaza on a portion of the pile supported wharf at the Ninth Avenue Terminal. This type of structure typically requires a thorough structural analysis to better understand its life span as a public access area. Recently, the Commission's Design Review Board requested a structural assessment of a similar wharf to help in its review of that public access proposal. Ultimately, the Commission will need a thorough evaluation to determine the integrity of the structure that will be used for public access. E-10

Figure III-7 depicts the proposed trails within the project site. No trail connection is proposed across the private lands between Channel Park and South Park. If this connection is infeasible, the project should provide a connection to Embarcadero on each side of the outparcel. E-11 Also, improved physical connections between the existing adjacent Eastlake neighborhood and the waterfront should be considered. Fifth Avenue provides the critical link between the existing neighborhoods and the shoreline and should be evaluated for public access improvement opportunities, especially at the existing railroad crossing. E-12

The Commission routinely requires public access parking as a component of shoreline development projects. The Oak to Ninth Avenue Project should include an analysis of potential impacts to existing public shoreline parking, such as at Estuary Park, as well as the adequacy of the proposed public parking. It is possible that there is a greater need for additional, separate public parking lots near the shoreline than currently proposed. E-13

Page III-12 describes the proposed parks, open space and trails. To fully analyze the public access proposal for this project, the Commission and its staff will need a more detailed description and set of illustrative exhibits for each of the five parks. E-14

Construction Work Windows

Table IV-I-1 of the DEIR identifies construction work windows for in-water construction activities. Please also include in this table the construction work windows for the Least Tern. E-15

Marina

The DEIR states that the project would rebuild the existing Clinton Basin Marina and expand the Fifth Avenue Marina. Parking and marina facilities, such as pump-out stations and restrooms, are very important to marina operations. These elements of the project should be carefully considered. The interface and any potential public access conflicts between marina tenants and shoreline visitors should be explored. E-16

Thank you for providing staff with the opportunity to review the DEIR for the proposed project. We recognize the importance of this project and are looking forward to working with your staff to develop the final document and any subsequent permit application materials. Please feel free to contact me at (415) 352-3615, or email me at bradm@bcdc.ca.gov if you should have questions regarding this letter or the Commission's policies and permitting process. E-17

Sincerely,

BRAD McCREA
Bay Design Analyst

cc: State Clearinghouse; Attn: Katie Shulte Joung

Letter E – San Francisco Bay Conservation and Development Commission

E-1 Comment is noted that BCDC's comments are provided by BCDC staff and based on applicable legislation and plans that guide BCDC policy. The Commission had not yet reviewed the DEIR document as of the date of BCDC's comment letter.

E-2 Comment is noted. The project site is within BCDC's jurisdiction and would be required to obtain BCDC permits and approvals (DEIR p. III-28; pp. IV.A-30 and IV.A-32; and throughout the DEIR where specifically relevant).

E-3 Per the comment, the third sentence of the third paragraph under *San Francisco Bay Plan and San Francisco Bay Are Seaport Plan* on DEIR p. IV.A-30 is revised as follows (additions shown as underlined; deletions as ~~strikeout~~):

> **The project site is within Bay Plan Map No. Five (Center Estuary), which designates a portion of the site west of Lake Merritt Channel (near Estuary Park) as Waterfront Park Priority Use Area. BCDC has regulatory authority for all portions of the project site waterside of BCDC's 100-foot shoreline band (~~including that~~ excluding portions within ~~of~~ the priority use area)…. No port priority use area is designated for the Ninth Avenue Terminal break bulk facility on the site.**

E-4 The comment details the requirements and limitations related to bay fill within the purview of BCDC. The information provided is consistent with that summarized on DEIR pp. IV.A-32 and IV.D-9 to IV.D-10. As stated on DEIR p. IV.A-32, "the extent to which the potential new bay fill is "necessary" [pursuant to BCDC policies] would be considered by BCDC and City decisionmakers prior to acting on the project." Section IV.D (Hydrology and Water Quality) and Section IV.I (Biological Resources) of the DEIR identify and analyze potential adverse effects to water quality and biological resources that may result from the proposed bay fill (or other water-related activities). Adequate mitigation measures are identified to reduce these impacts to less-than-significant levels.

E-5 See Response to Comment B-8.

E-6 Consistent with the comment, DEIR pp. III-29 and IV.A-32 recognizes BCDC's purview over the project and specifically identifies the focus on the BCDC Design Review Board review that occurred on May 9, 2005. As stated in Response E-4, aspects of the project within BCDC's purview would be considered by BCDC prior to the City decisionmakers' action on the project.

E-7 See Master Response G.

E-8 As stated on DEIR p. IV.F-14, each development site, which includes the Ninth Avenue Terminal, will receive a site specific geotechnical investigation to determine design

specifics that would be in compliance with current California Building Code (CBC) requirements. For seismic performance, the current CBC as well as the most recent version of the Uniform Building Code (UBC) requires that all structures be designed to withstand an earthquake with a 10 percent probability of being exceeded in 50 years. As footnoted on DEIR p. IV.F- 10, "this probability level allows engineers to design buildings for larger ground motions than seismologists think will occur during a 50-year interval, making buildings safer than if they were only designed for the ground motions that are expected to occur in the 50 years."

In regards to determining the life span, an older structure which is being rehabilitated, such as the Ninth Avenue Terminal pier, may be expected to reach a life span similar to a new structure which is approximately 50 years; however, the need for periodic inspection and repairs would be greater than for a new structure. It should be noted that with periodic repairs, the pier has lasted over 75 years and has survived through the Loma Prieta earthquake, and is still operational.

E-9 See Response to Comment B-11 and revised (**Figure III-1**, Shoreline Parks and Trail Network, in Chapter III of this FEIR.

E-10 The comment speaks to the need for improved physical connections between the Eastlake neighborhood and the project site and waterfront. This is discussed under the project's consistency with Estuary Plan policies (*Land Use Continuity, Access, and Circulation Connections*) on DEIR p. IV.A-15. As stated there, I-880, rail tracks, and rail yards separate inland neighborhood (e.g., Eastlake) from the project site and the waterfront, although direct accessways do exist nearby. Increased transit services would improve access between these areas. See also Master Response F regarding railroad crossing.

E-11 See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management measures.

E-12 Detailed plans of each of the proposed parks would be prepared by the project sponsor as part of the Final Development Plan (FTP) submittal to the City. Park space exhibits depicted in the DEIR (DEIR Figure III-7, revised as (**Figure III-1,** Shoreline Parks and Trail Network, in Chapter III of this document) are conceptual. These exhibits are at an appropriate level of detail necessary to conduct the CEQA analysis and for the Preliminary Development Plan (PDP) approval currently sought by the project sponsor.

E-13 DEIR Table IV.I-1 is provided to support Mitigation Measure IV.I-3 (DEIR p. IV.I-27), a measure to reduce impacts to migrating salmonid and other listed fish species that may occur within the project area within migratory periods. The proposed project are does not provide suitable breeding habitat for the least tern, and they are not anticipated to occur in the project area based on the location of recorded occurrences by the California Natural Diversity Data Base (CNDDB) (CNDDB, 2005). The closest known nesting location is the Alameda Naval Air Station.

Mitigation Measures I.4a through I.4b (DEIR p. IV.I-28) provide protection for the least tern providing pre-construction surveys, timing of construction, and appropriate buffer areas if nesting birds are located within project boundaries. The Long Term Management Strategy (LTMS) recommends restriction of work for least tern during March through July 31 within 3 miles of active nesting areas. Mitigation Measure I.4a states that construction activities will be conducted during August 1 through January 30, outside the breeding season for birds and raptors. The restriction period as recommended by the LTMS for the least tern falls within this period. In addition, preconstruction surveys will be conducted by a qualified biologist for all nesting birds within the project area as stated in Mitigation Measure I.4b and these surveys would include the least tern.

E-14 Comment noted. All elements of the new and improved marina facilities proposed by the project would be reviewed in detail as part of the Final Development Plan (FTP) submittal to the City. The City and BCDC will review the detailed public access characteristics of marina uses, including the interface with non-marina visitors' access to the project site and shoreline. No pump-out stations are proposed by the project.

E-15 Comment is noted and acknowledges the commenter's anticipated future involvement.

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October 24, 2005

Margaret Stanzione, Project Planner
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250 Frank H. Ogawa Plaza, Suite 3315
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RE: COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT
OAK TO NINTH MIXED USE DEVELOPMENT PROJECT

Dear Ms. Stanzione:

On behalf of the San Francisco Bay Area Rapid Transit District (BART), we are pleased to have the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Oak to Ninth Avenue Project.

Comment 1:
The proposed Oak to Ninth Project would provide 3,100 new residential units with up to 200,000 square feet of ground-floor retail/commercial space in a core urban area within a mile of a BART station. The project sets aside 44 percent of the site (28.4 acres) for parks and public open space, much of it on the waterfront. Given this mix of uses, from a transportation perspective, the development will be both an "origin" and a "regional destination." The project proponent has proposed enhanced local bus and a new shuttle service to provide access to the closest BART station as well as a network of bicycle/pedestrian paths throughout the project. Through its Strategic Plan, adopted in 1999, BART generally supports urban infill projects with a strong pedestrian orientation and connections with the local transit system. F-1

Comment 2:
The key BART station affected by the proposed development is the Lake Merritt BART station. The analysis used by the project proponents in the DEIR to estimate the number of potential BART riders at this station when the project is completed – approximately 175 potential new riders during the a.m. peak hour – seems reasonable, and these riders can be accommodated by the BART trains and faregates. F-2

Comment 3:
The DEIR recognizes that the project will generate demand for alternative transportation service for the area (Impact B4) and relies on transit to help mitigate the project's contribution to cumulative regional air pollution (Impact C7). To address these issues, mitigation measures B.4b (transportation) and C.7f (air quality) require the project applicant to operate a private shuttle connecting to key transit nodes. Measure C.7f requires that the shuttle serve the Lake Merritt BART station, but Measure B.4b does not. Both mitigation measures contain only a vague direction to provide an unspecified "adequate" number of onsite stops and "sufficient" frequency of service. This unspecified description is insufficient to ensure that the shuttle service will be effective as mitigation. Moreover, although other transit measures require the project applicant to coordinate with AC Transit, there is no requirement for the applicant to coordinate the shuttle service with BART. As identified in the Lake Merritt BART Access Plan, the station's access F-3 F-4 F-5

infrastructure is currently at capacity for non-single occupancy vehicle connections. The passenger drop off/pick-up area at the Lake Merritt BART Station is one-car length along Oak Street and is inadequate to meet current demand. Typically, shuttles either need their own curb space, or improperly use AC Transit's curb space, which could impact AC Transit service. The passenger drop off area should be expanded to accommodate increased demand due to the proposed development, and the City should allocate curb space for the proposed shuttle. Effectively accommodating the shuttle service will require coordination with BART staff on scheduling and adequate street-level amenities for transferring shuttle patrons at the BART station, including transit maps, signage, and real-time shuttle arrival information. F-5 (CONT.)

Mitigation measure B.4b should be revised to require shuttle service to the Lake Merritt BART station, consistent with measure C.7f. Both measure B.4b and C.7f should be revised to require the project applicant to coordinate with BART and to provide adequate street-level amenities for transferring shuttle patrons at the BART station, including transit maps, signage, and real-time shuttle arrival information and to require the City to expand the existing passenger drop off area and allocate curb space for the proposed shuttle. F-6

Comment 4:

The City of Oakland's Transit First Policy, which applies to this project, favors modes that have the potential to provide the greatest mobility for people, rather than vehicles. (p. IV.A-26). BART is also seeking to encourage more patrons to access stations by walking, bicycling or on transit. Through its strategic planning process, the BART Board has developed several policies to guide and support station access near BART stations. The Strategic Plan seeks to achieve a 10 percent shift in access mode splits, by reducing the percentage of parked single occupancy vehicles (relative to other access modes). The BART Access Guidelines establish an access hierarchy that prioritizes investments in walk, transit and bicycle access to station areas. The BART Sustainability Policy has a goal to "(e)nhance the use of resource-efficient and environmentally-friendly access modes (e.g., bikes, walking, etc.), and other sustainable features at BART's new and existing stations." Finally, the BART Station Area Planning Policy has a goal to "(p)romote transit ridership and enhance quality of life by encouraging and supporting transit-oriented development within walking distance of BART Stations and along transit corridors that serve BART Stations." These policies and guidelines support investment in the facilities that encourage alternative modes of access to a station. F-7

In this context, BART has concerns regarding how residents, visitors and employees of the proposed Oak to Ninth development will access the Lake Merritt BART Station, both during peak and off-peak periods. The DEIR analysis assumes that (i) the only potential impacts on BART are effects on standing capacity and gate capacity, disregarding impacts on access; and (ii) the project site is too far to walk to the Lake Merritt Station and that patrons will arrive at BART via automobile (pp. IV.B-53 - 54). Regarding the first assumption, as noted above, the station's access infrastructure is currently at capacity for non-single occupancy vehicle connections and the one-car-length passenger drop off/pick-up area is inadequate to meet current demand. It should also be noted that several city streets under the I-880 freeway in the vicinity project site are congested, providing another practical reason that access should focus on pedestrian, bicycle and transit opportunities. The project site is certainly within reasonable bicycling distance from the Lake Merritt Station. However, the existing bicycle racks and lockers at the station are fully utilized, with a waiting list for lockers. Given the existing constraints in automobile drop-off and bicycle parking at the Lake Merritt BART Station, a development on the scale of the Oak to Ninth project clearly will impact these facilities.

Regarding the second assumption, it is generally true that a distance of 0.75 to 1.00 mile is a little longer than most commuters will walk to the transit node. Most residents commuting to and from the project will look for other ways to get to the BART station, such as drop-off, shuttle, or bicycle. However, this development will be a regional destination including parks, open space, and retail uses. The proposed project will link two existing segments of the Bay Trail (p. IV-B-56). The DEIR also notes that currently-adopted City plans and projects will create new pedestrian and waterway connections between Lake Merritt and the Estuary, making the project site accessible from the north via Lake Merritt Channel (p. III-20) – which would also provide an attractive pedestrian path to the Lake Merritt BART Station area. Thus, pedestrian access from greater distances is clearly contemplated. Although the project sponsor itself does not propose to hold events such as concerts or festivals at the project site, the DEIR recognizes that such events would be appropriate at the large new public open spaces created by the project (pp. III 18-19). To reduce automobile trips to events, with associated environmental impacts from traffic congestion and vehicle emissions, adequate signage for pedestrians and bicyclists to and from the development is especially important. F-8

Consistent with the City of Oakland's Transit First Policy, to help mitigate the additional transit demand generated by the project (Impact 4), the project applicant should be required to provide additional bicycle lockers at the Lake Merritt BART station, and adequate signage to direct bicycle and pedestrian traffic from the proposed development site to the BART station and back. F-9

Comment 5

The DEIR recognizes that construction activities for the project would have a potentially significant impact by temporarily affecting traffic flow and circulation, parking and pedestrian safety. Construction activities are anticipated in phases over a period of 11 years. As mitigation, the DEIR proposes a variety of traffic control measures in a Construction Traffic Management Plan, to be prepared in consultation with the City of Oakland (mitigation measure B.10).

However, construction activities – and the traffic control measures instituted to manage construction activities – may impede access and safety for riders who access the Lake Merritt station by automobile, transit, bicycle or walking. Given the long duration of phased construction for this project, the inconvenience to BART patrons potentially could reduce ridership over a substantial time period. Effects that reduce public transit ridership largely divert riders to automobiles, with potentially significant secondary impacts from increased traffic congestion and vehicle emissions. The DEIR contains no analysis at all regarding these issues and as such does not support the conclusion that mitigation measure B.10 will be adequate to ensure that construction-period impacts remain less than significant. The Final EIR should acknowledge these impacts and should require consultation with BART on the Construction Traffic Management Plan as it may affect access to the Lake Merritt Station. F-10

We appreciate your consideration of our concerns. Please contact Deidre Heitman, Senior Planner, at (510) 287-4796 or by e-mail at dheitma@bart.gov.

Thank you again for the opportunity to comment on this important project.

Sincerely,

Kathleen Kelly
Executive Manager, Planning & Budget

Letter F – Bay Area Rapid Transit

F-1 Comment noted.

F-2 Comment noted.

F-3 Mitigation Measure B.4b, DEIR p. IV.B-55, is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> **"Mitigation Measure B.4b: The project applicant shall operate a private shuttle service to complement AC Transit service that might be extended to the project site. The shuttle service shall run between the project site and nearby activity centers and transit nodes (e.g., Lake Merritt BART station) with ~~have~~ an adequate number of shuttle stops located onsite, and ~~shall operate~~ on a frequency sufficient to attract use of the service by project residents and employees."**

F-4 See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures**.**

F-5 It is acknowledged that as part of planned service (shuttle and/or AC Transit) to BART station(s), access considerations would require coordination among the project applicant, AC Transit and BART.

F-6 See Responses to Comments F-3 through F-5, above.

F-7 See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures; and Response to Comment F-5, above, regarding coordination among the project applicant, AC Transit and BART concerning access considerations.

F-8 As stated on DEIR p. IV.B-53, research indicates that most transit users prefer to access a station within one-quarter to one-half mile of their origin or destination. Providing directional signs to reach the Lake Merritt BART station one mile away (or more from many areas inside the project) would have no meaningful effect on the average person's decision to walk or not walk.

F-9 See Responses to Comments F-7 and F-8, above.

F-10 Given the distance between the project site and the Lake Merritt BART Station, project construction activity, and associated increased traffic, is not expected to adversely affect access to the Lake Merritt BART Station. However, the following is added to the list of items and requirements shown in bullet format on DEIR p. IV.B-69 as part of Mitigation Measure B.10:

- **Provisions for coordination with BART to reduce, as needed and as feasible, adverse effect on access to the Lake Merritt BART Station.**

City of Alameda • California

October 24, 2005

Margaret Stanzione
Community and Economic Development Agency – Planning
250 Frank Ogawa Plaza, Suite 3315
Oakland, CA 94612

Re: Oak to Ninth Avenue Project Draft Environmental Impact Report

Dear Ms Stanzione:

Thank you for the opportunity to comment on the City of Oakland's Draft Environmental Impact Report for the Oak to Ninth Avenue Project.

As acknowledged in the Draft EIR, the project will have significant impacts at the intersections that provide access to the I-880 freeway for Alameda, Chinatown, and Downtown Oakland. The Draft EIR states that the project will have a significant unavoidable impact at the critical intersections at 6th Street and Jackson and Broadway and 5th Streets. These two intersections are critical gateways to I-880 and the regional freeway system for Downtown Oakland, Jack London Square, Chinatown and Alameda. G-1

These impacts are not unexpected. This area known as the "Broadway/Jackson Study Area" has been the subject of extensive study. The City of Oakland and the City of Alameda have acknowledged through a series of agreements that the two cities must work together with the affected communities and the development community to identify and fund solutions to this regional transportation problem. Without a coordinated effort that includes the best efforts of two cities and the participation of the development community, neither community will be able to effectively achieve its redevelopment goals or effectively respond to community concerns about unacceptable congestion and traffic volumes at these critical intersections. G-2

The Oak to Ninth EIR does provide a good example of how the development community and local agencies can work together to solve these problems. Mitigation Measure B.2.a commits the project proponent to mitigate a significant unavoidable impact at the intersection of Atlantic and Webster within the City of Alameda by providing a fair share contribution to the cost of improvements (cost to be determined). We appreciate the inclusion of this mitigation and the commitment that it represents. However, for the significant unavoidable impacts at 6th and Jackson and Broadway and 5th, the EIR does not require that the project commit a fair share contribution to Broadway Jackson improvements. In contrast, the City of Alameda's EIR for Alameda Point, which also G-3

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resulted in significant unavoidable impacts at critical intersections in "Broadway Jackson Study Area", required that the Alameda Point Master Developer contribute a fair share contribution (cost to be determined) to future Broadway/Jackson Area improvements. In addition, the City of Alameda required the project to institute an aggressive TDM program designed to achieve a 10% reduction for residential trips and a 30% reduction for commercial trips to reduce the volume of traffic that would be generated in the impacted area. We believe that all projects in both cities that impact the Broadway Jackson area should contribute a fair share contribution to fund improvements and include an aggressive trip reduction strategy to reduce traffic volumes in the impacted area. G-3 (CONT.) G-4

5th and Broadway and 6th and Jackson Mitigations We respectfully request that the Oak to Ninth EIR be revised to include two additional mitigations for the significant unavoidable impacts at 6th and Jackson and 5th and Broadway:

1. The EIR should include a mitigation committing the project to a fair share contribution (cost to be determined) to future improvements in the "Broadway Jackson Study Area".
2. The EIR should include a mitigation committing the project to an aggressive TDM program with specified trip reduction goals.

G-5

Both of these mitigation measures are feasible measures that would serve to reduce the severity of the impacts identified at the intersections providing access to the I-880 and State Route 260.

State Route 260 and Deficiency Plan. There are a number of statements in the EIR concerning the Broadway Jackson Area that should also be corrected:

On Page IV.B-1, Regional Access, paragraph 4 should be corrected as follows, "State Route 260 (SR260) is a ~~six~~ four-lane ~~freeway~~ controlled-access facility (classified in the highway log as a freeway) (~~three~~ two lanes in each directional tunnel). G-6

On Page IV.B-16, Planned Roadway Improvements, the EIR should describe the Oakland and Alameda effort to address the CMA required SR 260 Deficiency Plan and various interim and future strategies that may reduce congestion at this intersection of 6th and Jackson. We would recommend the following language:

> *The State Route 260 Deficiency Plan was prepared after the Alameda County Congestion Management Agency identified the connection between State Route 260 Eastbound (Posey Tube) and the Interstate 880 Northbound On-ramp as operating at an unacceptable level of service. The Deficiency Plan recommended the following seven strategies, five short-term and two long-term, to improve the operations of this freeway connection:*

G-7

Near-Term Improvement Strategies
Strategy A - Close 6th Street connecting ramp to Broadway and re-stripe on-ramp to I-880;
Strategy B1 - Divert southbound traffic on Jackson Street at 7th Street to eastbound 7th Street; or
Strategy B2 - Channelize southbound Jackson Street between 7th and 6th Streets;
Strategy C - Channelize right turns from Harrison to 7th Street; and
Strategy D - Implement traffic responsive signal operations in Alameda and Oakland.

G-7 (CONT.)

Long-Term Improvement Strategies
Strategy E - Construct a direct connector from the Posey Tube to 5th Street; and
Strategy F - Construct the full Jackson-Broadway interchange improvements.

Each strategy is to be implemented in sequential order if the previous strategy fails to mitigate the deficiency. The City of Oakland is proceeding with the implementation of Strategies A and B.

On Page IV.B-16, Broadway/Jackson Interchange at I-880, Paragraph 1, Sentence 3, should be corrected to say

"The preliminary studies and environmental for Phase I improvements are complete, and both PSR and PR have been completed by Caltrans. Partial funding is available for these improvements and the project is listed in the current official 2004 State Transportation Improvement Program (STIP). Additional funding is needed to accomplish all of the improvements necessary."

G-8

Atlantic and Webster Mitigation Measure B.2a. As described above, we appreciate the project's commitment to fund a fair share to the improvement of this intersection. However, we request that:

G-9

1. The mitigation be modified to require that the fair share contribution be provided as a condition of building permit for the project. Without a clear statement about when the funds will be made available, this mitigation cannot be effectively monitored.

2. The summary table Table II-1 on page II-17 should be modified to include the full Mitigation Measure. For some reason, the commitment to fund a fair share was eliminated from the mitigation in this table. Since these tables are often used to create the Mitigation Monitoring Program, we believe it is important to include the funding commitment and the timing of the mitigation within Table II-1.

G-10

In the Final EIR or as an appendix, please provide:

a. Existing and future year LOS analysis Traffix output for intersections #1, Atlantic/Webster, #2, Atlantic/Constitution and #5 Broadway/5th G-11
b. Select link info from the model for trips to/from Alameda Traffic Analyses Zones (TAZ).

Thank you for your careful considerations of our comments. We look forward to working closely with the City of Oakland to address the deficiencies in our regional transportation system. If you have any questions, please do not hesitate to contact Andrew Thomas, Supervising Planner at 747-6881 or Virendra Patel, Assistant Engineer at 749-5852.

Sincerely,

Greg McFann
Acting Planning and Building Director

Cc: Debra Kurita, City Manager
Andrew Thomas, Supervising Planner
Virendra Patel, Assistant Engineer.

Letter G – City of Alameda

G-1 The commenter's characterization of the DEIR's descriptions and findings about project impacts at 6th and Jackson Streets, and 5th Street and Broadway is noted.

G-2 The commenter's description of the mutual interests of the cities of Oakland and Alameda is noted.

G-3 See Master Response C for a discussion of Significant and Unavoidable Transportation Impacts, including those in the Broadway/Jackson area.

G-4 See Master Response D for a description of the Transportation Demand Management Plan for the project.

G-5 See Response to Comment G-3 and Master Response D for a description of the Transportation Demand Management Plan for the project.

G-6 The first sentence of the fourth paragraph of DEIR p. IV.B-1 is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> **"*State Route 260* (SR 260) is a ~~six~~ four-lane controlled-access facility (classified in the highway log as a freeway (~~three~~ two lanes in each directional tunnel) that connects the cities of Alameda and Oakland through the Posey & Webster tubes."**

G-7 The SR 260 Deficiency Plan, as noted by the commenter, contains a number of strategies related to improving the overall access and circulation between the cities of Oakland and Alameda. The strategies included in this Deficiency Plan attempt to improve the operations of the roadways at either end of the SR 260 tunnel, with a focus on improvements in the City of Oakland. The Deficiency Plan includes both near-term and long-term strategies. The proposed improvements studied by Caltrans as part of the Project Study Report (PSR) and Project Report (PR) process for improving the operation of the Broadway/Jackson interchange mirror several of the recommended strategies included in the Deficiency Plan. The proposed improvements for the Broadway/Jackson interchange therefore implement the Deficiency Plan. As noted on DEIR p. IV.B-17 (under Planned Roadway Improvements), the planning process for the interchange improvements are complete, but insufficient funding is available at this time to fully implement the recommendations of the PSR and the PR.

G-8 The first paragraph under *Broadway/Jackson Interchange at I-880* on DEIR p. IV.B-16 is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> **"Considerable efforts have also been made to improve operations at the Broadway / Jackson interchange at I-880. Phase I improvements would involve modifying the intersection at Broadway/5th Street and modifying the ramps at Jackson Street. The preliminary studies and environmental process for Phase I**

improvements are complete, and both Project Study Report (PSR) and Project Report (PR) have been completed by Caltrans ~~the environmental process is still underway~~. Partial funding is available for these improvements, and the project is listed in the current official 2004 State Transportation Improvement Program (STIP). Additional funding is needed to accomplish all of the improvements necessary. Phase II improvements would improve access to the Posey Tube from I-880 and I-980. This phase is being funded by the Alameda County Transportation Improvement Agency and is being managed by the City of Alameda. Funding is not available for the design and construction of Phase II at this time."

G-9 The project impact at the Atlantic Avenue / Webster Street intersection would not occur until buildout of the project. Conditions of approval for the project will require that the project's fair share contribution to the intersection improvements (as described in the DEIR, and in the Response to Comment G-10, below) be provided prior to issuance of the building permit for full development (buildout) of the proposed project analyzed in the DEIR.

G-10 The text for Mitigation Measure B.2a in Table II-1 (Chapter II, Summary) is incorrect (i.e., does not match the true mitigation language on DEIR p. IV.B-35 in the body of the DEIR. The following full text description of Mitigation Measure B.2a replaces the text in Table II-1, p. II-8:

"B.2a: The project applicant shall pay its fair share contribution to the cost of improvements proposed by the City of Alameda at the signalized intersection of *Atlantic Avenue and Webster Street*. Intersection reconfiguration would consist of adding and restriping lanes to provide the following lanes per approach:

- **Webster Street (from Oakland) – 1 Left-turn lane, 2 Through lanes, and 1 Right-turn lane (non-channelized right turn)**
- **Webster Street (to Oakland) – 2 Left-turn lanes, 1 Through lane, and 1 Through/Right-turn lane**
- **Atlantic Avenue (towards Alameda Point) – 1 Left-turn lane, 1 Through lane, and 1 Through/Right-turn lane**
- **Atlantic Avenue (away from Alameda Point) – 2 Left-turn lanes, 2 Through lanes, and 1 Right-turn lane**

"This mitigation measure was identified by the City of Alameda as the required improvement to accommodate redevelopment of the former Naval Air Station. The project would contribute to the implementation of this mitigation measure through payment of a fair share cost of the improvement (to be determined). During the AM and PM peak hours, the project's contribution to the estimated

growth in traffic between the existing and cumulative traffic volumes (including project traffic). would be 5 and 6 percent, respectively. The project applicant would pay this fair share amount to the City of Alameda, which would then be responsible for the implementation of this improvement."

In addition, the text for Mitigation Measure B.3a in Table II-1 (Chapter II, Summary) is incorrect (i.e., does not match the true mitigation language on DEIR p. IV.B-47 in the body of the DEIR. The following full text description of Mitigation Measure B.3a replaces the text in Table II-1, p. II-9:

"B.3a: Implement Mitigation Measure B.2a (contribute fair-share contribution to intersection improvements proposed by the City of Alameda)."

G-11 LOS output sheets for all study intersections under all analysis scenarios are provided in the appendix to the technical resource document (*Oak to Ninth Project Final Traffic Study*, August 26, 2005) on-file at the City of Oakland office. Under separate cover, the City of Oakland will transmit to the City of Alameda a plot of the distribution of project trips to and from the City of Alameda, based on the Alameda County CMA model.

COMMENT LETTER H

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October 24, 2005

Ms. Margaret Stanzione
City of Oakland Community and Economic Development Agency
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250 Frank H. Ogawa Plaza, Suite 3330
Oakland, CA 94612

SUBJECT: Comments on the Draft Environmental Impact Report (DEIR) for the Oak to 9th Mixed Use Development Project

Dear Ms. Stanzione:

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Oak to 9th Mixed Use Development Project in the City of Oakland. The project site, approximately 62 acres of waterfront property, is bounded by Embarcadero Road, the Oakland Estuary, Fallen Street, and 10th Avenue. The proposed project includes up to 3,100 residential units, 200,000 square feet of ground-floor commercial space, 3,500 structured parking spaces, approximately 27 acres of public open space, two renovated marinas, and a wetlands restoration area. The project is proposed to be constructed in phases over approximately eleven years. The site is currently occupied by combination of commercial, warehouse and light industrial services. The existing buildings on the site will be demolished with the exception of a portion of the Ninth Avenue Terminal shed building, Estuary Park and the Jack London Aquatic Center. The General Plan land use designation is the Estuary Policy Plan's Planned Waterfront District. The construction of the proposed project will require consideration of amendments to the City of Oakland Estuary Policy Plan, a rezoning of the property, approval of a subdivision map, design review approval, a development agreement, and possibly other approvals/actions from the City and other appropriate agencies.

The ACCMA respectfully submits the following comments. Where possible, DEIR page numbers are referenced:

- Mitigation Measures- General: Signal Optimization is proposed as the major mitigation measure for almost all of the impacted intersections. Supporting documentation related to traffic analysis showing how the proposed signal optimization improves the performance of the intersections should be included in the final EIR. H-1

COMMENT LETTER H

- Mitigation Measures: For each proposed mitigation measure, the report states that since the suggested improvements would be outside the City of Oakland's jurisdiction and would require Caltrans or City of Alameda approvals, the improvements may not be feasible and hence the impact would remain significant and unavoidable. In this regard, given the overall size and of the project and its impact on the local and regional roadway network, it is requested that the City collaborate with Caltrans and City of Alameda identifying appropriate mitigation measures and a plan for implementation. H-2

- Traffic Impact on CMP Roadways: Since the intersection analysis shows significant impact on Atlantic and Webster Street intersection in Alameda in both mid term and long term scenarios, traffic impact analysis on the CMP roadways of Webster Street between Atlantic and tubes, Constitution Way between Atlantic and Posey Tube, Posey Tube and Webster Tube in Alameda should be included in the final EIR document. H-3

- Page IV B.21: The report states that no formal Travel Demand Management (TDM) program has been adopted for this project. Given the large-scale nature of the project and type of residential units proposed (condos, townhomes and lofts), this project could be a good candidate for development and implementation of a TDM program. Further, item B.9 of Table II-1 states that this project would contribute to the traffic condition on regional and local roadways by 2025, which would be significant and unavoidable, as there is no direct mitigation measure feasible. In this context, an effective TDM program with better connectivity to BART and other transit facilities would help reduce new trips generated from the project and in turn reduce the impact on the regional and local roadways. We encourage you to develop a TDM program and identify funding and other operational arrangements. H-4

- Page IV.B.53 – Transit Impacts – The DEIR states that as a result of the current negotiations with AC Transit, if AC Transit were to extend service to this site, transit facilities such as bus stops/turn outs would have to be provided. Details on what will be provided and where it will be done on the site along with funding arrangements for providing those facilities should be included in the report. H-5

- Given the limited parking available at Lake Merritt BART station, better connection from the site to the BART station through AC Transit, shuttle service, bike etc. should be considered. H-6

- There is a shuttle service proposed in the report. The timeline as to when it will begin to operate and in the long run who will be responsible for the operations and maintenance of the shuttle should be included in the report. H-7

COMMENT LETTER H

- SR 260 (Posey Tube) Deficiency Plan prepared by the City of Oakland and approved by the CMA Board in 2001 should be referenced along with other studies and resulting planned and programmed transportation improvements. H-8

Thank you for the opportunity to comment on the Draft Environmental Impact Report. Please do not hesitate to contact me at 510/836-2560 ext. 24 if you require additional information.

Sincerely,

Saravana Suthanthira
Associate Transportation Planner

cc: file: CMP - Environmental Review Opinions - Responses - 2005

Letter H – Alameda County Congestion Management Agency

H-1 See Master Response E regarding optimization of signal timing, and its appropriate use as a mitigation measure.

H-2 See Master Response C for a description of significant and unavoidable traffic impacts.

H-3 The CMP analysis relied on the roadway segments defined in the *2004 CMP LOS Monitoring Report*, which did not include Webster Street, Constitution Way, the Posey Tube, or the Webster Tube. However, an analysis was prepared of these additional roadways, using the V/C ratio analysis methodology required by the ACCMA, and it was determined that the additional traffic from the project would not result in a significant impact along these roadway segments.

H-4 See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures.

H-5 See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures.

H-6 See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures.`

H-7 See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures.

H-8 See Response to Comment G-7 regarding the SR 260 Deficiency Plan.

STATE OF CALIFORNIA ARNOLD SCHWARZENEGGER, *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

PAUL D. THAYER, *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
Relay Service From TDD Phone **1-800-735-2929**
from Voice Phone **1-800-735-2922**

Contact Phone: **916-574-1227**
Contact FAX: **916-574-1955**

October 24, 2005

File Ref: G01-04

Nadell Gayou
The Resources Agency
901 P Street
Sacramento, CA 95814

Margaret Stanzione
Community & Economic Development Agency
City of Oakland
250 Frank Ogawa Plaza, Suite 3315
Oakland, CA 94612

RE: Comments on Draft Environmental Impact Report, Oak to Ninth Avenue Project - SCH #2004062013

Dear Ms Gayou and Ms. Stanzione:

The staff of the State Lands Commission (SLC) has reviewed the Draft Environmental Impact Report (DEIR) [SCH #2004062013] for the Oak to Ninth Avenue Project (Project) and submits the following comments for your consideration.

Background

When California became a state on September 9, 1850, the State acquired nearly 4 million acres of land underlying the State's navigable and tidal waterways. Known as "sovereign lands," these lands include tide and submerged lands adjacent to the entire coast, the offshore islands, and the inland bays and estuaries of the State from the ordinary high water mark to three nautical miles offshore. The SLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable rivers, sloughs, lakes etc. The SLC has certain residual and review authority for sovereign lands legislatively granted in trust to local jurisdictions (Public Resources Code § 6301 and § 6306). As mentioned below, in the case of the Oak to Ninth Avenue project, the SLC has statutory authority in Chapter 542, Statutes of 2004 to consider and to approve any proposed land exchange related to this Project. I-1

All sovereign lands, granted or ungranted, as well as navigable rivers, sloughs, etc., are impressed with the common law public trust. Restrictions on the use of tide and submerged lands apply in order for the State to maintain the lands for commerce, navigation, fisheries, water-oriented recreation, and preservation in their natural condition, or for other recognized public trust uses.

The California Legislature has granted, in trust to the city of Oakland, the State's interest in filled and unfilled sovereign lands involving portions of the project area pursuant to Chapter 654, Statutes of 1911 (as amended; minerals not reserved) and Chapter 15, Statutes of 1960 (as amended; minerals reserved). Any proposed uses involving granted tidelands must be consistent with the public trust generally and with the applicable granting statute(s). Acceptable trust uses include, but are not limited to, uses that promote water-oriented or water dependent recreation and commerce, navigation, fisheries, public access, and the preservation of the land in its natural condition. I-1 (CONT.)

Specific Comments

At pages III-28 and IV.A-33, the DEIR provides a cursory discussion of the land exchange and sale related to this development. As mentioned above, the legislation authorizing an exchange and sale is found at Chapter 542, Statutes of 2004 (the "Exchange Act"). The Exchange Act authorizes the State Lands Commission and the Port of Oakland to enter into an exchange provided that all required findings are made as set forth in sections 4 and 7 of the Act. Key to this is the acquisition of a parcel to effectuate an exchange according to a list of areas by priority. The four priority areas are: (1) a parcel within the estuary plan area; (2) a parcel contiguous to the estuary plan area; (3) a parcel within or adjacent to the Middle Harbor; and (4) a parcel within or adjacent to the Outer Harbor. I-2

The Exchange Act also recognizes the importance of keeping land along the shoreline of the Oak to 9th site within public trust ownership, to be held by the city of Oakland and used for purposes set forth in the Act. The land to be publicly-owned is depicted in a diagram in section 12 of the Exchange Act, and constitutes the minimum of lands to be retained in the public trust. The SLC, when it considers an exchange following any city of Oakland approvals, may determine to increase the dimensions of these retained shoreline lands. As provided in the Exchange Act at section 4 (j)(1), any decision to increase the geographic configuration of these final public trust lands shall take into account the determinations of the Port and City when those entities considered similar issues in connection with entitlements for the Project.

Given the significance of the configuration and depth of public areas along the shoreline of the Project, we recommend that the DEIR be amended to include a more expansive discussion of public needs for certain uses along the shoreline and within parks. As set forth in the Exchange Act, these uses are for walkways, parks, marinas and boat launching, habitat areas, and visitor-serving commercial facilities. A more I-3

complete discussion will better inform the Port, Council, and Planning Commission as they consider the need for and character of public improvements.

We also note that the DEIR states that the standard being used for the size of public parks within the Oak to 9th property is for a "local-serving" park within the city of Oakland. This standard in the General Plan is stated to be 4 acres per 1,000 residents. (Page IV.L-7) Properly developed, the open spaces and facilities serving visitors at Oak to 9th should be regional amenities. Over time, and with the completion of the network of pathways and parks contemplated in the Estuary Policy Plan, this will be an amenity of statewide significance. For these reasons, we ask that standards above the local-serving park levels in the General Plan be adopted. I-4

At pages IV.L-1 through 4, the DEIR outlines the current level of police and fire service within the City of Oakland. This discussion notes that the Port of Oakland currently has security officers who monitor the Oak to 9th property, but that this Port activity would stop with developer acquisition of land in this area. We want to note that this should not lead to expense to the Port of Oakland or a demand upon public trust monies from Port operations to pay for municipal police and fire services. The expenditure of public trust monies for general municipal functions such as police and fire is restricted. (See Mallon v. City of Long Beach (1955) 44 C.2d 199.) I-5

If you have any questions or concerns, please do not hesitate to contact Ms. Grace Kato at katog@slc.ca.gov, at the above address, or by telephone at (916) 574-1227. Thank you.

Sincerely,

Dwight E. Sanders

Dwight E. Sanders, Chief
Division of Environmental Planning
and Management

Letter I – State Lands Commission

I-1 By Charter of the City of Oakland, the Port is the Department of the City with exclusive management and control over tidelands granted to or acquired by the City. The Board of Port Commissioners, in whom the Charter vests control of the Port Department, has the complete and exclusive power, and the duty, on behalf of the City, to manage the Port of Oakland, including all the waterfront properties and lands adjacent thereto granted to Oakland in trust by the State for promotion and accommodation of commerce and navigation.[2] Properties controlled by the Port include the project site.

I-2 The comment discusses the location of an "exchange parcel" and the State Lands Commission's (SLC) ultimate approval of the configuration of the "final trust lands," which largely relates to a separate property transaction between the Port and the SLC. The comment does not discuss any potential environmental impacts of the project.

I-3 The comment concerns the depth and scope of the discussion in the DEIR about public needs and desired uses along the shoreline. While such a discussion may further inform decision makers, it does not concern the environmental consequences of the project. Notably the comment does not fault the existing discussion in the DEIR nor disclose any concrete omission in the DEIR.

I-4 The comment suggests "standards above the local serving park levels in the General Plan be established." The comment is directed to a statement in the DEIR about the standard for park or open space acreage required by the City General Plan (OSCAR Element) for approval of a development containing a particular density of residents. The basis for this comment is the State Lands Commission's assumption that the project parks would be regional parks not local parks, and thus will serve a larger populace.

The comment fails to note any inadequacy in the environmental document itself nor the analysis provided within the project environmental impact analysis. Nonetheless, the comment is noted. The DEIR recognizes on p. IV.L-6 that "the series of connected parks and open space proposed by the project would be region-serving as well as local-serving, given its proximity to nearby residential and mixed use neighborhoods near downtown and Lake Merritt." Clearly, the new facilities would also meet OSCAR's definition of region-serving parks: 25 acres or larger, citywide service area, transit-served; diverse features and functional areas

The comment asks that the City consider adopting park standards above the local-serving park level in the General Plan (since no region-serving standard currently exists). The City could entertain such an amendment to the General Plan park standards, however, this is not currently being considered in combination with the proposed project.

[2] Charter § 706(3). Some lands granted to the City of Oakland by the Legislature are not part of the Port of Oakland and are under the complete control of the City Council.

I-5 The comment specifically states the Port should not pay for police and fire protection for the project. Nowhere within the analysis in the DEIR is it stated or suggested that the Port would pay for these services, nor is this payment suggested by the comment. Rather the comment raises an issue relating to type of property owned by the Port and the character of and protections for the revenue generated by that property. While the Port agrees with the statements made by the State Lands Commission they have no bearing on the adequacy of the environmental analysis of the project.

It is anticipated that the City of Oakland Police Department and Fire Department would provide services to the project site, including all private development and public areas (parks), and private police/security services would be provided to augment those services as necessary or desired by the project sponsor or project tenants. Impact L.1 (Police Service) and Impact L.2 (Fire and Emergency Service) are discussed on DEIR pp. IV.L-9 through IV.L-13 and would be less-than-significant impacts. The comment accurately states that existing Port of Oakland security monitoring of the project site would not continue after the project sponsor acquires the project site from the Port (DEIR p. IV.L-2).

COMMENT LETTER J

CAPITOL CORRIDOR

October 24, 2005

RECEIVED
OCT 28 2005
City of Oakland
Planning & Zoning Division

Margaret Stanzione
City of Oakland
Community and Economic Development Agency - Planning
250 Frank Ogawa Plaza, 4th Floor
Oakland, CA 94612

Dear Ms. Stanzione:

On behalf of the Capitol Corridor Joint Powers Authority (CCJPA), I am submitting comments on the Draft Environmental Impact Report (EIR) for the Oak to Ninth Avenue Project (State Clearinghouse No. 2004082013).

- Page IV.B-11: Under "Rail Service (BART and Amtrak)", the description of the Capitol Corridor service is not correct. The service area for the trains is Auburn-Sacramento-Oakland-San Jose. Currently 24 weekday Capitol Corridor trains operate between Sacramento and Oakland Jack London Station (18 trains on weekends) with 8 of these weekday trains continuing from Oakland Jack London Square Station to/from San Jose (12 trains on weekends) along the Union Pacific Railroad (UPRR) tracks in the project area. J-1

- Page IV.B-53: The "Transit Impacts" section needs to consider the Capitol Corridor train service, as a means to mitigate traffic and as an existing public transport service that will be impacted by the development of the project. As mentioned above, 8 weekday Capitol Corridor trains (and 12 weekend trains) operate along the tracks adjacent to the project site. Also along the tracks within the project area, on weekends selected San Joaquin trains operate to the City of Oakland's new Oakland Coliseum Intercity Train Station plus Amtrak operates 2 long distance trains between Seattle and Los Angeles and UPRR is increasing its freight trains along this route due to growth at the Port of Oakland. J-2

  By this time next year, service levels will increase to at least 14 daily trains between the hours of 6 a.m. and 10 p.m. According to the CCJPA's service expansion plan, over the next five to seven years, this service level will be further increased to 32 daily trains within the same operating window, which equates to a train every 30 minutes. This is a significant number of trains that will be operating on tracks near the project site. This Capitol Corridor Rail Program was initiated by the State following the enactment of Propositions 108 and 116 in 1990 and the Board of Directors of the CCJPA adopted this service expansion plan in April 2002 and reaffirmed the plan in April 2005. J-3

  The Capitol Corridor service is now the 3rd busiest route in Amtrak's national system, carrying over 1.25 million riders a year with projections of up to 2.5 million under the CCJPA Board-adopted service expansion plan. The CCJPA is concerned that the draft EIR has not accounted for the current Capitol Corridor trains as well as the CCJPA's future plans for the service. As a regional passenger rail service linking the Sacramento and Bay Area metropolitan areas, the Capitol Corridor can provide benefits to those people living and working in the future project site; yet, the project plans must ensure that the existing service and future plans are incorporated into the EIR. J-4

CAPITOL CORRIDOR JOINT POWERS AUTHORITY
300 LAKESIDE DRIVE, 14T FL. EAST, 94612
510.464.6995 (V) 510.464.6901 (F)

WWW.CAPITOLCORRIDOR.ORG

COMMENT LETTER J

- Page IV.B-55: In the "Pedestrian Safety Impacts" section, the draft EIR is silent on the impacts to pedestrian safety with respect to having this project development so close to active railroad tracks. Safety to our passengers and community is the CCJPA's top priority. The draft EIR needs to adequately recognize the interface between the project plans and the passenger (and freight) trains operating on the tracks adjacent to the project site and determine measures that will mitigate the impacts to pedestrians accessing the project site. J-5

- Page IV.B-60: The draft EIR does not provide a concise description in the "Railroad Operations" section. The level of passenger train service in the project area has not been correctly identified in the draft EIR. While the CCJPA cannot speak on behalf of our host railroad, Union Pacific Railroad (UPRR), on more than one occasion the UPRR has indicated their plans to increase rail freight traffic along the tracks in the vicinity. Delays to vehicles waiting at the 5th Avenue railroad crossing will only increase with the expanded levels of freight and passenger rail service along the tracks. J-6

  In addition, the CCJPA has been involved in meeting with UPRR and Caltrans highway construction staff regarding the seismic construction project for I-880 and the 5th Avenue ramp system. This Caltrans project is an extensive which involves the reconfiguration (and associated disruptions) to one of the project's access road (5th Avenue) as well as the railroad tracks. J-7

- Page IV.B-69: The CCJPA is concerned about the level of construction truck trips that will be generated by the project. The draft EIR identifies a peak of 300 truck trips per day in 2011 generated by the project. Any of these trucks using 5th Avenue and/or Oak Street will be impacted and delayed by passenger and freight trains at the associated railroad/street crossings. The draft EIR needs to provide a concise plan on how these trucks will access the site and needs to consider the expanded level of passenger train service along the tracks in the project area. J-8

The draft EIR lacks a comprehensive understanding of the current and planned operation of Capitol Corridor passenger trains on railroad tracks adjacent to the project site. That being said, as the managing agency for the Capitol Corridor, the CCJPA is available to work with the City of Oakland to ensure that the development of this project is closely coordinated with the several railroad services and projects in the vicinity. J-9

Thank you for the opportunity to provide comments on the draft EIR for the project and we look forward to working with the City.

Sincerely,

Eugene K. Skoropowski
Managing Director

cc: CCJPA Board of Directors
Jerry Wilmoth, Union Pacific Railroad
Bill Bronte, Caltrans Division of Rail
Stan Hall, Amtrak (Oakland Offices)

Letter J – Capitol Corridor

J-1 On p. IV.B-11 of the DEIR, the second paragraph under *Rail Service (BART and Amtrak)* is revised to read as follows (additions shown as underlined; deletions as ~~strikeout~~):

> **"Amtrak provides passenger rail service at the Jack London Square station. This station is about 0.75 mile west of the project site. Several lines use this station, including the Capital Corridor (~~to Reno, Nevada, via~~ serving Auburn-Sacramento-Oakland-San Jose), the San Joaquin (to Bakersfield via Fresno), and the Coast Starlight (between Seattle and Los Angeles). Currently 24 weekday Capitol Corridor trains operate between Sacramento and Oakland Jack London Square (18 trains on weekends), with 8 of these weekday trains continuing from Oakland Jack London Square Station to/from San Jose (12 trains on the weekends)."**

J-2 The DEIR evaluated the impact of the project on the predominant transit modes in the City of Oakland, which include BART and AC Transit. According to the 2000 Census, over 95 percent of all transit users traveling to and from work rode either BART or AC Transit. Rail service, including the Capital Corridor, represented two percent of the all transit work trips and less than one percent of all work trips.

The DEIR focused solely on transit capacity and determined whether the project would add ridership to transit systems above their current or projected capacity. Additional analysis, using mode choice data from the US Census, indicates that about 15 to 20 directional peak-hour trips from the project might use the Capitol Corridor. Under current train operations, the project could add 3 or 4 people to each peak-hour train. As the number of trains increase, the number of people added to each train could decrease.

The effect of trains limiting access to/from the project site (e.g., emergency vehicles) was addressed in the Public Services section of the DEIR (i.e., on DEIR p. IV.L-10).

J-3 The following text is added after the second full paragraph on page IV.B-18, above Bicycle/Pedestrian Improvements

> **"The Capitol Corridor Joint Powers Authority (CCJPA), which operates the Capitol Corridor service along the Union Pacific Railroad (UPRR), currently operates 8 trains along the rail line adjacent to the project site. According to the CCJPA, by 2006, this number of trains is anticipated to increase to 14 trains per day, and is expected to increase further, to 32 trains per day, within the next 5 to 7 years; with these service expansions, the yearly ridership is anticipated to increase from 1.25 million riders to 2.5 million riders."**

J-4 See Responses to Comments J-1 and J-3, above.

J-5 See Master Response F regarding pedestrian activity at nearby rail crossings.

J-6 See Responses to Comments J-1 and J-3, above. In addition, the possibility of an increase in freight rail traffic is acknowledged on DEIR p. IV.B-60.

J-7 See Responses to Comment D-14, regarding coordination with Caltrans about the I-880 Seismic Retrofit project.

J-8 The DEIR (pp. IV.B-65 to IV.B-70) contains an extensive discussion of possible construction traffic impacts and requires that the project applicant prepare a construction traffic management plan (CTMP), which would be reviewed by the City of Oakland. One element of the CTMP is the identification of access routes to and from the project site for construction traffic, including trucks.

J-9 See Responses to Comments J-1 through J-6, above.

COMMENT LETTER K

ALAMEDA COUNTY
PARKS, RECREATION AND HISTORICAL COMMISSION

224 W. Winton Avenue, Room 111, Hayward, CA 94544 (510) 670-5400 FAX (510) 670-6529

October 24, 2005

RECEIVED
OCT 28 2005
City of Oakland
Planning & Zoning Division

Margaret Stanzione, Project Planner
City of Oakland
250 Frank Ogawa Plaza, Suite 3315
Oakland, CA 94612

Re: Comments to the Draft Environmental Impact Report for the project known as the Oak to Ninth Avenue Project, State Clearinghouse No. 2004062013

Dear Ms. Stanzione,

Thank you for the opportunity to respond to the Draft Environmental Impact Report (DEIR) for the project known as the Oak to Ninth Avenue Project located along the Oakland Estuary and the Embarcadero, east of Jack London Square and south of Interstate 880. At our October 6, 2005 meeting, the Alameda County Parks, Recreation and Historical Commission reviewed and discussed the project and proposed mitigation measures identified in the Draft EIR and have the following comments.

The DEIR identifies significant potential project impacts and areas of controversy, including: consistency with the Estuary Policy Plan and the Public Trust, appropriateness of scale and density of development, wetland habitat impacts, physical access to the development and connections to surrounding areas, visual access to recreational and open space, effected views to the estuary, preservation of a large municipally owned historic building (the Ninth Avenue Terminal), as well as increased demand upon public services, transit and traffic, and neighborhood air quality. As such, we strongly believe that the EIR process is not the appropriate mechanism to fully address this type or scale of project and that the City of Oakland not certify this DEIR or approve any alternative to this project. Instead, we advocate that the City of Oakland prepare a Specific Plan that will focus on the systematic implementation of the general plan for this redevelopment area. Under Section 65450 of the California Government Code, a Specific Plan and accompanying EIR must fully address major components of land use and identify programs that will adhere to the Plan's specific regulations and policies. K-1

With regard to the historic Ninth Avenue Terminal, we concur with the Report's findings that the 1930 structure exhibits a Beaux Arts derived architecture style as applied to an otherwise utilitarian industrial municipal building. It is a rare and intact prewar structure utilized for break-bulk cargo and as stated in the report, is also an example of the early 20th century era City Beautiful Movement - which promoted the concept of embellishing utilitarian structures to convey an enhanced appearance of the urban fabric. The terminal is a key early Port of Oakland facility, constructed during the Port's major expansion period of the 1920's and 30's and it was paid for with voter approved bond funds. As such it is significant to the maritime history of Alameda County, the city of Oakland, and the Bay Area. The terminal is also an early example of an inter-modal complex, where water, rail and land transportation capability can be found in one facility. Historically the existence of this tri-part proximity has been one of Alameda County's most significant advantages with respect to its prominence in California as a center for commerce and trade. Therefore, the continued use of the terminal creates a tangible link to this important heritage. K-2

We are aware that the City of Oakland's Landmarks Preservation Advisory Board reviewed and unanimously adopted a resolution recommending landmark designation of this unique waterfront landmark, in March of 2004. We agree that further study is needed to see how the terminal's preservation and adaptive reuse within the boundaries of the Oak to Ninth project would foster the public link with the city and county's distinctive waterfront, past and future. K-3

Our Commission is the public body responsible for historic oversight throughout Alameda County. Our Commission members are appointed by the County Supervisors and are selected for expertise in preservation-related issues in their respective communities. As such, we would like to respectfully request that the PRHC receive all future communications and notifications of future meetings regarding the Oak to Ninth Avenue Project. We were disappointed not to have learned about this earlier in the process. K-4

Please feel free to call our staff, Lisa Asche at (510) 670-6515 if you have questions or would like to contact the Commission.

Sincerely,

Lisa Asche /for

Abe Friedman, Chair
Alameda County Parks, Recreation and Historical Commission

Letter K – Alameda County Parks, Recreation and Historical Commission

K-1 See Master Response A.

K-2 The comment discusses the historical and architectural significance of the Ninth Avenue Terminal building that is consistent with the discussion and conclusions in the DEIR. The comment also points out the contribution of the Terminal's continued use. Comment is noted.

K-3 The comment states that further study is needed regarding preservation and reuse of the Terminal. The range of alternatives presented and discussed in Chapter V of the DEIR includes alternatives that retain all or part of the Ninth Avenue Terminal: Alternative 3 (Enhanced Open Space/Partial Ninth Avenue Terminal Preservation and Adaptive Reuse(and a Sub-Alternative (Full Ninth Avenue Terminal Preservation and Adaptive Reuse). The information provided in the DEIR, which as discussed in Master Response B includes a number of reuse scenarios outlined by the community, complies with CEQA mandates for examining alternative preservation alternatives of the historic resource. The City decisionmakers will consider this information before acting on the project.

K-4 The Alameda County Parks, Recreation and Historical Commission, the commenting agency, requests to be added to the City's project mailing list for all project notices. The City has added several County staff to the project mailing list for the project. Comment is noted.

COMMENT LETTER L

State of California – The Resources Agency
ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

October 28, 2005

RECEIVED
NOV 4 2005
City of Oakland
Planning & Zoning Division

RECEIVED
OCT 31 2005
STATE CLEARING HOUSE

Clear 10.24.05 Late

Ms. Margaret Stanzione
City of Oakland
250 Frank H. Ogawa Plaza, Suite 300
Oakland, CA 94612

Dear Ms. Stanzione:

Oakland Harbor Partners
Oak to 9th Street Mixed Use Development Project
SCH #2004062013

The Department of Fish and Game (DFG) has reviewed the document for the subject project. We do not have specific comments regarding the proposed project and its effects on biological resources. Please be advised this project may result in changes to fish and wildlife resources as described in the California Code of Regulations, Title 14, Section 753.5(d)(1)(A)-(G)[1]. Therefore, a de minimis determination is not appropriate, and an environmental filing fee as required under Fish and Game Code Section 711.4(d) should be paid to the Alameda County Clerk on or before filing of the Notice of Determination for this project. L-1

If you have any questions, please contact Mr. John Krause, Associate Wildlife Biologist, at (415) 454-8050; or Mr. Scott Wilson, Habitat Conservation Supervisor, at (707) 944-5584.

Sincerely,

For Robert W. Floerke
Regional Manager
Central Coast Region

cc: State Clearinghouse

[1] http://ccr.oal.ca.gov/. Find California Code of Regulations, Title 14 Natural Resources, Division 1, Section 753

Letter L – California Department of Fish and Game

L-1 Comment is noted. The project sponsor shall remit all appropriate required environmental filing fees as required for the project.

COMMENT LETTER M

STATE OF CALIFORNIA

ARNOLD SCHWARZENEGGER, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

December 22, 2005

Margaret Stanzione
City of Oakland Community & Economic Development Department
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

Raul Godinez II
Director of Public Works
City of Oakland Public Works Agency
250 Frank H. Ogawa Plaza, Suite 4314
Oakland, CA 94612

SUBJECT: Railroad Safety Issues related to the Oak to Ninth Project

Dear Ms. Stanzione and Mr. Godinez:

As the State Agency with regulatory oversight of rail safety within California, we have major concerns related to the proposed Oak to Ninth Mixed Use Development. Staff of the Commission's Consumer Protection and Safety Division – Rail Crossings Engineering Section (RCES) recently reviewed the draft Environmental Impact Report (EIR) for the proposed project, identified by the State Clearinghouse as SCH#2004062013. Please note that our concerns regarding safety around the railroad tracks were communicated in letters dated September 20, 2005 and October 18, 2005 (see attached). We are aware that the 30-day comment period has expired, however, we believe that to ensure the safety of the motoring public it is necessary for the City to consider the issues below. M-1

Of primary concern to us are the safety hazards inherent in at-grade highway-rail crossings (crossings) in the vicinity of this project. The EIR mentions the proximity of the Union Pacific Railroad's (UPRR) track to the Oak to Ninth project, but only as it relates to traffic congestion, delay of emergency response vehicles, and air quality. The EIR fails to recognize that at-grade highway-rail crossings present safety hazards due to the potential for collisions of trains with motorists, bicyclists, and pedestrians. These hazards can be significantly increased by development near the tracks, particularly development that leads to roadway congestion near the crossings or which brings bicyclists and pedestrians into the area around the tracks. **The issue of safety around the tracks must be addressed as part of this development.**

Current train traffic along the UPRR mainline in this area is approximately 30 trains per day, with Amtrak trains traveling up to 60 MPH. A list of the particular crossings that will be directly affected by this project is included in Appendix A. We recommend that the City hold a diagnostic review of the safety of these crossings with UPRR, CPUC staff, and other interested parties.

We also recommend that the City work with our staff and UPRR to conduct a diagnostic review of the rail corridor and establish a long-range plan for rail safety as Oakland continues to develop between the railroad tracks and the waterfront.

The EIR indicates that there will be a significant increase in traffic volumes and congestion at intersections in the vicinity of the highway-rail crossings. The proposed mitigation measures are to widen roadways, signalize intersections, and optimize timing between the signals. Our concern is that even with these mitigations, significant queuing from the intersections is still expected and this is very likely to lead to motorists stopping on the tracks. It is in the clear interest of safety to avoid such a situation, and where it cannot be avoided, to mitigate the possibility for train-vehicle collisions through improvements directly related to safety at the railroad crossing.

Our previous comments stated: "Safety factors to consider include, but are not limited to, the planning for grade separations for major thoroughfares, improvements to existing at-grade highway-rail crossings due to increase in traffic volumes and appropriate fencing to limit the access of trespassers onto the railroad right-of-way." M-1 (CONT.)

The following topics should be considered in an analysis of railroad crossing safety in the area. Discussion and recommendations related to these topics are included below.

1. Close existing at-grade crossings
2. Grade separate existing at-grade crossings
3. Improve safety of existing at-grade crossings
4. Construct fencing along the railroad right-of-way
5. Improve pedestrian and bicyclist safety at crossings
6. Fully consider the noise impacts
7. Follow-up appropriately on abandoned crossings

1. Closure

The most economical and sometimes easiest method of eliminating safety concerns at crossings is to remove either the roadway or track at unnecessary crossings. The City and Caltrans should consider the elimination of at-grade crossings where possible, particularly at 5th Street, the I-880 off-ramp at 6th Street at Embarcadero, and the I-880 on-ramp at 10th Street at Embarcadero. The City should talk with Caltrans and UPRR regarding the feasibility of removing the spur track running adjacent to Embarcadero, and the number of other tracks connected to it. M-2

2. Grade Separations

The proposed major thoroughfares of Oak Avenue and 5th Avenue should be considered for grade separation. Separation of grade typically requires the construction of a roadway overpass or underpass to physically separate traffic on the roadway from trains on the tracks. Grade separations eliminate the potential for collision between trains and motorists at a crossing. M-3

The current geometric design of Oak Avenue is conducive to the construction of a grade separation structure. This primary route to the proposed development should be considered for grade separation.

At the 5th Street crossing, the EIR notes that Caltrans is planning the reconstruction and widening of the Interstate 880 elevated structure. Such reconstruction, which may include relocation of the

overhead roadway supports, could allow the opportunity for 5th Avenue to also be reconstructed at a separated grade beneath the tracks.

We strongly recommend that the City establish a transportation impact fee program that is specifically allocated to highway-rail crossing safety improvements, and that the program include this project. Such an impact fee might be best used to assist in funding the construction of grade-separated crossings, including Oak Avenue and 5th Avenue.

The following document provides a basis for analyzing the need for grade separation of highway-rail crossings: *Guidance on Traffic Control Devices at Highway-Rail Grade Crossings*, Federal Highway Administration / US DOT Highway-Rail Grade Crossing Technical Working Group, November 2002. Page 27 and 33 of the PDF discuss particular criteria that should be considered when assessing the need for grade separation. M-3 (CONT.)

It may be possible that the developer, City, and State could together fund the cost of a grade separation project. The CPUC administers the Grade Separation Program (Section 190) which may provide up to $20 million in funding for projects that will grade separate existing at-grade crossings. The funds are allocated based on a statewide list of crossings that is prioritized by taking into account a number of factors related to crossing safety, including Average Daily Traffic (ADT), average daily train count, accident history, and various other factors. Please contact our office for further information on the Grade Separation Program.

3. Improvements to Existing At-Grade Highway-Rail Crossings

The Transportation, Circulation, and Parking section of the EIR (Section IV.B) should have included analysis of the safety issues directly associated with the presence of railroad tracks and at-grade highway-rail crossings. Closure and grade separation must be considered, as discussed above. However, where at-grade crossings must remain, the City should ensure that the roadways and crossings are configured as safely as possible.

This project is expected to be a source and destination for significant vehicle traffic, and the Level-of-Service analysis in Table IV.B-8 shows that the Embarcadero & 5th Avenue intersection is expected to be operating at LOS D after widening of Embarcadero, meaning that queues may develop. Any queues along 5th Avenue are likely to build up onto the tracks and therefore will require that the traffic signals and crossing warning devices be well coordinated. Similarly, at other crossings in the area which may remain, such as the I-880 on- and off-ramps along Embarcadero, there may be a need to preempt the traffic signals at adjacent intersections. M-4

It should be noted that the LOS analysis is predicated on the assumption that Embarcadero can be significantly widened as a mitigation measure. Such widening may not be possible without the elimination of the railroad track running parallel to the roadway.

Any at-grade crossings where vehicular queuing can be expected to build-up from adjacent roadway intersections should have its automatic warning devices interconnected with traffic signals at the intersection. In its most basic form, railroad crossing preemption of intersection traffic signals provides, upon the approach of a train, a green signal to motorists that may be stopped between the intersection and the crossing, or on the crossing itself. This operation allows those vehicles to proceed off of and away from the tracks. It may be necessary to provide "advance warning time,"

meaning that the traffic signal would enter into a special mode of operation prior to activation of the crossing warning devices in order to ensure that there is appropriate time for pedestrian clearance at crosswalks, transfer of right-of-way at the intersection, and queue clearance to clear vehicles from the highway-rail crossing. Providing advance warning time generally requires modification of the train detection circuitry along the track and has a cost that may need to be included in the estimate for traffic signals.

Although we strongly encourage the City to pursue closure or grade separation, in the more immediate future the City should consider the following improvements at the Oak Avenue and 5th Street crossings:

M-4 (CONT.)

- Unmountable medians on approach to crossings to prevent motorists from circumventing the activated automatic gate arms
- Flashing light signals mounted over the roadway or in the median to provide greater visibility
- Parking prohibition in the vicinity of crossings (signage, red curbs)
- Elimination of driveways and intersections in the vicinity of at-grade crossings
- Installation of traffic signals at intersections within 200 feet of a crossings
- Interconnection of highway-rail crossing warning devices with traffic signals
- Advance preemption of traffic signals
- Pre-signal (traffic signal directed toward the crossing approach to stop vehicles before track)
- DO NOT STOP ON TRACKS signs (MUTCD R8-8)
- Flashing light signals may need an upgrade to 12-inch, LED-type signals
- Refurbishment and/or installation of railroad crossing advance warning signs and markings

Due to the expected increases in traffic at all roadways in the area, any crossings that will remain should be upgraded to include, at minimum, automatic gate arms with flashing light signals.

Section III.C of the EIR lists various agencies involved in the approval process for this project. It does not, but should, mention that approval by CPUC staff is required prior to changes in the configuration of at-grade highway-rail crossings.

4. Appropriate Fencing to Limit Access of Trespassers

In recent years, fatalities of railroad trespassers have been the leading cause of railroad-related deaths in the United States. Clearly it is in the interest of public safety that pedestrians be kept off of and away from the railroad right-of-way.

M-5

The proposed development will clearly attract many people into the area around the tracks, due to the construction of residences, business, parks, and recreational paths. This additional development will lead to some people attempting to cross the tracks at unauthorized locations, and may lead to people walking or jogging along the tracks.

In order to mitigate such trespassing problems, fencing between Embarcadero and the tracks should be a requirement **for the full length of the project**. To ensure its effectiveness, the fencing should be difficult to climb and difficult to cut through (vandal resistant). Our staff can provide particular recommendations on types of fencing that have been successful in similar situations.

5. Pedestrian and Bicycle Safety

The Pedestrian Master Plan discussed in Section IV.A of the EIR includes the goal to "Improve pedestrian crossings in areas of high pedestrian activity where safety is an issue." This area, due to the density of development, is likely to see high pedestrian activity, and therefore safety at the highway-rail grade crossings must be addressed.

For pedestrians and bicyclists, the City should consider improvements to the at-grade crossings including the following: M-6

- automatic-gate arms specific to pedestrian warning along the sidewalks
- improved sidewalk surfacing at the crossing
- tactile warning surfaces on every pedestrian approach the the crossing
- swing gates (pull to enter, push to exit) to encourage pedestrians to pause for a moment prior to stepping onto the tracks
- additional pedestrian oriented railroad crossing warning signage
- pedestrian channelization to ensure that pedestrians follow a path that allows sufficient observation of the warning devices. Effective pedestrian channelization must include barriers and fencing to discourage entry onto the railroad right-of-way.

The Bicycle Master Plan discussed in Section IV.A states a goal to "Upgrade the existing path along the Lake Merritt Channel from Lake Merritt to the Bay Trail…" Figure III-7 shows the proposed Shoreline Parks Network which includes two paths, one on each side of the Lake Merritt Channel, both which appear to cross the railroad tracks in order to reach Embarcadero. We strongly recommend that any plans for such a path be designed with grade separated crossings at the tracks.

6. Noise Analysis

The City Planning Commission's report of September 28, 2005 indicates that "New housing and public parks are proposed to be developed in an area where existing noise levels are above what is considered 'normally acceptable.'" It may be necessary to stress that this is not only related to average noise levels, but also short duration, high volume sounds occurring day and night, due in part to proximity of at-grade highway-rail crossings. M-7

Train horns are required to be sounded as trains approach at-grade crossings, and may be sounded at any time to warn somebody who is on the tracks at a crossing or along the right-of-way. The train horn is utilized by locomotive engineers to give warning of the approaching train, and is an important part of providing for safety at railroad crossings. The Federal Railroad Administration (FRA) established rules on the use of locomotive horns at highway-rail grade crossings effective June 24, 2005. Further information can be found on the FRA website (www.fra.dot.gov).

The measured noise levels provided in the noise impact analysis indicate that near the at-grade crossing of 5th Street there are consistently high peak sound levels at all hours of the day and night. It can be assumed that a number of these peak sound readings are directly related to the presence of a railroad crossing at this location, due to the bells on the warning devices and horns on the trains. A written disclosure should be made to potential residents to make them fully aware of this.

7. Abandonment

It is expected that a number of rail crossings will be abandoned as part of the redevelopment of this currently industrial area. The City should ensure that the abandoned track is removed from at least M-8

the sidewalk and roadway to eliminate the potential safety hazards to motorists, bicyclists, and pedestrians. Abandoned crossings can cause a multitude of concerns if left in place due to the potential for broken and rusty rail, and generally rough surfacing. Abandoned crossings left in place may also encourage a general complacency by the public about safety at the tracks.

M-8 (CONT.)

For any crossing that is removed or closed, UPRR is required to submit a Commission Form G, Report of Changes at Highway Grade Crossings and Separations. The City should openly communicate with the railroad to ensure that this report is accurately completed. It may be helpful to reference Appendix A for a list of the affected crossings.

We request that the Planning Commission consider the above concerns when negotiating the terms of project approval. I can be contacted with any questions or concerns on this topic at (415)703-1208.

Sincerely,

K Schumacher

Kevin Schumacher

Utilities Engineer
Rail Crossings Engineering Section
California Public Utilities Commission

cc: Patrick Kerr, UPRR

APPENDIX A:
At-grade Highway-Rail Crossings Significantly Affected by the Oak to Ninth Project

CPUC Crossing Number*	DOT Crossing Number*	Street Name	Warning Devices*	Crossing Status
001D-7.20	749591D	Oak Street (at Embarcadero)	2 x Std No. 9-A	Active mainline
001D-7.60	749616W	5th Avenue	2 x Std No. 9	Active mainline
001D-7.60-C	749595F	5th Avenue (closest track to Embarcadero)	2 x Std No. 8	Active spur line
001D-7.70-C	749597U	I-880 off-ramp at 6th Avenue / Embarcadero	2 x Std No. 8	Active spur line
001D-8.00-C	749600A	I-880 on-ramp at 10th Avenue / Embarcadero	2 x Std No. 8	Active spur line
001D-7.40-C	749593S	Embarcadero	2 x Std No. 8	Unknown spur
001D-7.50-C	749594Y	Embarcadero	Crossbucks	Unknown spur
001D-7.65-C	749596M	Embarcadero	Crossbucks	Unknown spur
001D-7.75-C	749598B	Embarcadero	Crossbucks	Unknown spur
001D-7.95-C	749599H	Embarcadero	Crossbucks	Unknown spur

Notes:

(1) The California Public Utilities Commission (CPUC) assigned crossing number is formatted as follows:
001: identifies Union Pacific Railroad
D: identifies the Niles Subdivision
Milepost: Here between 7.20 and 8.00
Suffix: '-C' indicates that the crossing is on a spur line

(2) The US Department of Transporation (DOT) / Federal Railroad Administration assigns each railroad crossing an identifier consisting of six digits followed by a letter, e.g. 749591D.

(3) Standards for crossing warning devices are specified in Commission General Order 75-C.
Standard No. 1-R: Crossbuck assembly (MUTCD R15-1 sign only)
Standard No. 8: automatic flashing light signals
Standard No. 8-A: automatic flashing light signals, and additional flashing light signals on an overhead mast arm
Standard No. 9: automatic gate and flashing light signals
Standard No. 9-A: automatic gate and flashing light signals, and additional flashing light signals on an overhead mast arm

COMMENT LETTER M

E OF CALIFORNIA
UBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

ARNOLD SCHWARZENEGGER, *Governor*

October 18, 2005

Margaret Stanzione
City of Oakland
250 Frank Ogawa Plaza, Ste. 3315
Oakland, CA 94612

Dear Ms. Stanzione:

Re: SCH# 2004062013; Oak to Ninth Mixed Use Development

As the state agency responsible for rail safety within California, we recommend that any development projects planned adjacent to or near the rail corridor in the County be planned with the safety of the rail corridor in mind. New developments may increase traffic volumes not only on streets and at intersections, but also at at-grade highway-rail crossings. This includes considering pedestrian circulation patterns/destinations with respect to railroad right-of-way.

Safety factors to consider include, but are not limited to, the planning for grade separations for major thoroughfares, improvements to existing at-grade highway-rail crossings due to increase in traffic volumes and appropriate fencing to limit the access of trespassers onto the railroad right-of-way.

The above-mentioned safety improvements should be considered when approval is sought for the new development. Working with Commission staff early in the conceptual design phase will help improve the safety to motorists and pedestrians in the County.

If you have any questions in this matter, please call me at (415) 703-2795.

Very truly yours,

Kevin Boles
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection and Safety Division

cc: Pat Kerr, UP

COMMENT LETTER M

STATE OF CALIFORNIA
PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

ARNOLD SCHWARZENEGGER, *Governor*

September 20, 2005

Margaret Stanzione
City of Oakland Com. & Eco. Dev. Agency
250 Frank H. Ogawa Plaza, Ste. 3315
Oakland, CA 94612

Dear Ms. Stanzione:

Re: SCH# 2004062013; Oak to Ninth Mixed Use Development

As the state agency responsible for rail safety within California, we recommend that any development projects planned adjacent to or near the rail corridor in the County be planned with the safety of the rail corridor in mind. New developments may increase traffic volumes not only on streets and at intersections, but also at at-grade highway-rail crossings. This includes considering pedestrian circulation patterns/destinations with respect to railroad right-of-way.

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If you have any questions in this matter, please call me at (415) 703-2795.

Very truly yours,

Kevin Boles
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection and Safety Division

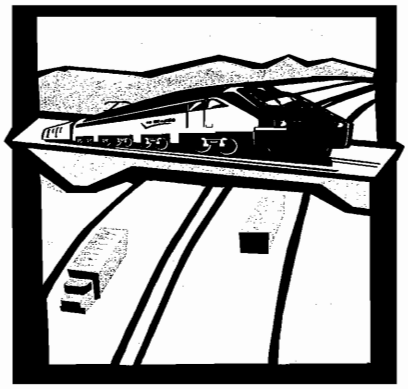
cc: Pat Kerr, UP

Grade Separation Program

Rail Crossings Engineering Section, CPUC

August 2005

Introduction



The Grade Separation Program is a state funding program to grade separate highway-rail crossings. A highway-rail crossing is the intersection of railroad track with any type of highway or pathway used by vehicles and/or pedestrians. Crossings are classified as either grade-separated or at-grade. Grade-separated crossings are where either the highway or the railroad track crosses over or under the other at different elevations, typically using a bridge structure. The elevation difference allows trains to travel through grade-separated crossings at the same time as highway users. At-grade crossings are where the highway and railroad tracks are at the same elevation, thereby creating a potential conflict between trains and highway users. At-grade highway-rail crossings pose significant public safety hazards to California's motorists and pedestrians.

The California Public Utilities Commission (hereinafter referred to as the Commission or CPUC) has jurisdiction over the safety of highway-rail crossings in California. The Rail Crossings Engineering Section (RCES) reviews projects for the safe design of crossings and recommends safety measures, such as automatic warning devices, to mitigate hazards for at-grade crossings users.

The optimal safety improvement for an at-grade highway-rail crossing is the complete separation of the railroad tracks from the roadway through construction of a grade-separation structure. Replacement of at-grade crossings with grade-separated crossings eliminates the fatalities and injuries that often result from collisions between train and highway users. It also eliminates blocking delays that cause traffic congestion, reduces the intrusive noise from train horns and automatic warning devices, and can improve emergency response times.

The Grade Separation Program helps local agencies finance the high costs of grade separating highway-rail crossings, thereby improving public safety and convenience throughout California.

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1. Background
2. Eligible Projects
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4. Formulas
5. Current Priority List
6. Next Call for Projects
7. Commission and Caltrans Contacts
8. Past Allocations
9. Decision Tools for Grade Separations
10. Caltrans Guidelines for Grade Separation Allocations
11. Relevant Streets & Highways Code

1. Background

The Commission establishes and furnishes to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) a funding priority list of grade crossing projects most urgently in need of separation or alteration. Section 190 of the California Streets and Highways Code (referred to as S&H Code) requires the State's annual budget to include $15 million for funding these projects. Section 2450 *et seq.* of the S&H Code sets out the procedure for administering these funds, and Section 2453 gives the CTC responsibility for allocating the funds to qualified projects.

S&H Code Section 2452 requires the Commission, by July 1 of each year, to establish the priority list for projects and furnish it to the CTC for use in the fiscal year beginning on that date. Our procedure is to promulgate the list for the first fiscal year by issuing an interim decision, and then to revise the list for the second year by deleting projects for which funds were actually allocated in the first. The Commission adopts the revised list by final decision in the second year of the proceeding, and begins the funding cycle again the following year by instituting a new proceeding.

In accordance with S&H Code Section 2452, the Commission is responsible for establishing criteria to be used in determining the priority of projects nominated for separation or alteration. The formula weighs vehicular and train volumes at crossings along with project costs, and considers a variety of special factors such as accident history, site visibility, the angle of the tracks to the road crossing geometry, blocking delays and other relevant factors. Staff conducts field inspections and performs safety evaluations.

Interested local agencies are responsible for submitting nominations with the required information. These agencies must be ready to share in the project's cost. The Commission requires applicants to attend the formal public hearings and provide testimony in support of their proposals.

2. Eligible Projects

The Commission will consider projects for the Grade Separation Priority List that are nominated by a city, a county, a separation-of- grade district, and any public entity providing rail passenger transportation services.

Eligible projects include: (1) projects for grade separation of existing or proposed crossings of city streets, county roads, or state highways, (2) grade crossings in need of elimination by removal or relocation of streets or railroad tracks, or (3) existing separations in need of alteration or reconstruction.

Section 2450(a) of the S&H Code states:

> *"Grade separation" means the structure which actually separates the vehicular roadway from the railroad tracks.*

Although projects comprised of multiple grade separations are eligible, a project nomination shall not include multiple projects that are separate, distinct and clearly severable. The combination of severable projects into a single nomination would preclude the Commission from effectively determining which projects are most urgently in need of separation or alteration as required by S&H Code Section 2452. Furthermore, a single nomination cannot combine projects for both the elimination of existing grade crossings and the elimination of proposed grade crossings.

If a project qualifies as a multiple crossing or consolidation project, the overall priority is affected by a combined weighting of factors at each crossing. The factors include roadway traffic counts, number of accidents, and crossing geometrics. Multiple crossing or consolidation projects may qualify for more than the usual $5 million maximum allocation.

3. Funding

Section 190 of the S&H Code requires the State's annual budget to include $15 million for funding qualified projects on the Grade Separation Priority List Program as ranked by the Commission.

For a project that eliminates an existing crossing or alters or reconstructs an existing grade separation, an allocation of 80% of the estimated cost of the project is made, with the local agency and railroad each contributing 10%. For a project that plans a grade separation of a proposed new crossing (currently no existing crossing), an allocation of 50% of the estimated project costs is made, with the remaining 50% contributed by the local agency.

Subsequent to the Commission's issuance of the Priority List, the California Department of Transportation (Caltrans) accepts applications for an allocation of funds on or before April 1 of each fiscal year. Guidelines on applying for Caltrans allocations are posted at the following website:
http://www.dot.ca.gov/hq/LocalPrograms/lam/prog_g/g19gdsep.pdf.

Caltrans distributes the available funding according to the priority ranking established annually by the CPUC. The project on the list with the highest priority, and which also meets the requirements detailed below, has first claim to the available funds to the extent of the yearly cap. The next project in the ranking which meets the requirements receives the next allocation, and so on, until the fiscal year's funds are exhausted. Two different formulas are used to make these computations, one for existing at-grade crossings nominated for separation or elimination and another for existing separations nominated for alteration or reconstruction.

Other critical requirements to secure an allocation from the Caltrans include:

1. Application for funding must be sent to Caltrans by April 1
2. Authority to construct the project must be obtained from the Commission
3. Environmental review documents must be complete
4. Construction, maintenance, and any other necessary agreements with the railroads must be signed
5. Final plans must be complete

Applicants should be aware of the following funding limits:

- Allocations are made on the basis of estimated cost.
- An allocation to a project may not exceed $5 million from any one fiscal year.
- Caltrans may only allocate up to 80% of the estimated cost.
- Cumulative allocations may not exceed $20 million to any one project.
- Allocations are to be reduced or augmented after the project is completed to reflect the actual cost to construct the grade separation.
- Parties anticipating the need for an allocation greater than $5,000,000 shall be prepared to present evidence at the hearings to justify the additional award. See S&H Code 2454 (g) and (h) for more information.

The probability of projects being funded is dependent on a number of things. The first is the amount of available funding, which is $15 million and which does not increase from year to year. In accordance with S&H Code 2454(g), funding for an individual project is limited to one-third of the total fund or $5 million per year (whichever is less). A project may qualify for up to 80% of the total project cost or a maximum of $20 million funded over a multiyear period, not to exceed five years, if it shows a saving to the state as indicated in S&H Code 2454(h).

The list is dynamic, responding to local demographic changes. Some projects may drop in ranking from one year to the next, as new nominations, where factors such as rising

vehicular traffic levels, increased train activity, or recent accident history indicate a greater public need for grade separation or improvement may rise on the list.

The system is not one where the first on the list is necessarily the first to be funded. For example, in fiscal year 2002-2003, Caltrans notified the Commission that projects ranking 14, 38 and 52 had received $6 million, $5 million, and $5 million, respectively in allocated funds. For fiscal year 2003-2004, no new projects received an allocation, but previously funded projects received supplemental allocations. The same is projected for fiscal year 2004-2005; allocations are to be made to supplemental requests only.

Although the priority list ranking is an important factor in determining whether a project can be funded, securement of an allocation requires a number of other requirements to be met. These requirements include completion of the design, establishment of a maintenance agreement with the affected railroad, completion of environmental review of the project, and procurement of the local funding share or remainder of the project cost. In recent years, these additional requirements have not been met by the vast majority of projects on the priority list, thereby allowing projects with what may appear to be a low ranking to be funded. If there is a possibility that a highway-rail grade separation project may be able to meet the requirements outlined above within two years of its nomination, RCES strongly recommends that the local agency apply for funding through the Grade Separation Program.

4. Formulas

There are two formulas used to rank projects: one for crossings nominated for separation or elimination and the other for existing grade separations in need of alteration or renovation.

Formula For Crossing Nominated For Separation Or Elimination

$$P = \frac{V * (T + 0.1 * LRT) * (AH + 1)}{C} + SCF$$

Formula For Existing Separations Nominated For Alteration Or Reconstruction

$$P = \frac{V * (T + 0.1 * LRT)}{C} + SF$$

Note: V- Average Daily Vehicle Traffic, T –Average Daily Freight/Commuter

Train Traffic, LRT – Average Daily Light Rail Train Traffic, C – Project Cost Share to be Allocated from Grade Separation Fund, AH – Accident History (number of accidents at crossing), SCF- Special Conditions Factor, SF - Separation Factor

Please see the current Order Instituting Investigation for more details on current Commission adopted formulas.

5. Current Priority List

Commission Decision (D.) 05-06-056, dated June 30, 2005 adopted the final order for the Section 190 Grade Separation Priority List for fiscal year 2005-2006, as required by S&H Code Section 2452. The Priority List for fiscal year 2004-2005, established by D.04-06-020, dated June 9, 2004 required no revision. D.05-06-056 also closes Investigation (I.) 03-07-009 (which established the list for 2004-2005 and revised it for 2005-2006). Decisions are published on the Commission's website: http://www.cpuc.ca.gov

6. Next Call for Projects

The Public Utilities Commission is responsible for ranking the nominated projects. The call for projects occurs every two years, therefore the nominated projects stand for two years, with those projects receiving an allocation during the first year being removed from the second year's list. The Commission is required to adopt a list by July 1 of each year. The list is then sent to the CTC and Caltrans. Caltrans allocates the funds.

The current call for projects opened July 21, 2005. The proceeding is online at the following site: http://www.cpuc.ca.gov/proceedings/I0507016.htm .

Click **COMMISSION INVESTIGATION** to download the Order Instituting Investigation and the Appendices which include the application forms and instructions. Applications are due October 21, 2005 to the Los Angeles office.

7. Commission and Caltrans Contacts

California Public Utilities Commission

Rosa Muñoz, PE
Consumer Protection & Safety Division
Rail Crossings Engineering Section
320 West 4th Street, Suite 500
Los Angeles, CA 90013-1105
(213) 576-7078
rxm@cpuc.ca.gov

Caltrans

Lauren Clausen
Rail Crossing Safety & Track Branch
Caltrans - Division of Rail
P.O. Box 942874
Sacramento, CA 94274-0001
(916) 653-0243
lauren_clauson@dot.ca.gov

8. Past Allocations

FY	Project	Proceeding	Rank	RR	Lead Agency	State Share
2001-02	Monte Vista Avenue	I.99-07-001	4	BNSF	City of Montclair	$ 5,000,000.00
	Bailey Avenue & Others	I.99-07-001	16		City of San Jose	$ 5,000,000.00
	Clovis Ave OH (1994-95)	I.93-07-032	8	UP	Fresno County	$ 1,370,400.00
Remainder will be used up by supplemental & balance allocations						$ 3,629,600.00
					Total Allocation	$ 15,000,000.00
2002-03	Jurupa Road UP	I.01-07-008	14	UP	City of Riverside	$ 6,000,000.00
	P & Q Streets UP	I.95-07-003	16	BNSF	City of Bakersfield	$ 342,894.65
	7th Standard Road OH	I.01-07-008	38	BNSF	City of Shafter	$ 5,000,000.00
	Mohawk Street UP	I.01-07-008	52	BNSF	Kern County/City of Bakersfield	$ 5,000,000.00
					Total Allocation	$ 16,342,894.65
2003-04	50th Ave OH	I.93-07-032	4	UP	City of Coachella	$ 6,014,010.00
	Chestnut Avenue OH	I.97-07-014	18	UP	County of Fresno	$ 778,748.00
	Kansas-Needham OH	I.95-07-003	1	UP	City of Modesto	$ 3,418,631.00
	Calloway Drive UP	I.95-07-003	18	BNSF	Kern County	$ 872,000.00
	Shaw-Marks UP	I.97-07-014	1	BNSF	City of Fresno	$ 3,340,204.00
					Total Allocation	$ 14,423,593.00
2004-05 (preliminary)	West Capitol Ave UP-Emergency Repair	I.99-07-001	26	UP	City of West Sacramento	$ 19,045.42
	Remainder will be used up by supplemental & balance allocations					
					Total Allocation	$ 19,045.42

9. Decision Tools for Grade Separations

The topic of when to construct a grade separation is complex. The Commission does not have strict criteria that would require an existing at-grade highway-rail crossing to be grade-separated. However, resources are available which clearly specify when a grade separation should be considered, and when it may be well justified.

The Federal Highway Administration's (FHWA) Technical Working Group (TWG) published a document in November 2002 entitled 'Guidance on Traffic Control Devices at Highway-Rail Grade Crossings'. This document is available online. Page 27 and 33 of the published document discuss particular criteria that should be considered when assessing the need for grade separation.

When considering the need for grade separation of highway-rail crossings, it may be appropriate to use the Federal Railroad Administration's web-based tool "GradeDec.net". The software application, accessible at http://GradeDec.net , can be used to evaluate the benefits and costs of rail investment projects, specifically those involving highway-rail grade crossing improvements (including grade separation, closure, or warning device upgrades), within a risk analysis framework. GradeDec.net is particularly well-suited for analysis of rail corridors.

10. Caltrans Guidelines for Grade Separation Allocations

Please see Chapter 19 of the Local Assistance Program Guidelines published by Caltrans for further details regarding allocations from the Grade Separation Program. http://www.dot.ca.gov/hq/LocalPrograms/lam/lapg.htm

11. Relevant Streets & Highways Code

Funding for projects included on each annual priority list is provided by S&H Code Section 190, and the basis for allocation and state requirements are contained in S&H Code Sections 2450-2461.

Letter M – (Letter enclosures provided as Appendix D)

M-1 See Master Response F for a discussion of Pedestrian Activity at Nearby Rail Crossings, including pedestrian safety concerns and fencing to limit the access of trespassers onto the railroad right-of-way, and Response to Comment Letter A regarding comments in the commenter's letter dated September 20, 2005.

The comment addresses seven topics related to rail crossings in the study area including:

1. Close existing at-grade crossings
2. Grade separate existing at-grade crossings
3. Improve safety of existing at-grade crossings
4. Construct fencing along the railroad right-of-way
5. Improve pedestrian and bicyclist safety at crossings
6. Fully consider the noise impacts
7. Follow-up appropriately on abandoned crossings

Each of these topics is addressed in further detail below.

M-2 The closure of existing at-grade crossings can reduce or eliminate safety concerns at crossing locations. Several of the existing crossings may be removed, but the removal of such crossings requires the agreement of both UPRR and Caltrans.

The crossings that could be removed are those at 6th Avenue and 10th Avenue near Embarcadero. The removal of these crossings, across the existing spur line (also known as the drill track), would occur in conjunction with the seismic retrofit of I-880 by Caltrans. Caltrans has discussed the removal of this spur line with UPRR over the past several years. Unfortunately, no agreement has been reached regarding the disposition of the spur line at this time. Because no definitive agreement has been reached regarding the removal of the spur line, this information was not included in the DEIR.

A review of the existing roadway network indicates that removing the existing crossing at 5th Avenue is inadvisable due to the lack of alternate routes. If that crossing were to be removed, a section of the waterfront approximately 1 mile long would be separated from the rest of Oakland with access limited to the Embarcadero (I-880 limits access from the waterfront to remaining areas in the City of Oakland). Because of this lack of parallel routes, the 5th Avenue at-grade crossing needs to be maintained to provide the necessary emergency vehicle access, and to provide connectivity to the remaining areas of Oakland.

The removal of the at-grade crossing at Oak Street would also limit access to existing and future developments along Embarcadero. Removing this at-grade crossing would sever any connection between the Jack London Square area and the remaining areas of the Oakland waterfront. As with the case of the 5th Avenue crossing, removing this at-grade crossing would reduce emergency vehicle access and limit connectivity to the remaining areas of the City of Oakland.

M-3 Grade-separated crossings would improve the operation and safety of Oak Street and 5th Avenue. However, there are significant topographic, engineering, and environmental constraints that limit the ability of the project applicant or the City of Oakland to construct these grade separations. BKF Engineers analyzed the potential for grade separated crossings at both locations and has prepared schematic plan and profile drawings for both a roadway undercrossing and roadway overcrossing at each location. These are included as **Figure VI-1 through Figure VI-8** at the end of the response to this letter.

5th Avenue

At 5th Avenue, the main barrier to constructing a railroad undercrossing is the existing groundwater table. As shown in **Figure VI-2**, the groundwater table is only several feet below the existing grade. Additionally, construction of an undercrossing would require the relocation of several existing water and storm water facilities, including an 84-inch interceptor maintained EBMUD, as shown most clearly in **Figure VI-1**. An undercrossing would require a significant rerouting of Embarcadero towards the waterfront, significantly encroaching onto existing properties, many of which are currently occupied. These properties include parcels that are not included in the Oak to Ninth Project and are not anticipated to remain in use through the near future.

The main impediment to building an overcrossing is the I-880 elevated structure. As shown in **Figure VI-4**, an overcrossing would pass directly through the existing I-880 structure. With the reconstruction of I-880 as part of the I-880 Seismic Retrofit by Caltrans, this conflict remains. Given the distance between the railroad and the I-880 Structure, it is not possible to design an overcrossing that does not pass through the I-880 structures. Additionally, as shown in **Figure VI-3**, an overcrossing would require the relocation of Embarcadero towards the Estuary, which would encroach on the existing properties along the waterfront - on the project site and the adjacent Fifth Avenue Point outparcel. Because of the additional height needed to clear the rail line, the overcrossing structure would extend even further away from Embarcadero than the undercrossings. As a consequence, Embarcadero would have to be rerouted even further (as compared to the undercrossing) and a bridge would be required for the roadway as it assed of Clinton Basin.

Oak Street

An undercrossing at Oak Street would have many of the same issues as the same facility along 5th Avenue. **Figure VI-6** shows the existing groundwater table is only several feet below grade, which could lead to flooding after construction. This undercrossing would also require the relocation of the 84-inch EBMUD interceptor. **Figure VI-5** shows that constructing any grade separation at Oak Street would also remove access between 2nd Street and Oak Street. The existing intersection of 2nd Street/Oak Street would have to be removed, and 2nd Street would then have to be converted into a cul-de-sac. Several access points to existing properties would also have to be removed along the elevated structure.

Figure VI-7 and **Figure VI-8** show that an overhead crossing at Oak Street would also require the removal of the existing intersection of 2nd Street/Oak Street and the conversion of 2nd Street into a cul-de-sac. Existing properties along Embarcadero and Oak Street would also lose several access points along these roadways with the construction of the grade separated crossing.

M-4 The commenter expresses a number of concerns regarding the operations of the Embarcadero/5th Avenue intersection. The design of the intersection is intended to limit queuing, particularly across the railroad tracks by providing multiple left-turn lanes from 5th Avenue to Embarcadero, as well as two receiving left turn lanes.

The commenter also expresses concerns regarding the ability of the project to widen the Embarcadero as a mitigation measure. The project site plan reflects this widening, and the project applicant will be reconstructing the Embarcadero in conjunction with the development of the site.

The commenter recommends a number of upgrades to the existing at-grade crossing at 5th Avenue and Oak Street. Both crossings currently have warning lights and traditional safety gates installed, and several of the recommended items could be implemented in conjunction with the installation of traffic signals at both locations (identified in the DEIR as mitigation measures for project traffic impacts), including:

- Installing additional signage, such as DO NOT STOP ON TRACKS signs (MUTCD R8-8)
- Refurbishing existing advance warning signs and markings

M-5 See Master Response F for a discussion of Pedestrian Activity at Nearby Rail Crossings, including fencing to limit the access of trespassers onto the railroad right-of-way.

M-6 See Master Response F for a discussion of Pedestrian Activity at Nearby Rail Crossings, including appropriate pedestrian and bicycle safety improvements.

M-7 Train horn usage near the at-grade crossing in the project vicinity would result in high volume and intermittent noise levels of short duration that could occur during the daytime and nighttime hours. The following text is added to the first paragraph on DEIR p. IV.G-27 (additions shown as underlined; deletions as ~~strikeout~~):

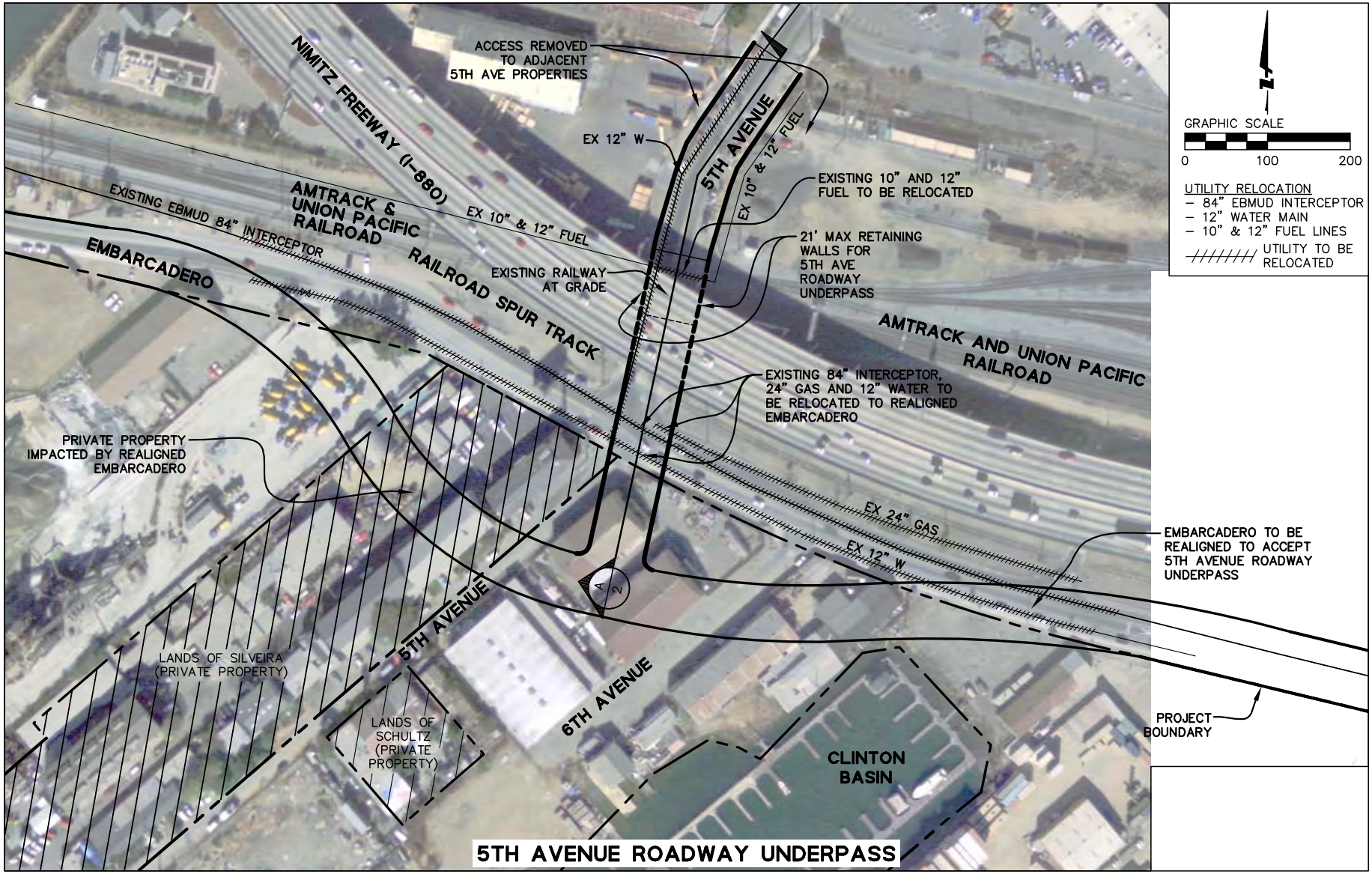
> **Based on noise measurements in the project site vicinity (see Table IV.G-3 and Table IV.G-4), existing ground-level and aerial (elevations of 14 to 70 feet) Ldn noise levels range from 60 dBA to 80 dBA and from 62 dBA to 85 dBA, respectively. These noise levels are primarily due to the proximity of the measurement location to the Embarcadero and I-880, as well as the railroad tracks to the north, and show that project-related ground floor and non-ground floor residences in close proximity to these noise sources would be exposed to noise levels classified from "normally unacceptable" to "clearly unacceptable" for residential uses (DEIR Table IV.G-2).**

The following revisions and additions are made to Mitigation Measures for Impact G.3 on DEIR p IV.G-27 (additions shown as underlined; deletions as ~~strikeout~~):

> **Mitigation Measure G.3a: To comply with the requirements of Title 24 and achieve an interior noise level of less than 45 dBA, noise reduction in the form of sound-rated assemblies (i.e., windows, exterior doors, and walls) shall be incorporated into project building design. Final recommendations for sound-rated assemblies will depend on the specific building designs and layout of buildings on the site and shall be determined during the design phase.**[3]
>
> **Mitigation Measure G.3b: Due to the proximity of the project to a railroad crossing, a written disclosure of railroad crossing noise, particularly usage of train horns and bells on warning devices during the daytime and nighttime hours, shall be provided to potential residents of the project.**

M-8 The comment addresses the potential hazards of abandoned railroad crossings and tracks. The removal of any crossings or railroad tracks would be done by Caltrans in conjunction with the proposed I-880 Seismic Retrofit. Neither the project sponsor nor the City of Oakland would remove any existing crossing locations or railroad tracks as part of the proposed project.

3 *Oak to 9th Residential Development, Oakland, California, Environmental Noise Assessment* by Charles M. Salter Associates, Inc., November 2002. Table 4 of the Salter Associates document lists conceptual window and wall Sound Transmission Class (STC) ratings for different noise environments and gives an estimate of the STC requirements needed to meet interior noise criteria.

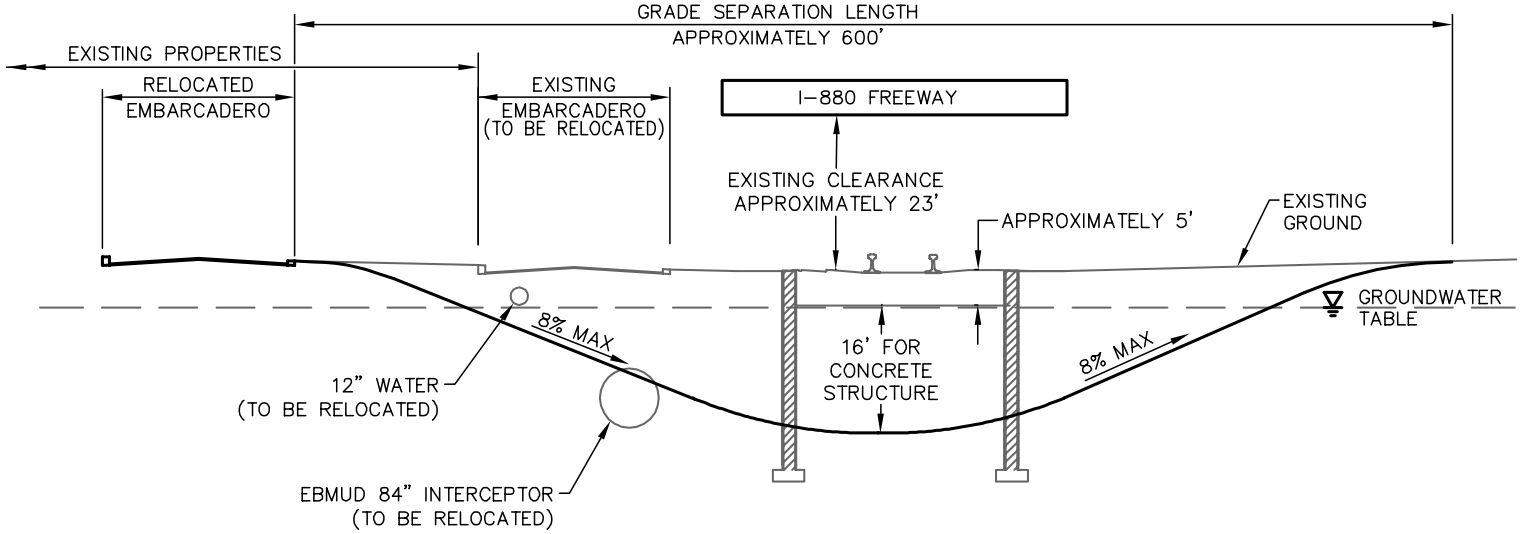


SOURCES: BKF

Oak to Ninth Avenue . 202622

Figure VI-1

Conceptual Plan of Grade-Separated Underpass at 5th Avenue



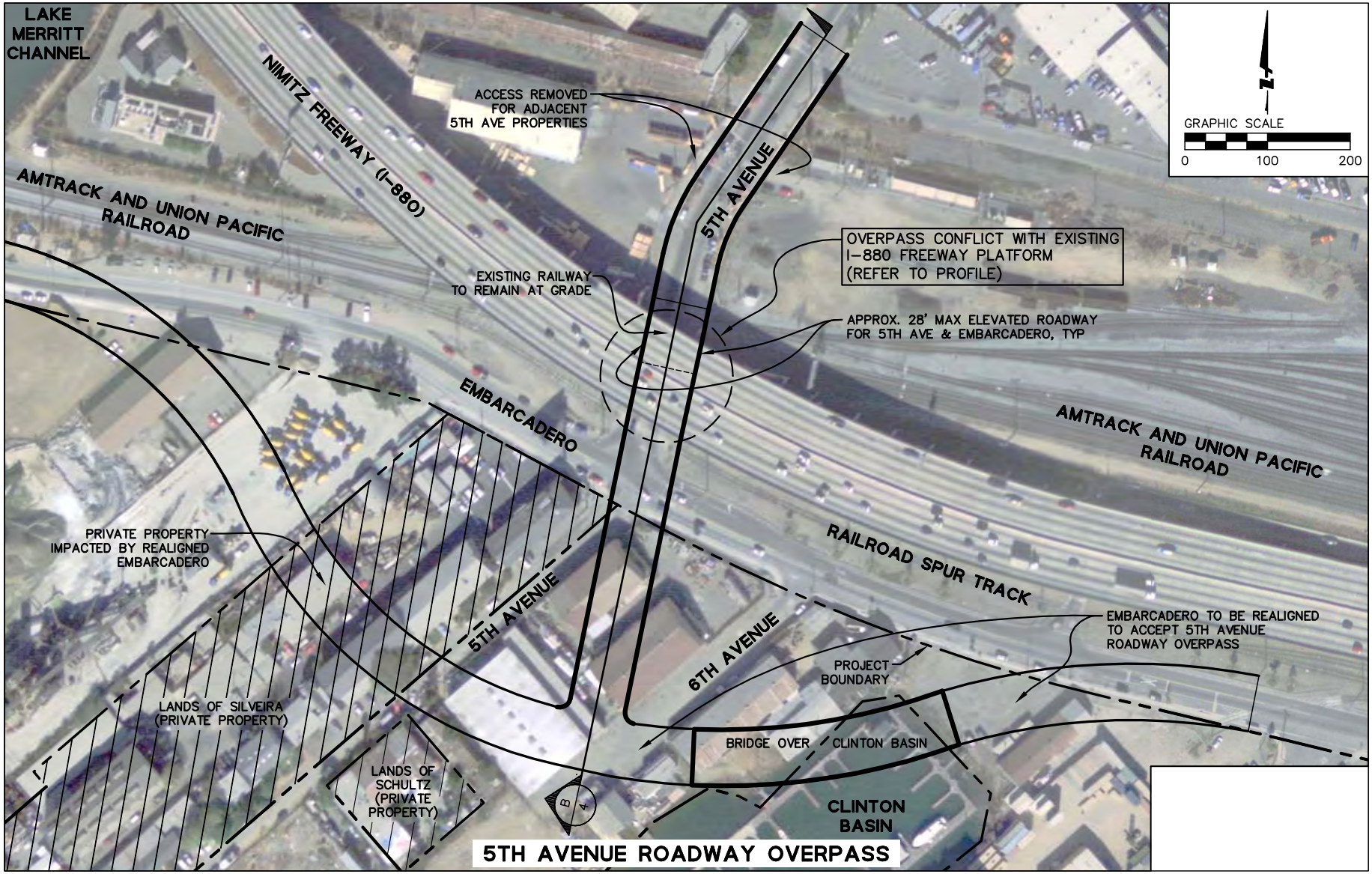
NOT TO SCALE

SOURCES: BKF

Oak to Ninth Avenue . 202622

Figure VI-2

Conceptual Profile of Grade-Separated Underpass at 5th Avenue

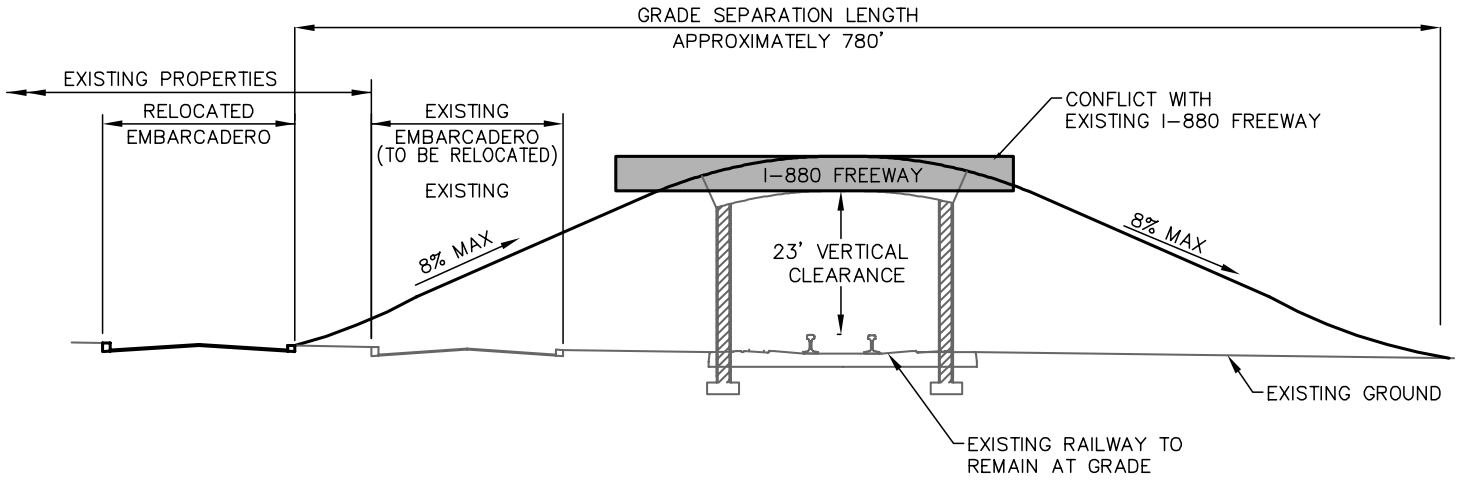


SOURCES: BKF

Oak to Ninth Avenue . 202622

Figure VI-3

Conceptual Plan of Grade-Separated Overpass at 5th Avenue



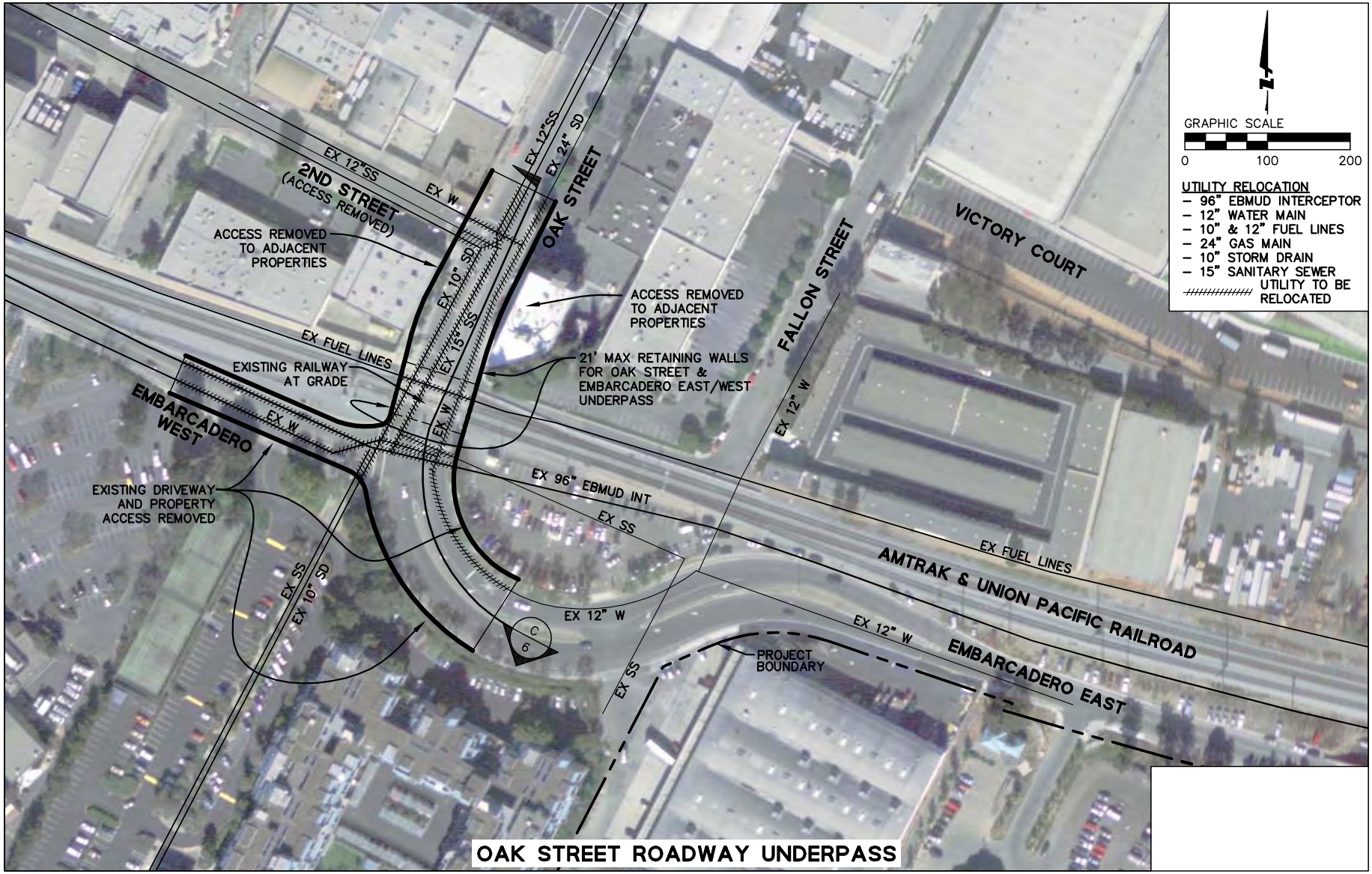
NOT TO SCALE

SOURCES: BKF

Oak to Ninth Avenue . 202622

Figure VI-4

Conceptual Profile of Grade-Separated Overpass at 5th Avenue

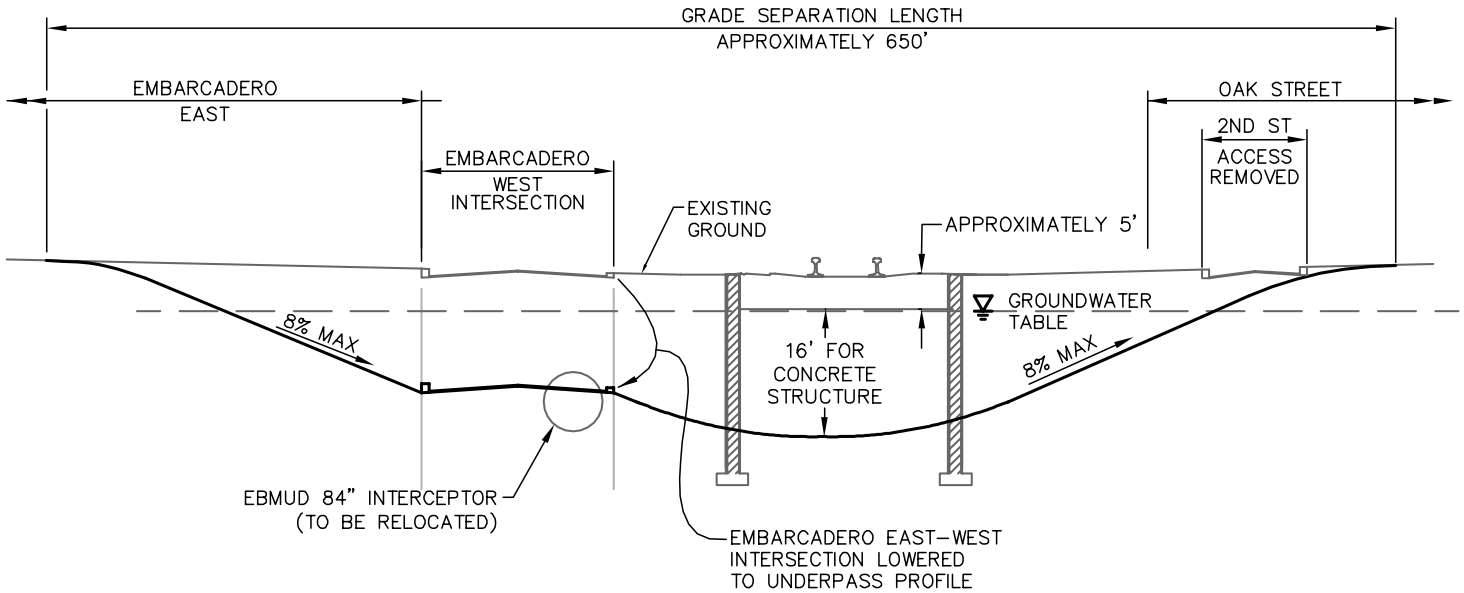


SOURCES: BKF

Oak to Ninth Avenue . 202622

Figure VI-5

Conceptual Plan of Grade-Separated Underpass at Oak Street



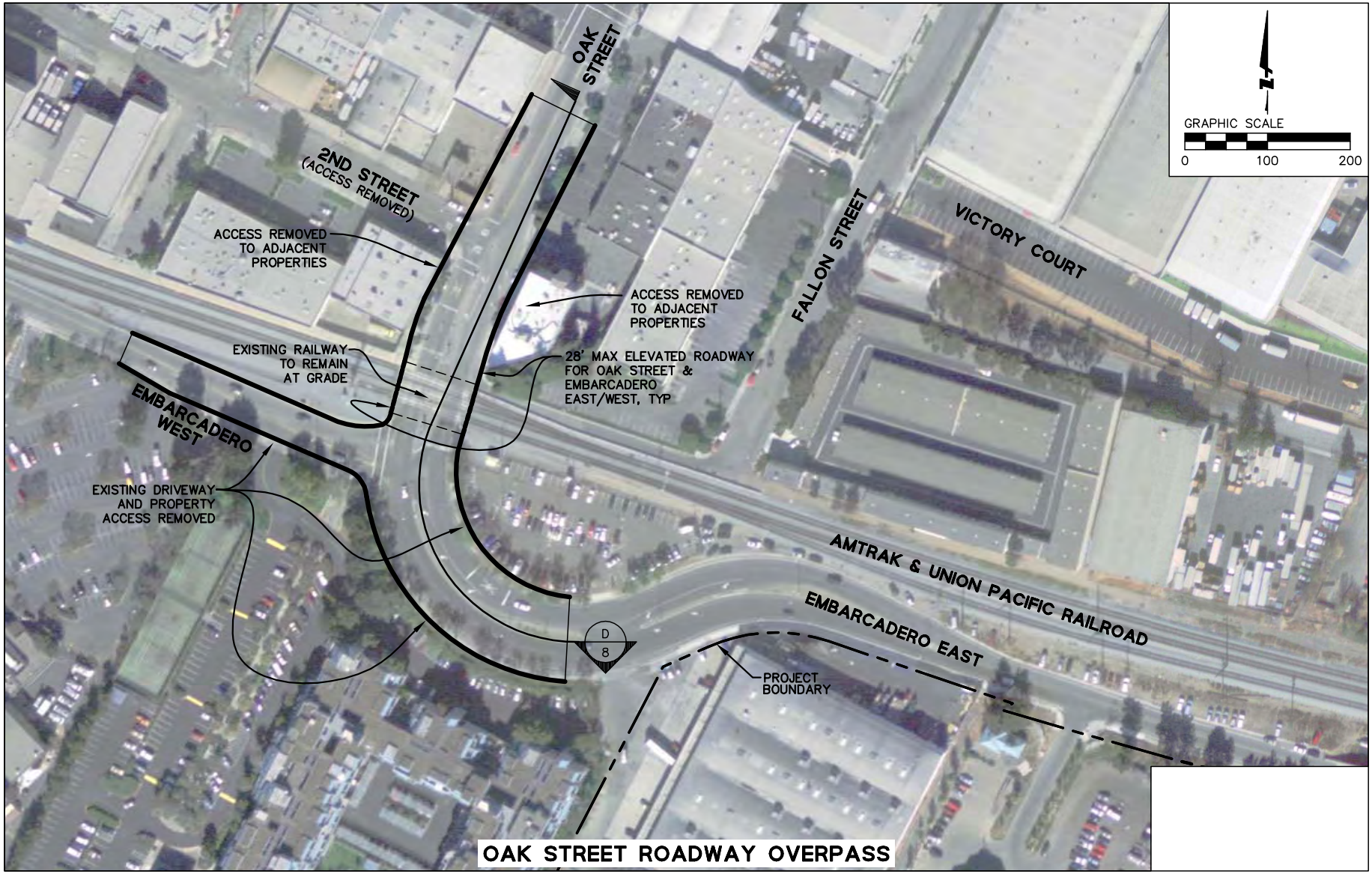
NOT TO SCALE

SOURCES: BKF

Oak to Ninth Avenue . 202622

Figure VI-2

Conceptual Profile of Grade-Separated Underpass at Oak Street

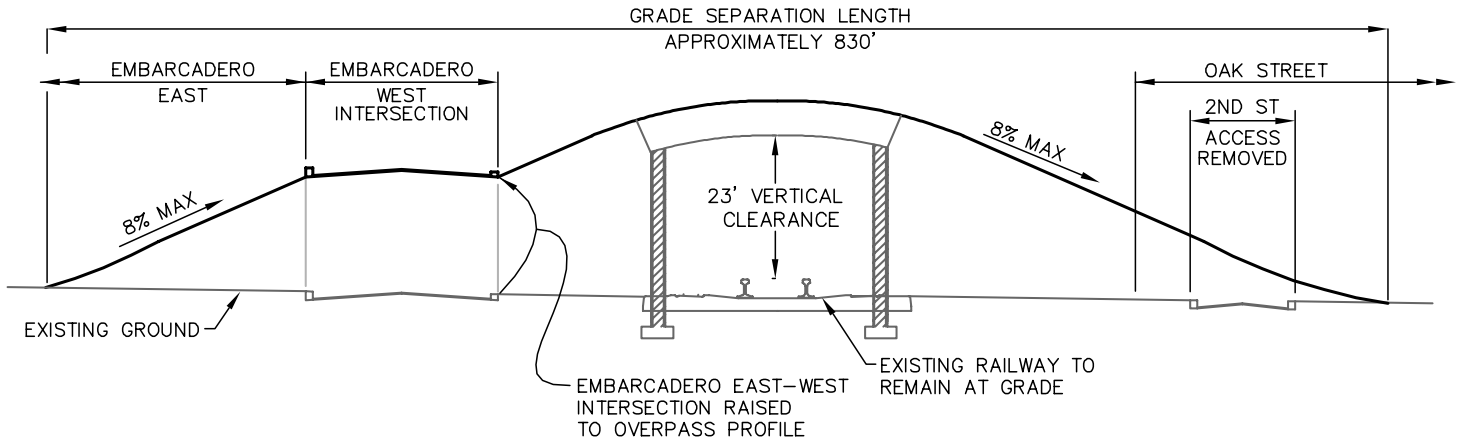


SOURCES: BKF

Oak to Ninth Avenue . 202622

Figure VI-7

Conceptual Plan of Grade-Separated Overpass at Oak Street



NOT TO SCALE

SOURCES: BKF

Oak to Ninth Avenue . 202622

Figure VI-8

Conceptual Profile of Grade-Separated Overpass at Oak Street

COMMENT LETTER N

The League of Women Voters of Oakland

RECEIVED
OCT 1 1 2005
City of Oakland
Planning & Zoning Division

October 5, 2005

Colland Jang, Chair
Oakland Planning Commission
250 Frank Ogawa Plaza, Suite 2114
Oakland, CA 94612

Dear Mr. Jang,

The League of Women Voters of Oakland would like to request an extension of at least one week to the comment period for the Draft EIR on the Oak to Ninth Avenue Project. While the DEIR was available on line from the beginning of the comment period, it was very difficult to find, even for those familiar with the City website. It required numerous links, none of which was immediately obvious. Even when the main link to the DEIR was placed on the City's main web page, it was put under the heading "Events" (where it remains today). Additionally, there is no link from the Commission's online agenda for the September 28 discussion of the DEIR to the DEIR itself. N-1

We hope that the Planning Commission will act to extend the comment period to ensure that everyone who wishes to comment has the opportunity to do so. In addition, we suggest that the link to the DEIR on the City's main website be moved from the "Events" heading to the "News" column, and that links to the DEIR be added wherever people might logically look for it – including the CEDA page and the Planning Commission page.

Sincerely,

Helen Hutchison
President
League of Women Voters of Oakland

cc: Claudia Cappio, Development Directory
Gary Patton, Deputy Director of Planning and Zoning
John Russo, Oakland City Attorney

1305 Franklin Street, Suite 311 • Oakland, California 94612-3222 • (510) 834-7640
Email: *lwvoakland@earthlink.net*
www.lwvoakland.org

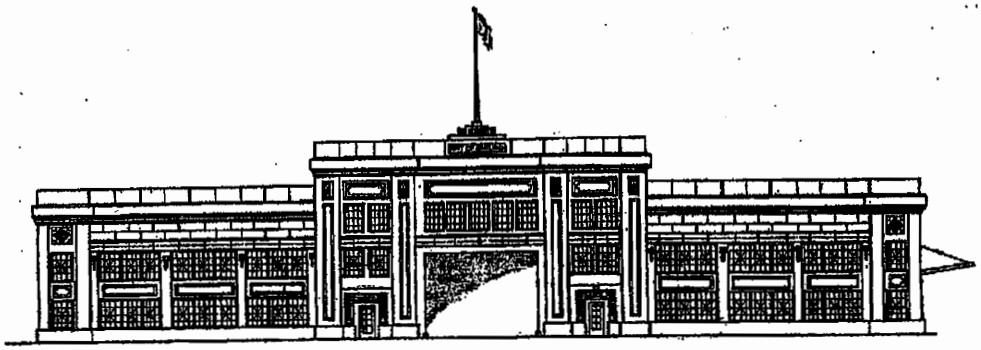
Letter N – League of Women Voters

N-1 The City issued the first Notice of Preparation (NOP) for the DEIR on May 28. 2004. As is standard, the NOP was sent to all governmental agencies and organizations and persons interested in the project.

Section 15105 of the CEQA Guidelines states, "*The public review period for a draft EIR should not be less than 30 days or longer than 60 days except in unusual circumstances. When a draft EIR is submitted to the State Clearinghouse for review by state agencies, the public review period shall not be less than 45 days, unless a shorter period, not less than 30 days, is approved by the State Clearinghouse*." The Oak to Ninth Project DEIR was published on September 1, 2005, beginning a 54-day public comment and review period that ended at 4:00 p.m. October 24, 2005. As was stated in the Notice of Availability that the City mailed to governmental agencies, organizations, and persons interested in the project, and/or who had responded to the NOP, any person could review or obtain a copy of the DEIR. Copies of the DEIR were available on-line and in the Community and Economic Development Agency office and the Main Oakland Library.

As detailed in Master Response A, to date, the review process for the project has involved meetings with more than 100 groups and organizations, which has resulted in the project sponsor speaking directly to over 4,000 people and to groups representing over 20,000 people about the project. Information about the project exists on over 10 internet websites. In addition, a community outreach process was conducted by Circlepoint on behalf of the City and involved nine small-group meetings and two community-wide meetings. Public hearings occurred at the Landmarks Preservation Advisory Board, the Park and Recreation Advisory Commission, the Planning Commission, a joint special hearing of the Planning Commission, Landmarks Preservation Advisory Board (LPAB), Park and Recreation Advisory Commission (PRAC), the Redevelopment Agency and the City Council for a tour of the project site, and subcommittee meetings of the Planning Commission and the LPAB. As of preparation of this additional meetings are anticipated before the LPAB. Both the Planning Commission and the City Council will hold additional hearings prior to acting on the project proposal. Thus, the Planning Commission has determined that the 54-day comment and review period on the DEIR is adequate and would not be extended

The comment's suggestions for the City of Oakland website are noted.



EAST ELEVATION.
Scale 1"=20'

FRIENDS OF NINTH AVENUE TERMINAL

October 21, 2005

Marge Stanzione, Project Planner
City of Oakland
Community & Economic Development Agency
Planning Division
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, California 94612

RE: Oak to 9th Avenue Project

The letter is in response to the Draft Environmental Impact Report for the project, and specifically on the analysis o 603 Embarcadero East, also known as Philbrick Boat Works.

The Drafty E.I.R [DEIR] erroneously categorizes this building as not a historic resource per "CEQA." The DEIR also incorrectly lists the build date as 1947. In fact the construction date is much earlier. Also, there is a landmarks application before the Oakland Landmarks Preservation Advisory Board [LPAB].

The DEIR must be corrected and this building must be evaluated as the historic resource according to the LPAB. To properly evaluate this building, an additional hearing –or more - is needed to properly evaluate this historic resource.

O-1

This building has participated in Oakland waterfront industry for the good part of a century. The business itself, Philbrick Boat Works, has been the primary tenant of this building for almost half a century. This is a business is a historic cultural resource. The DEIR does not note any of this and it must.

The EIR must also include the saving of this building and its present use as part of the proposed project, as well as in other alternative. The DEIR is in error to label this building as a NOT a historic resource. The landmark application and all attendant resources submitted for the landmarking of this building to the city of Oakland must also be included as part of the EIR.

Also, in the 'Project Description' the city uses to characterize this project, it does not clearly state that city-owned historic resources are to be demolished; it only notes 'demolition of structures' which does not convey the amount of historic resources that would be lost should the project proceed as presented.

O-2

Sincerely,

Leal Charonnat, Secretary
Friends of Ninth Avenue Terminal

Enclosure – The Landmarks Application document on file with city of Oakland is hereby incorporated as part of this letter and must be attached to this letter when included in the EIR.]

Oakland Landmarks Preservation Advisory Board

NOTICE OF INTENT OT SUBMIT AN OAKLAND LANDMARK AND S-7 PRESERVATION COMBINING ZONE APPLICATION FORM

The undersigned proposed that the Oakland Landmarks Preservation Advisory Board initiate, pursuant to Section 9502 of the Zoning Regulations, designation of the below described property as an Oakland landmark or to rezone such property to the S-7 Preservation Combing Zone. If after reviewing this proposal and requesting and considering comments from the property owner(s) the Board determines to proceed with the proposal, the undersigned intends to submit a completed Oakland Landmark and S-7 Preservation Combing Zone Application Form within six (6) months from the date of such determination.

1. **TYPE OF APPLICATION:** ✓ Oakland Landmark ✓ S-7 Zone

2. **IDENTIFICATION**

   A. Historic name if known: PORT OF OAKLAND BLDG. #H-103 1935 TO PRESENT

   B. Common Name: PHILBRICK BOAT WORKS - CONTINUOUS AT SITE SINCE 1946

3. **ADDRESS/LOCATION** (List all addresses and attach map if more than one address): 603 EMBARCADERO, OAKLAND, CA. 94606 (A SECOND HISTORIC ADDRESS OF 400 SIXTH AVENUE, OAKLAND, CA. 94606)

4. **OWNER OF PROPERTY** (Use attached sheet if multiple parcels with separate owners):

   Name: PORT OF OAKLAND

   Address: 530 WATER STREET

   City: OAKLAND State: CA Zip Code: 94607

   Assessor's Parcel Number: 2914

FORM LPAB-1

5. **SIGNIFICANCE**

A. Date constructed or established, if know: 1935

B. Builder, architect and/or designer, if know: UNKNOWN

C. Summary statement of significance (Please clearly explain why the property is significant and why it merits landmark or S-7 Zone designation) THE PORT OF OAKLAND BLDG. #H-103 WAS THE OAKLAND PRODUCE BUILDING FROM 1935 TO 1940. IT WAS USED AS A SHIPPING WAREHOUSE FOR THE WAR EFFORT THROUGH 1945. FROM 1946 TO PRESENT THE BLDG. HAS HOUSED "PHILBRICK BOAT WORKS." H-103 IS THE ONLY REMAINING "TIMBER FRAME" WAREHOUSE AND "PHILBRICK BOAT WORKS" IS THE ONLY REMAINING WOODEN BOAT BUILDING & REPAIR FACILITIES IN OAKLAND. SIX DECADES OF OAKLAND'S RICH MARINE HERITAGE IS REPRESENTED BY THIS PROPERTY AND THIS BUSINESS LOCATED IN #H-103. PLEASE SEE THE ATTACHED HISTORICAL STATEMENT, SUPPORTIVE LITERATURE AND PICTURES.

6. **NOTICE SUBMITTED BY**

Signature: Russ Donovan Date: 6/14/05

Name/Title: RUSS DONOVAN / OWNER

Organization: PHILBRICK BOAT WORKS

Address: 603 EMBARCADERO, OAKLAND 94606 Telephone: 510·893·9443

DEPARTMENTAL USE ONLY

Accepted by: _____ Date: _____

Included in Oakland Cultural Heritage Survey: ☐ Yes ☐ No Survey rating: ☐

State Historical Resources Inventory Form prepared: ☐ Yes ☐ No

Included in Preliminary Citywide Historical and Architectural Inventory:

☐ Yes ☐ No; Preliminary rating: ☐

Philbrick Boat Works *Since 1934*
STOCK • CUSTOM BUILT • INBOARD RUNABOUTS
803 EMBARCADERO • OAKLAND, CA. 94606-5116 • (510) 893-8443

The "Philbrick Boat Works"™ has occupied and built boats in Port of Oakland Building H-103 since 1946. This warehouse built on Clinton Wharf in 1935 is 90 feet long by 45 feet wide and 24 feet tall and constructed of "old growth " Douglas Fir. It has pier block timbers 14in by 14 inches; floor joist supports 12 inch wide by 12 in thick and floor joists 12 inches wide by 2 1/2 inches thick, in twenty-foot lengths. The floorboards are 2 inches thick by 12 inch wide also running twenty feet in length. The walls and roof structures are "timber frame construction" and covered in the original galvanized corrugated sheet metal. Building H-103 served as the City of Oakland Produce Warehouse until World War II when it was turned over to the war effort. It is unaltered and the last remaining example of the working wharf warehouse district that was critical to Oakland's maritime history.

Don Philbrick started the "Philbrick Boat Works"™ in 1934. He moved his boat building business to POA Warehouse Bld H-103 in 1946 and has manufactured, repaired and restored wooden boats continuously at this site. Philbrick Boat Works™ are part of a long Oakland boating history. Lake Merritt and the Municipal Boat house encourage aquatic sports. It was in Warehouse H-103 that Philbrick Boats built all of the "El Toro's" and "Melodies" sail boats used for recreation on Lake Merritt. The Boat Works has also built plywood outboard boats, mahogany runabouts, mahogany utility boats, cabin cruisers and four record holding race boats. The design of Warehouse bldg H-103, its adjoining boat storage yard, launch ramp and Clinton wharf is a protected environment allowing work to progress on boats that vary in length from 8 ft to 35ft long year round. Philbrick Boat Works™ still manufactures, repairs and restores wooden boats and is known nationally for their brand new boats as well as their award winning concours restorations. Philbrick boats are prized as examples of craftsmanship and the boat builder's art and have been the subject Oakland Museum displays. Philbrick Boat Works™ is the last remaining original wooden boat builder left in Oakland. Its workshops in OPA Warehouse bldg H-103 still operate in ways little changed in over 150 years. They build wooden boats based on designs developed in Oakland but sough after by collectors around the world. The boat works has produced over 5,000 handcrafted runabouts using tools, patterns, techniques materials and personal care more common to history then modern mass production. They are all that remains of a rich Oakland Estuary marine history of boatbuilding activities that predate the arrival of the Spanish.

The marsh upon which the boat works sits is part of land created in 1900 and is an early example of pile-stabilized fill. This semi-submerged tideland supplied the Ohlone with the tule, reeds and grass needed to build their boats and the small sandy beaches offered launch sites. With fill and construction of the 200 ft by 20 ft Clinton Wharf this site became the primary shipping point through which the great wealth of produce grown in the central Valley passed. With the arrival of the Rail Road tons of fresh farm goods arrived and were shipped daily. This continued an Estuary activity of the Spanish who shipped produce grown near Fruitvale to the San Francisco Mission in small flat-bottomed wooden boats made by local craftsman. When the 1906 San Francisco Earthquake struck, the warehouses on Clinton wharf were critical to the relief effort, using their capacity to send supplies. Along side the shipping activities the Oakland Estuary provided all of the shipbuilding and marine services needed. The immediate area on both the Alameda and Oakland shores became known for modern shipbuilding and convenient hauling out. Hanlon's Boat Yards, Hurley Marine Works, Pacific Dry Docks, Merritt Shipyards, Swanson's Yard, Moor's Boats, Crowley Brothers; all are part of the maritime history which continues today in the operations of the historic Philbrick Boat Works.

Preserving Philbrick Boat Works™ and the building it has occupied for sixty years, POA Warehouse Bldg #H-103, is an opportunity to save two important pieces of the disappearing Oakland water front history; The last remaining wooden boat builder on the Oakland water front operating in the last remaining original Port of Oakland Warehouse building. Together the boat works site and the warehouse building provide visitors and customers alike with a walk back in time. Not a frozen museum but a living example of Oakland's boat building and waterfront history just beyond the front door of Philbrick Boat Works™ on the Oakland Embarcadero.

INBOARDS OUTBOARDS

Don Philbrick Boat Works

STOCK - CUSTOM BUILT

400 - 6th Avenue

Oakland, California

Bus. TW. 2-9443 Res. LA. 3-1430

Philbrick Boat Works Since 1934

STOCK • CUSTOM BUILT • INBOARD RUNABOUTS

RUSS DONOVAN

603 EMBARCADERO OAKLAND, CA. 94606-6118 • (510) 533-9443

LPAB FORM 3.3

City of Oakland — Landmarks Preservation Advisory Board
EVALUATION SHEET FOR LANDMARK ELIGIBILITY

Address 603 Embarcadero

Name Philbrick Boat Works - Port of Oak. Produce Wh - Blg H-103

A. ARCHITECTURE

1.	Exterior/Design	E	VG	(G)	FP
2.	Interior	E	VG	G	FP
3.	Construction	E	(VG)	G	FP
4.	Designer/Builder	E	VG	G	(FP)
5.	Style/Type	E	(VG)	G	FP

B. HISTORY

6.	Person/Organization Port of Oak. Produce Wh Philbrick Boat Works, since 1946, known worldwide	E	VG	(G)	FP
7.	Event	E	VG	G	FP
8.	Patterns boatbuilding/maritime industry on estuary S-IC - rare survivor	E	(VG)	G	FP
9.	Age 1935	E	VG	(G)	FP
10.	Site	(E)	VG	G	FP

C. CONTEXT

11.	Continuity supports Clinton Basin, 9th Av. Terminal, 5th Av. district	E	VG	(G)	FP
12.	Familiarity visually notable from water tho inconspic. from Embarc.; business + its boats are widely known	E	VG	(G)	FP

D. INTEGRITY

13.	Condition	E	VG	(F)	FP
14.	Exterior Alterations	(E)	VG	G	FP

Evaluated by _____ Date _____

STATUS

Rating: _____

City Landmark Eligibility: ☐ Eligible ☐ Not eligible

National Register Status: ☐ Listed ☐ In process

☐ Determined eligible ☐ Appears eligible

☐ Appears ineligible

Site of Opportunity ☐

This evaluation sheet was accepted by the Landmarks Preservation Advisory Board at its meeting of _____ (Date)

Attest: _____ (Secretary)

LPAB FORM 3.2

City of Oakland -- Landmarks Preservation Advisory Board
EVALUATION TALLY SHEET FOR LANDMARK ELIGIBILITY

Address_____

Name_____

12	6	3	0	1. Exterior/Design		
6	3	2	0	2. Interior		
4	3	2	0	3. Construction		
4	2	1	0	4. Designer/Builder		
6	3	2	0	5. Style/Type		
	6	3		A. ARCHITECTURE TOTAL	9	(max. 26)
30	15	8	0	6. Person/Organization		
30	15	8	0	7. Event		
18	9	5	0	8. Patterns		
8	4	2	0	9. Age		
4	2	1	0	10. Site		
4	9	10		B. HISTORY TOTAL	23	(max. 60)
4	2	0	0	11. Continuity		
14	7	2	0	12. Familiarity		
		5		C. CONTEXT TOTAL	5	(max. 14)
PRELIMINARY TOTAL (Sum of A, B and C)					36	(max. 100)
-0	-3%	-5%	-10%	13. Condition (From A,B and C total)	-1.8	
-0	-25%	-50%	-75%	14. Exterior Alterations (From A,B and C total excluding 2)	-	
				D. INTEGRITY		
ADJUSTED TOTAL (Preliminary total minus Integrity)						

STATUS/RATING

Present Rating (Adjusted Total): ☐ A(35+) ☐ B(23-34) ☐ C(11-22) ☐ D(0-10)

Contingency Rating (Preliminary Total): ☐ A(35+) ☐ B(23-34) ☐ C(11-22) ☐ D(0-10)

City Landmark Eligibility: ☐ Eligible (Present Rating is A or B)
☐ Not eligible

F-116 3EVALTAL.CB

Letter O– Friends of the Ninth Avenue Terminal

O-1 The comment challenges the DEIR conclusion that the building at 603 Embarcadero, the Philbrick Boat Works, is not a historic resource per CEQA, as well as its construction date, and acknowledgment of a preliminary landmarks application before the Oakland Landmarks Preservation Advisory Board (LPAB). The comment includes a copy of the landmarks application and supporting materials.

Information Provided in the Draft EIR

The Cultural Resources section of the Oak to Ninth Avenue Project DEIR (Table IV.E-1, p. IV.E-14) stated that the building at 603 Embarcadero (the Philbrick Boat Works building) is not a historic resource for CEQA purposes, and states that it was constructed in 1947. The DEIR also stated that among other non-historic buildings on the project site, the proposed removal of 603 Embarcadero would constitute a less-than-significant impact to historic resources (p. IV.E-29).

These statements and conclusions in the DEIR were made after all buildings and structures on the project site were reviewed under federal, state, and local evaluation criteria for their potential historic significance by Carey & Co., consulting architectural historians for the proposed project. Specifically, Carey & Co. found that the Philbrick Boat Works building did not meet the federal or state criteria for listing on the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR). The building was not rated in the Oakland Cultural Heritage Survey (OCHS). In Carey & Co.'s opinion the property at 603 Embarcadero does not appear to be of Oakland Landmark quality because it is not an outstanding or especially fine architectural example and it does not possess extreme or major historical importance." (DEIR Appendix G)

Preliminary Evaluations & Additional Detailed History

In June, 2005, the tenant who leases 603 Embarcadero (Philbrick Boat Works) from the Port of Oakland, submitted a Notice of Intent to Submit an Oakland Landmark Application form to the Oakland LPAB, as well as a detailed history of the building prepared by the tenant. OCHS staff and the tenant/applicant prepared a preliminary landmarks evaluation tally worksheet in a pre-application discussion of the nomination, which, based on the information provided by the tenant/applicant, gave the building high marks for cultural significance.

Both the preliminary evaluation prepared by OCHS and the detailed history of the building prepared by its tenant suggest that the Philbrick Boat Works could be considered a historical resource because it is the site of the "last remaining wooden boat builder on the Oakland Waterfront operating in the last remaining original Port of Oakland warehouse." The application materials also indicate that the building was constructed in 1935, not 1947, as described in the DEIR.

While the building may pre-date 1947, Port documents state that it was built in 1947. Therefore, the building was assigned this construction date. The possibility that the building may have been constructed up to 12 years earlier has little or no bearing on its historical significance, since Carey & Co.'s evaluation considered the building to be 45-50 years old or older regardless of its actual date of construction. Age is only one of many considerations used to evaluate a building and would not alone determine its historic significance.

A determination of the accuracy of the tenant's assertion that the building houses the "last remaining wooden boat builder on the Oakland Waterfront operating in the last remaining original Port of Oakland warehouse" would require a full investigation of the existence of all other wooden boat builders in Oakland, as well as all other Port of Oakland warehouses dating from this time period (circa 1935) and the various maritime activities that occur within them. The tenant has not provided this documentation to the City.

Philbrick Boat Works was one of many maritime enterprises that operated along the Oakland waterfront, including Hurley Marine Works, Hanlon's Boat Yards Pacific Drydocks, Merritt Shipyards and others. The building's association with Oakland's maritime industry as a long-time builder of wooden boats, while likely rare and somewhat interesting, would not alone qualify it as a historic resource on an individual level. Moreover, the building is not located in a historic district.

Landmark and Heritage Property Eligibility and Evaluation

In order to determine whether a property is eligible as a landmark, the property is rated under the City's evaluation criteria on an evaluation tally sheet. The tally sheet uses numerical scores that are added together to form a total score that is converted into an alphabetical rating; A, B, C, or D. Properties receiving an A or B rating are considered eligible landmarks. Properties rated C or D would not be considered eligible landmarks. On the preliminary evaluation work sheet, Staff assigned the building with a rating of B (23-34 points), which indicates that the building could be eligible as an Oakland landmark.

In December, 2005, Carey and Co., completed a subsequent review of the property to confirm the OCHS staff's preliminary findings about the building's potential historical significance and to reevaluate the building for landmark eligibility using the city's evaluation tally sheet. Carey and Co., reviewed the Notice of Intent Form and supporting materials, conducted a site visit and reviewed additional archival research and based on this additional information not available during its initial investigation conducted for the DEIR . (This review is provided as **Appendix B** to this FEIR). In Carey & Co.'s subsequent review, the total numerical score on the evaluation tally sheet did not rise above a C rating. Therefore, the Philbrick Boat Works building would not qualify as an Oakland landmark under the city's landmark evaluation criteria. In addition, Carey & Co. found no evidence that Philbrick Boat Works helped establish the Oakland waterfront or that its founder, Don Philbrick, helped establish, promote, or develop even the local boat

building industry. At the peak of Philbrick's business in the 1950s, he employed only six people, and therefore, had a relatively minor role in the history of Oakland's waterfront when compared to the larger and more established boat manufacturers in the area.

At the January 9, 2006 LPAB hearing on the landmark application, the Board adopted the finding that the Philbrick Boat Works did not meet the City's landmark eligibility requirements.

Carey & Co. also evaluated the building based on the OCHS evaluation tally sheet and concluded that it would not quality as a Heritage Property because its rating did not rise above a D rating. Staff's preliminary total on the OCHS tally sheet resulted in a C rating. At the January 9, 2006 LPAB hearing, the board adopted the finding that the Philbrick Boat Works did not meet the City's criteria for a Heritage Property designation.

In summary, based on a review of the Notice of Intent Form and supporting materials, a site visit, photographic documentation, additional archival research conducted at local libraries and other depositories of historical information, and completion of Oakland's evaluation tally sheets, Carey & Co. confirmed that the building does not warrant Oakland landmark or heritage status. Carey & Co.'s determination has been confirmed by the LPAB determination that the building does not meet either the City's landmark or heritage designation criteria. As such, the assertion in the DEIR that the Philbrick Boat Works building is not a historic resource for CEQA purposes and that its potential demolition resulting from the proposed project would be a less-than-significant impact, is accurate and supported by the evidence provided herein.

O-2 The comment is related to the description of the project rather than the adequacy of the environmental evaluation. CEQA does not require the disclosure of ownership of historic buildings that would be demolished as part of a proposed project (i.e., public vs. private ownership). CEQA does, however, require disclosure of a proposed project's potential effects to such resources, including demolition. These potential effects are described in DEIR Section IV.E (Cultural Resources).

COMMENT LETTER P

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October 19, 2005

Margaret Stanzione, Project Planner
City of Oakland
Community and Economic Development Agency
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

RE: Comments on DEIR, Oak to Ninth Avenue

Dear Ms. Stanzione:

These comments are submitted on the Draft Environmental Impact Report (DEIR) for the proposed Oak to Ninth Avenue development of Oakland Harbor Partners.

Save The Bay is the oldest and largest organization working to protect and restore San Francisco Bay and promote public access to its shoreline. Save The Bay's 10,000 members have worked throughout the region since 1961, led the campaign to establish the San Francisco Bay Conservation and Development Commission, and have been active in efforts to reconnect the people of Oakland to their Bay shoreline for decades. Save The Bay campaigned for Measure DD to provide resources for improvement of Oakland shoreline parks and public access, and annually engages thousands of Oakland students and adults in Bay restoration, stewardship, and on-the-water education.

The DEIR incorrectly asserts that the project would be consistent with most Estuary Plan policies (IV.A-13).

The Oakland Estuary Policy Plan (EPP) was produced by a thorough public process, adopted by the City Council and incorporated in the General Plan in 1999, and states, in part:

> "Shoreline access and public space policies are intended to establish this area of the Estuary as the major recreational destination in the city. The Plan recommends a series of large open spaces, intended to provide for awide variety of recreational experiences. Developing a series of well-defined open spaces would change the entire nature of the waterfront in this area, transforming it from an industrial backwater into a recreational centerpiece of the city. In total, these sites would represent one of the most significant additions of urban parkland within the entire Bay Area. They would create both a regional and local asset of major proportions."

P-1

SAVE THE BAY

P

In fact, the project described in the DEIR is inconsistent with the EPP in several significant ways: P-1 (CONT.)

1. The EPP called for the dominant purpose of this site to be recreation and commercial. The proposed project emphasizes residential use instead. P-2

2. Most of the alternatives described in this DEIR provide significantly less open space and public use than established in the EPP, which was itself the result of a compromise. The DEIR admits that the project would provide only 40 percent of the open space delineated in the EPP (IV.L-16). The open space that is provided is designed to benefit condominium owners, not to encourage and invite use by the public. The project significantly defers completion of Bay Trail segments until as late as 2018. These critical public access components should be required at the outset of any project on the site. The EPP required creation of festival areas, but those would be precluded by the project and its 3,100 residential units. These aspects of the proposal are also inconsistent with the San Francisco Bay Plan's requirements for maximum feasible public access. P-3 P-4 P-5 P-6 P-7

3. The development's design is of significantly greater bulk, height and density that established in the EPP, and "walls off" the estuary by blocking visibility of the water and Estuary Park from public view, rather than reconnecting the people of Oakland to their shoreline. The EPP requires opening the water to the public, in part, by ensuring views from the streets off the Embarcadero. These aspects of the proposal are also inconsistent with the San Francisco Bay Plan's requirement that views of the Bay be maintained, especially from new streets. The DEIR should not compare these aspects of the project to the current site use, but instead to the profile of future use articulated in the EPP. P-8 P-9

The DEIR incorrectly asserts that it may serve as a substitute for the Oak to Ninth area Specific Plan required by the EPP.

The project proponent is impermissibly ignoring a mandated Specific Plan process that would have permitted extensive input and scrutiny from the public, Planning Commission and City council of any attempt to undermine the EPP's requirements regarding open space, public access, density and views.

As noted above, the project is inconsistent with the Estuary Plan, and the DEIR's assertion that it may substitute for a Specific Plan is erroneous in several respects: P-10

1. A Specific Plan should describe optimal development of the Oak to Ninth area consistent with the EPP, not erode the EPP to endorse a developer's preferred project.

2. A Specific Plan should be developed through a focused community planning effort and through city-sponsored public hearings, not "declared" by blessing a specific developer's proposal.

COMMENT LETTER P

3. The City and the Port of Oakland are mandated by the EPP within the General Plan to prepare a Specific Plan, and have taken no affirmative action to eliminate that mandate. Because the General Plan has not been duly amended, this mandate stands. P-10 (CONT.)

Oakland should be reclaiming its waterfront for the benefit of all residents of the city, after so much of it has been off limits to generations of people. Any project at the Oak to Ninth street site must be consistent with the EPP and create the "major recreational destination in the City" envisioned by the plan, which was developed with and for all the people of Oakland and is enshrined in the city's General Plan. Elements of Project Alternatives 2 and 3 come the closest to achieving this vision and implementing the city's General Plan. P-11

Thank you for your consideration of these comments.

Sincerely,

David Lewis
Executive Director

Letter P– Save the Bay

P-1 A comprehensive discussion of how the project relates to the Estuary Policy Plan is provided on DEIR pp. IV.A-11 through IV.A-17, and under Impact A.2 on pp. IV.A-36 and IV.A-37. As concluded there, the project would not conflict with Estuary Plan policies. The project is consistent with the overall goal cited by the commenter: "the project would introduce a series of large open spaces along the waterfront that would be a major recreation designation in the city"; would transform the area from an industrial backwater to a recreational centerpiece and a regional and local asset. The DEIR also discusses that the project would be consistent with policies that address the need for improved environmental conditions of the site (biological resources, remediation, and shoreline improvements).

The DEIR clarifies that conflict with a General Plan policy does not inherently result in a significant impact on the environment within the context of CEQA (DEIR pp. IV.A-6 and IV.A-36). City decisionmakers, in deciding whether to approve the project, will assess whether the project is consistent with the overall policies of the General Plan and must balance competing General Plan goals and objectives as part of is consideration.

P-2 Impact A.2 identifies the potentially significant impact from the project's proposed residential land use component, which the Estuary Policy Plan does not explicitly identify as an encouraged or envisioned land use for the Oak-to-Ninth District (although it establishes a maximum residential density). The project proposes a General Plan Amendment (Mitigation A.2a) to create a new Planned Waterfront Development-1 (PWD-1) land use classification and incorporate it into the Zoning Regulations and map. Among other things, approval of the proposed amendment would include establishing "residential" as a permitted land use for the project area.

P-3 Comment is noted. The project would provide a total of 20.7 acres of new open space. The Estuary Plan does not provide open space acreage assumptions, however, a total of 35.7 acres of new open space was analyzed in the Estuary Plan EIR and illustrated in the Estuary Policy Plan (DEIR p. IV.L-16 and Table IV.L-2). City decisionmakers of the project will ultimately consider the adequacy of the proposed new parks and open space acreage.

P-4 The comment suggests that the proposed open space design aims to benefit condominium owners and would not encourage and invite use by the public. The comment does not elaborate, therefore this response assumes the comment refers to the location of residential (and retail) development against the Embarcadero (except for Channel Park at Lake Merritt Channel and Gateway Park at Clinton Basin) and that may limit visual access to some of the proposed new open spaces from the Embarcadero thoroughfare. To some extent, as discussed in Master Response H, this is a design consideration of the project, which the City will consider in its deliberations beyond its consideration of CEQA impacts to physical environment. To the extent that this is a "views" issue, it is addressed in Section IV.K (Visual Quality and Shadow) of the DEIR.

To assist the City decisionmakers, as required by CEQA, the DEIR analyzes a reasonable range of project alternatives. Alternative 2 (Enhanced Open Space / Partial Ninth Avenue Terminal Preservation and Adaptive Reuses) depicted in Figure V-2 on DEIR p. V-23 is provided to allow an alternative site layout (among other characteristics). Alternative 2 realigns the Embarcadero to run adjacent to new waterfront open space and locates new residential and commercial uses north of the Embarcadero. This configuration would allow additional visual access to the new open spaces (as would the project), however, other considerations include that locating open space adjacent to a major road (such as the Embarcadero) could discourage use of the space for certain users and activities. Additionally, a comprehensive signage program would guide the public to the new park/open space and trail system..

P-5 See Master Response G.

P-6 The comment suggests that the proposed residential use would preclude the creation of festival areas called for by the Estuary Policy Plan. The proposed land use would not preclude the use of existing or new open spaces for festivals or any public special event. As stated starting on DEIR p. III-18, “The project sponsor is not proposing to hold events (such as concerts or festivals) at the project site. However, it is possible that in the future, upon further review and approval by the City of Oakland, entities could sponsor such organized events at the new public open spaces created by the project.” Parks and open spaces likely would be owned and operated by the City of Oakland which would consider and grant/permit special activities. The ownership and maintenance responsibilities of parks and open spaces do not affect the project’s impacts on the physical environment under CEQA. The project sponsor would be responsible for installing improvements and maintenance of parks/open spaces in the project area.

P-7 See Response to Comment B-8.

P-8 See Response to Comment B-8.

P-9 The comment states that the DEIR should not compare the project to the current site use, but instead to the “profile of future use articulated in the EPP [Estuary Policy Plan].” The alternatives analysis provided in Chapter V of the DEIR describes and analyzes a no project scenario that generally compares the project to existing conditions (Alternative 1A: No Project). Additionally, as required by CEQA for a project proposing a General Plan change, the DEIR describes and analyzes a no project scenario that compares the project to the buildout envisioned in the Estuary Policy Plan (Alternative 1B: No Project / Estuary Policy Plan).

P-10 See Master Response A.

P-11 he comment expresses an opinion about what development plan should be approved and is noted. See Response P-1 through P-9. Additionally, prior to its action on the project, City decisionmakers will evaluate the project alternatives analyzed in Chapter V of the

EIR and ultimately reject these alternatives and adopted the proposed project, or alternatively elect one of the alternatives analyzed instead of the project.

COMMENT LETTER Q

SIERRA CLUB
FOUNDED 1892

Northern Alameda County Regional Group
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City of Oakland
Planning & Zoning Division

October 24, 2005

Margaret Stanzione, Project Planner
City of Oakland
Community and Economic Development Agency
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

Re: Comments on DEIR for Oak to Ninth Avenue Project

Dear Ms. Stanzione,

Our major overall concern regarding this project is the loss of public lands on the estuary for private development after years of a public process that designated the majority of the site for public open space. And there was no Specific Plan process as called for in the adopted Estuary Policy Plan **BEFORE** this project was presented. Q-1

We would like to point out the following ways that the DEIR is inadequate and misleading.

Missing Alternative
The obvious alternative that needs to be studied is a version of the Estuary Policy Plan that replaces the commercial development designated around the Crescent Park with housing. With most of this housing in widely spaced slender towers ala Vancouver in addition to the 42 units of work/live adjacent to Fifth Avenue Point, a reasonable number of units between 1200 to 1800 could be accommodated. The Crescent Park facing the 1920's portion of the Ninth Avenue Terminal and part of the 50's portion remaining as an open shed would clearly delineate the public space. The 32' platform between the Terminal and the water with activity spilling out from it would serve as a lively, popular boardwalk for the Bay Trail. The 40' high Ninth Avenue Terminal will be lower than most of the residences since their first few levels need to accommodate retail and parking. Q-2

Traffic Impacts Based on Fallacious Assumptions
The data generated for traffic impacts and air quality is based on the unrealistic premise described in "Evaluation of Project's Proposed Parking Supply" beginning on page IV.B-70, that each household will have only one car. It is hard enough to get banks to finance a 1:1 parking ratio near good transit but this is like a suburban development where you have to drive to transit and so the suburban standard of 1:1.46 is the relevant one. This would mean the addition of 1426 cars. The increased auto use will affect the Level of Service at each intersection as well as air quality and will change it from unacceptable to horrendous. Q-3

Actually a project of 1800 units with a ratio of 1:1.46, that is, 2628parking spaces plus 434 for commercial and the marina and 472 for events would be equal to the 3534 spaces studied for the proposed project. So the traffic impacts studied would be correct for a project of 1800 units.

Transportation Mitigations:
The development will generate significant impacts that are not mitigated. Mitigation measures include: providing an HOV/bus bypass lane from the project towards other transit connections, constructing a pedestrian overpass over the train tracks, constructing a Class 2 bike lane as designated in the Oakland bike plan that would connect with the city bike networks, and funding peak hour 15 minute headway transit service to the International Boulevard AC Transit trunk route and Lake Merritt BART station, including the estimated capital and maintenance costs for purchasing additional buses to serve the project. Q-4

Without these mitigations, the project will contribute to non-attainment of the Clean Air Plan, will shift the area's mode share to more single-occupant vehicles, and generate significant traffic and air pollution. Cars will idle and be stuck in traffic during the many train stops during the day. The project is also not walking distance to BART or transit, so occupants will mostly use cars unless adequate transit, pedestrian, and bike infrastructure and transit level of service is provided.

Air Quality Data is Irrelevant
The air quality data is irrelevant because it is not based on monitoring at this site adjacent to the I-880 freeway. The data is taken from too great a distance, the Alice Street and West Oakland monitoring stations. Q-5

No Analysis of the Health Impacts to Residents at this Site
There is some allusion to safety risk in case of medical emergencies and fire due to the poor accessibility of this site but **NO** chapter on the health risks of residing next to a heavily used freeway.

In April 2005, the California Air Resources Board published an Air Quality and Land Use Handbook in which they recommended to "avoid siting new sensitive land uses within 500 feet of a freeway." Sensitive land uses are defined as "residences, schools, daycare centers, playgrounds, or medical facilities." About half of the units are within 500 feet of the Nimitz Freeway. (The relevant pages from the Air Board Handbook are attached.) Q-6

University of Southern California researchers concluded "children who lived a quarter mile from a freeway, for example, had an 89% higher risk of asthma than children living about a mile from a freeway." The whole site is within one-quarter mile of the freeway. Furthermore another team of researchers at USC found "that the chronic health effects of smog among adults are two to three times greater than earlier research showed." (Quotes are from attached article.)

Yet there has been no monitoring of air quality at this site. Not only is data required for this Environmental Impact Report but, if people are to reside on this site, constant monitoring will be needed to warn sensitive Q-7

individuals (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality) when it is above an acceptable level.

The Open Space Only Meets the Needs for Local-Serving Parkland.
Even by counting the site of the Ninth Avenue Terminal, the parkland of 20.7 acres only meets the standard of the Open Space, Conservation, and Recreation (OSCAR) Element of the General Plan for local-serving parkland, 4 acres / 1000 residents. For the citywide use visualized for this site, OSCAR calls for 10 acres of total parkland per 1,000 residents. With 5,000 anticipated residents that would be 50 acres of new parkland, more than twice the proposed park area. This belies the claim that the park area on this land owned by the public would benefit the larger citywide population. Q-8

It is time to go back to the drawing board and engage in a citywide Specific Plan process.

Sincerely,

Joyce Roy

Joyce Roy
Member of Executive Committee
Northern Alameda County Group

Attachments:
Excerpts from California Air Resources Board "Air Quality and Land Use Handbook
Sept. 21, 2005 Los Angeles Times article titled "Study Links Freeways to Asthma Risk."

COMMENT LETTER Q

AIR QUALITY AND LAND USE HANDBOOK: A COMMUNITY HEALTH PERSPECTIVE

April 2005

California Environmental Protection Agency
California Air Resources Board

Table 1-1

Recommendations on Siting New Sensitive Land Uses Such As Residences, Schools, Daycare Centers, Playgrounds, or Medical Facilities*

Source Category	Advisory Recommendations
Freeways and High-Traffic Roads	• Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution Centers	• Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	• Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. • Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	• Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	• Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	• Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloro-ethylene	• Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	• Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

*Notes:

- These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

Table 1-2

Summary of Basis for Advisory Recommendations

Source Category	Range of Relative Cancer Risk[1,2]	Summary of Basis for Advisory Recommendations
Freeways and High-Traffic Roads	300 – 1,700	• In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70% drop off in particulate pollution levels at 500 feet.
Distribution Centers[3]	Up to 500	• Because ARB regulations will restrict truck idling at distribution centers, transport refrigeration unit (TRU) operations are the largest onsite diesel PM emission source followed by truck travel in and out of distribution centers. • Based on ARB and South Coast District emissions and modeling analyses, we estimate an 80 percent drop-off in pollutant concentrations at approximately 1,000 feet from a distribution center.
Rail Yards	Up to 500	• The air quality modeling conducted for the Roseville Rail Yard Study predicted the highest impact is within 1,000 feet of the Yard, and is associated with service and maintenance activities. The next highest impact is between a half to one mile of the Yard, depending on wind direction and intensity.
Ports	Studies underway	• ARB will evaluate the impacts of ports and develop a new comprehensive plan that will describe the steps needed to reduce public health impacts from port and rail activities in California. In the interim, a general advisory is appropriate based on the magnitude of diesel PM emissions associated with ports.
Refineries	Under 10	• Risk assessments conducted at California refineries show risks from air toxics to be under 10 chances of cancer per million.[4] • Distance recommendations were based on the amount and potentially hazardous nature of many of the pollutants released as part of the refinery process, particularly during non-routine emissions releases.
Chrome Platers	10-100	• ARB modeling and monitoring studies show localized risk of hexavalent chromium diminishing significantly at 300 feet. There are data limitations in both the modeling and monitoring studies. These include variability of plating activities and uncertainty of emissions such as fugitive dust. Hexavalent chromium is one of the most potent toxic air contaminants. Considering these factors, a distance of 1,000 feet was used as a precautionary measure.
Dry Cleaners Using Perchloro-ethylene (perc)	15-150	• Local air district studies indicate that individual cancer risk can be reduced by as much as 75 percent by establishing a 300 foot separation between a sensitive land use and a one-machine perc dry cleaning operation. For larger operations (2 machines or more), a separation of 500 feet can reduce risk by over 85 percent.

Freeways and High Traffic Roads

Air pollution studies indicate that living close to high traffic and the associated emissions may lead to adverse health effects beyond those associated with regional air pollution in urban areas. Many of these epidemiological studies have focused on children. A number of studies identify an association between adverse non-cancer health effects and living or attending school near heavily traveled roadways (see findings below). These studies have reported associations between residential proximity to high traffic roadways and a variety of respiratory symptoms, asthma exacerbations, and decreases in lung function in children.

One such study that found an association between traffic and respiratory symptoms in children was conducted in the San Francisco Bay Area. Measurements of traffic-related pollutants showed concentrations within 300 meters (approximately 1,000 feet) downwind of freeways were higher than regional values. Most other studies have assessed exposure based on proximity factors such as distance to freeways or traffic density.

These studies linking traffic emissions with health impacts build on a wealth of data on the adverse health effects of ambient air pollution. The data on the effects of proximity to traffic-related emissions provides additional information that can be used in land use siting and regulatory actions by air agencies. The key observation in these studies is that close proximity increases both exposure and the potential for adverse health effects. Other effects associated with traffic emissions include premature death in elderly individuals with heart disease.

Key Health Findings

- Reduced lung function in children was associated with traffic density, especially trucks, within 1,000 feet and the association was strongest within 300 feet. (Brunekreef, 1997)
- Increased asthma hospitalizations were associated with living within 650 feet of heavy traffic and heavy truck volume. (Lin, 2000)
- Asthma symptoms increased with proximity to roadways and the risk was greatest within 300 feet. (Venn, 2001)
- Asthma and bronchitis symptoms in children were associated with proximity to high traffic in a San Francisco Bay Area community with good overall regional air quality. (Kim, 2004)
- A San Diego study found increased medical visits in children living within 550 feet of heavy traffic. (English, 1999)

In these and other proximity studies, the distance from the roadway and truck traffic densities were key factors affecting the strength of the association with adverse health effects. In the above health studies, the association of traffic-related emissions with adverse health effects was seen within 1,000 feet and was

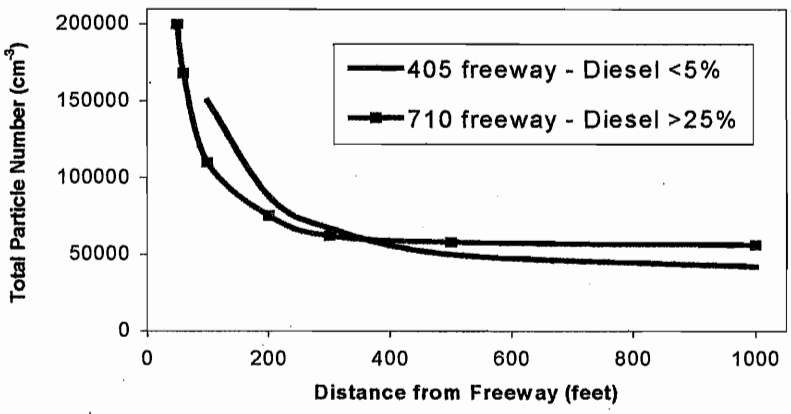
strongest within 300 feet. This demonstrates that the adverse effects diminished with distance.

In addition to the respiratory health effects in children, proximity to freeways increases potential cancer risk and contributes to total particulate matter exposure. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risk from motor vehicle traffic – diesel particulate matter (diesel PM) from trucks, and benzene and 1,3-butadiene from passenger vehicles. On a typical urban freeway (truck traffic of 10,000-20,000/day), diesel PM represents about 70 percent of the potential cancer risk from the vehicle traffic. Diesel particulate emissions are also of special concern because health studies show an association between particulate matter and premature mortality in those with existing cardiovascular disease.

Distance Related Findings

A southern California study (Zhu, 2002) showed measured concentrations of vehicle-related pollutants, including ultra-fine particles, decreased dramatically within approximately 300 feet of the 710 and 405 freeways. Another study looked at the validity of using distance from a roadway as a measure of exposure

Figure 1-1
Decrease In Concentration of Freeway Diesel PM Emissions With Distance



to traffic related air pollution (Knape, 1999). This study showed that concentrations of traffic related pollutants declined with distance from the road, primarily in the first 500 feet.

These findings are consistent with air quality modeling and risk analyses done by ARB staff that show an estimated range of potential cancer risk that decreases with distance from freeways. The estimated risk varies with the local meteorology, including wind pattern. As an example, at 300 feet downwind from a freeway (Interstate 80) with truck traffic of 10,000 trucks per day, the potential cancer risk was as high as 100 in one million (ARB Roseville Rail Yard Study). The cancer health risk at 300 feet on the upwind side of the freeway was much

less. The risk at that distance for other freeways will vary based on local conditions – it may be higher or lower. However, in all these analyses the relative exposure and health risk dropped substantially within the first 300 feet. This phenomenon is illustrated in Figure 1-1.

State law restricts the siting of new schools within 500 feet of a freeway, urban roadways with 100,000 vehicles/day, or rural roadways with 50,000 vehicles with some exceptions.[2] However, no such requirements apply to the siting of residences, day care centers, playgrounds, or medical facilities. The available data show that exposure is greatly reduced at approximately 300 feet. In the traffic-related studies the additional health risk attributable to the proximity effect was strongest within 1,000 feet.

The combination of the children's health studies and the distance related findings suggests that it is important to avoid exposing children to elevated air pollution levels immediately downwind of freeways and high traffic roadways. These studies suggest a substantial benefit to a 500-foot separation.

The impact of traffic emissions is on a gradient that at some point becomes indistinguishable from the regional air pollution problem. As air agencies work to reduce the underlying regional health risk from diesel PM and other pollutants, the impact of proximity will also be reduced. In the meantime, as a preventative measure, we hope to avoid exposing more children and other vulnerable individuals to the highest concentrations of traffic-related emissions.

Recommendation

- Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.

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[2] Section 17213 of the California Education Code and section 21151.8 of the California Public Resources Code. See also Appendix E for a description of special processes that apply to school siting.

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Distribution Centers

Distribution centers or warehouses are facilities that serve as a distribution point for the transfer of goods. Such facilities include cold storage warehouses, goods transfer facilities, and inter-modal facilities such as ports. These operations involve trucks, trailers, shipping containers, and other equipment with diesel engines. A distribution center can be comprised of multiple centers or warehouses within an area. The size can range from several to hundreds of acres, involving a number of different transfer operations and long waiting periods. A distribution center can accommodate hundreds of diesel trucks a day that deliver, load, and/or unload goods up to seven days a week. To the extent that these trucks are transporting perishable goods, they are equipped with diesel-powered transport refrigeration units (TRUs) or TRU generator sets.

The activities associated with delivering, storing, and loading freight produces diesel PM emissions. Although TRUs have relatively small diesel-powered engines, in the normal course of business, their emissions can pose a significant health risk to those nearby. In addition to onsite emissions, truck travel in and out of distribution centers contributes to the local pollution impact.

ARB is working to reduce diesel PM emissions through regulations, financial incentives, and enforcement programs. In 2004, ARB adopted two airborne toxic control measures that will reduce diesel PM emissions associated with distribution centers. The first will limit nonessential (or unnecessary) idling of diesel-fueled commercial vehicles, including those entering from other states or countries. This statewide measure, effective in 2005, prohibits idling of a vehicle more than five minutes at any one location.[3] The elimination of unnecessary idling will reduce the localized impacts caused by diesel PM and other air toxics

[3] For further information on the Anti-Idling ATCM, please click on: http://www.arb.ca.gov/toxics/idling/outreach/factsheet.pdf

For Your Information from the Sierra Club

Published Wednesday, September 21, 2005, in the Los Angeles Times

Study Links Freeways to Asthma Risk
USC research adds to evidence that air pollution can cause respiratory problems.

By Deborah Schoch

The closer that children live to Southern California freeways, the greater their risk of being diagnosed with asthma, USC researchers have found in a study that bolsters growing evidence that air pollution can cause asthma.

Children who lived a quarter mile from a freeway, for example, had an 89% higher risk of asthma than children living about a mile from a freeway, according to the new research.

Even in areas such as Santa Maria, with generally good air quality, the researchers found that the risk of asthma increased for children who lived near freeways.

Separately, a different team of University of Southern California researchers has concluded that the chronic health effects of smog among adults are two to three times greater than earlier research showed. The team pinpointed a link between the tiny particles contained in air pollution and increased deaths from heart disease.

Articles on the two studies, conducted in Southern California, appear in the November issue of the journal Epidemiology.

USC released the findings Tuesday.

The freeway article is part of an ongoing landmark study of how air pollution affects children's respiratory health. That study, which began in 1993, produced findings last fall that showed smog can permanently stunt lung growth in children and lead to lifelong health problems.

Dr. Elisa Nicholas, project director for the Long Beach Alliance for Children with Asthma, called the freeway study significant. "There's increasing evidence demonstrating a link between air pollution and the development of asthma," Nicholas said Tuesday. "The more evidence we have, the more political will there will be to clean up emissions from the freeways."

Earlier studies have demonstrated a relationship between children's asthma and traffic exposure, but results have not been consistent as to whether air pollution causes asthma, according to the article by a team of seven researchers at the USC Keck School of Medicine.

Nor has research been conducted in Southern California, said lead author James Gauderman, a USC associate professor of preventive medicine.

So researchers tracked 208 children living in 10 cities in the region, including 31 children, or 15%, with asthma.

They installed air samplers outside the children's homes to measure nitrogen dioxide for two-week periods in the summer and fall of 2000. Nitrogen dioxide is produced by pollutants from cars and trucks.

Researchers measured the distance between each home and freeways, and counted how many vehicles traveled within 164 yards of the homes.

They found that children with higher levels of nitrogen dioxide near their homes were more likely to have asthma. For each increase of 5.7 parts per billion of the pollutant, the risk of asthma increased by 83%, the study states.

The researchers have not determined that nitrogen dioxide is causing asthma, but it is found with other pollutants -- including particulate matter that has been tied to other diseases.

Researchers also found that air pollution from freeways influenced nitrogen dioxide levels more strongly than pollution from smaller roads. Gauderman said that the current findings do not allow researchers to determine at what distance from a freeway children can avoid an increased asthma risk.

He emphasized that the study does not show that every child living near a freeway gets asthma. "We have to realize that even for a kid to live very close to a freeway, odds are that they're not going to get asthma. There's only a fraction of kids that get asthma," he said Tuesday.

Gauderman also said the study does not provide the type of information that researchers can use to advise individual parents.

"The message is probably more general, in terms of thinking about not planning tracts or schools close to a major freeway," he said. The findings might also be useful for government regulators studying the impacts of air pollution.

"From a regulatory standpoint, it might suggest that we need to look not only at background air quality but also the more local exposures that one might have by living next to a major roadway," Gauderman said.

The study involved children living in the cities of Alpine, Atascadero, Lake Elsinore, Lancaster, Long Beach, Mira Loma, Riverside, San Dimas, Santa Maria and Upland.

[press release http://www.usc.edu/uscnews/stories/10555.html]

Letter Q– Sierra Club

Q-1 The project would contain a mix of private development areas (residential and retail/commercial development, marinas) and public areas that the City would likely own (parks, open spaces, Ninth Avenue Terminal Bulkhead Building, streets and public paths). Although the project sponsor, a private entity, would acquire the project site from the Port of Oakland, a public entity, the project would not result in a loss of public lands on the Estuary in terms of areas that are publicly accessible for purposes of recreation and open space enjoyment. In fact, the project site would be more accessible after implementation of that project than it is today. Additionally, pursuant to Senate Bill 1622 (Exchange Act), an exchange parcel for lands to be removed from the Tidelands Trust designation on the project site, and would be acquired somewhere in Oakland in accordance with the terms of SB 1622. Therefore, it is not anticipated that there would be a loss of lands as a result of the project. See Master Response A regarding preparation of a specific plan.

Q-2 The comment proposes an additional alternative to the project that is a version of the Estuary Policy Plan that retains the 1920s portion of the Ninth Avenue Terminal, maintains the 1950s portion as an open shed and replaces the commercial development designated around the Crescent Park with housing. Chapter V (Alternatives) of the DEIR analyze Alternative 2 (Enhanced Open Space / Partial Ninth Avenue Terminal Preservation and Adaptive Reuse); Alternative 3 (Reduced Development/ Ninth Avenue Terminal Preservation); and a Full Ninth Avenue Terminal Preservation and Adaptive Reuse Sub-Alternative. These alternatives provide the City with the basic range of preservation scenarios to consider as it evaluates the proposed project. It is not necessary or required to address every variation that could occur within the range of alternatives. Additionally, the comment suggests an alternative that is a variation of the Estuary Policy Plan (residential use around Crescent Park). The alternatives in the DEIR specifically represent feasible alternatives to the proposed project.

In summary, the alternative characteristics described by the comment are incorporated in the alternatives analyzed in the DEIR. Additionally, as discussed in detail in Master Response B, the selected alternatives analyzed in the DEIR constitute ‘a range of reasonable alternatives to the project…which would feasibly attain most of the basic objectives of the project’ (CEQA Guidelines Section 15126[a]).” City decisionmakers will ultimately decide on the adequacy of the range of alternatives included in the DEIR.

Q-3 See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management measures. In addition, factors that affect peak parking demand and factors that affect vehicle trip generation are not the same, particularly peak-hour trip generation, and therefore, the commenter is mistaken in linking these two analyses. For example, peak-hour trip generation is influenced by a person’s purpose and timing of the trip, which is not linked to a vehicle parked in the garage. Also of note is that the ITE-published traffic generation rates are taken from numerous surveys of similar land use types, and the condominium/townhouse sites in the

surveys average about two cars per unit (i.e., more than assumed in the project's parking supply). As a result, a change in estimated parking demand does not trigger a corresponding change in the estimated trip generation.

Q-4 See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures.

Q-5 The comment asserts that the air quality data is irrelevant because it is not based on monitoring at the site adjacent to the I-880 freeway, but on data taken from too great a distance from the project site. The information contained in DEIR Table IV.C-3 represents the most current and regionally specific air quality monitoring data available. Although the data may not describe the air quality onsite at the project location, the Alice Street and West Oakland monitoring stations are the closest stations to the project and effectively establish the background ambient air quality and air quality trends for criteria pollutants in the general project vicinity. Furthermore, localized air quality concerns near I-880 would be for carbon monoxide and diesel particulate Matter (DPM). The impact of carbon monoxide is analyzed in Impact C.3, and the impact of DPM is analyzed in Impact C.5. Both of these localized air quality impacts were determined to be less than significant.

Q-6 The health risks from exposure to diesel exhaust are reported in the Air Quality Section of the DEIR, starting on p. IV.C-21, *Toxic Air Contaminants*. The health risks from project emissions were evaluated, as well as health risks at the project site from exposure to diesel emissions on I-880, the rail line north of the site, and from boats in the Estuary, south of the site.

The statements in the comment about siting facilities near freeways (and that were taken from the Air Quality Land Use Handbook [ARB]), are recommendations based on the assumption that a facility would be located in the prevailing (downwind) direction of a freeway. The DEIR analysis agrees with the recommendation in the Handbook for cases where a project would be located in the prevailing downwind direction of the freeway. However, meteorological data from Oakland Airport, and which are representative of the project site, indicate that the proposed project site is upwind of the freeway and upwind of the rail line for a considerable portion of the time (about 90 percent of the time), and downwind less than 10 percent of the time. The Handbook states on Page 9:

"The cancer health risk at 300 feet on the upwind side of the freeway was much less."

The DEIR took into consideration site specific meteorological conditions when evaluating exposure to diesel exhaust, and it concluded that the freeway would have a much smaller effect on air quality at the project site than the condition described in the Handbook.

The comment quotes the University of Southern California (USC) Study about children having higher risks of asthma if they are located near freeways. The Study again assumes

that the children would be downwind of the freeways for a considerable portion of time. Again, the project site is located upwind of major freeways. Since there are no major diesel emission sources in the upwind direction of the project site, the conditions are better than those assumed in the USC Study. In addition, the measured ozone levels (the key ingredient in smog) at the monitoring stations that are most representative of the project site (DEIR Table IV.C-3) indicate that ozone levels over five years have been below both the state and federal standards. This indicates that, although there are areas in the region that exceed these standards, the levels at the project site are better than conditions referred to in the USC Study.

Q-7 The DEIR adequately describes existing air quality at the site on DEIR p. IV.C-6, and it relies on monitoring data from several stations near the Project site. One monitoring station is one half mile away and two other stations are two and three miles away. The data from these stations, which are reported in Table IV.C-3 of the DEIR, show the measured long-term average levels as well as the highest short-term average levels for the area near the Project site. Since air quality will continue to be monitored at these stations in the future, and since these measured levels are reasonably representative of the Project site, air quality conditions at the Project site will continue to be monitored in the future.

In addition, future concentrations of pollutants near the Project were evaluated in the DEIR through dispersion modeling of future pollutant emissions. The concentrations estimated from the modeling, which are reported in the DEIR, show that future concentrations and health risks at the Project site would be lower than levels at locations east of the freeway, mainly because the Project site is located upwind of the freeway because of prevailing wind conditions.

Q-8 As discussed in Response B-2, the proposed resident population and park acreage would exceed the City's adopted service standard for local-serving parks (4 acres per 1,000 residents) established by the OSCAR. The comment inappropriately applies the City's proposed "total park acreage standard of 10 acres of total park acres per 1,000 residents" to the project site, concluding that 50 acres of park land would be required to serve the project's projected approximately 5,000 residents. As stated on page 4-9 of the OSCAR, this standard "should only be applied for the city as a whole and should be based on all parkland in the city, regardless of function or ownership. Oakland currently has 8.26 acres of parkland per 1,000 residents."

Whereas the 20.7 acres of new open space (and trail facilities) proposed by the project would augment the city's park acreage, the citywide service level would remain below the goal of 10 acres per 1,000 residents. To demonstrate the project's contribution to the city's citywide service level, assuming the current total citywide park acreage (3,073 acres) the projected 2025 citywide population without the project (448,460)[4], the citywide ratio would be 6.85 acres per 1,000 residents. With the 20.7 new acres proposed

[4] Total citywide projected population without the Oak to Ninth Project, as stated in DEIR Table IV.J-5, Trends for Surrounding Areas and the City of Oakland, 2000, 2005, and 2025, on page IV.J-8 of the DEIR.

by the project (for 3,094 citywide acres total) and the projected citywide population with the project (453,520)[5], the citywide ratio would be 6.82 acres per 1,000 residents. This is a highly conservative assessment since it assumes that no other future development projects in the city would provide open space, and that the numerous park and open space strategies in the OSCAR Element of the General Plan or the many improvement strategies for new and existing parks, open spaces and trail facilities (funded or not-yet-funded) that exist in community-based and regional plans would not be implemented in the future to the benefit of Oakland residents. It is important in this response to reclarify that the service standards outlined by the OSCAR are "a way to measure the need for parks and figure out where deficiencies exist (OSCAR p. 4-40)." And most importantly, the service standards are not significance criteria to determine the project's impact on the physical environment under CEQA.

5 Total citywide projected population with the Oak to Ninth Project is 453,520, as stated in DEIR Table IV.J-11, Housing, Households, Population and Employment for Oakland with the Oak to Ninth Avenue Project, on page IV.J-22 of the DEIR.

COMMENT LETTER R

Jack London
Aquatic Center

October 24, 2005

RECEIVED
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City of Oakland
Planning & Zoning Division

Margaret Stanzione
Project Planner
City of Oakland
Community and Economic Development Agency
Planning Division
250 Ogawa Plaza Ste. 3315
Oakland CA 94612

Re: <u>Comments of Jack London Aquatic Center, Inc.</u>
Oak-to-Ninth Mixed Use Development Project
Case No. ER 04-0009 (State Clearinghouse Number 2004062013
Oakland Harbor Partners, Project Sponsor

Ms. Stanzione:

Please consider the following comments of Jack London Aquatic Center, Inc. ("JLAC")[1] to the above-referenced Draft Environmental Impact Report ("EIR"), authorized by the JLAC Board of Directors.

R-1

A. <u>The limited focus of these comments</u>.

The JLAC operates the Jack London Aquatic Center ("the Aquatic Center"), which is located in Estuary Park, at the northwestern end of the proposed project. See EIR Figure III-3.

---

[1] JLAC is a community-based, Section 501(c)(3)-qualified, non-profit corporation, founded in 1993. JLAC is governed by a board of directors. It is lead by its executive director DeDe Birch and the president of its Board of Directors Robert Kidd.

In 1997, the City of Oakland engaged JLAC to build an aquatic center ("the Aquatic Center") in Oakland's Estuary Park. The cost was underwritten by the City of Oakland (primarily Measure K Open Space bond funds), the Port of Oakland, the California Coastal Conservancy, and numerous individuals and local businesses. The facility was dedicated in October 2000.

JLAC has operated the Aquatic Center since January 2002, under a management-agreement with the City of Oakland. The Aquatic Center is a public facility, operated for the benefit of the public, in pursuit of the City's recreational goals. JLAC submits herewith a copy of its 2004 annual report, which provides an overview of the Aquatic Center and its activities.

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Rowing, kayaking, and sailing at Oakland's Estuary Park
115 Embarcadero East

The project proposes to develop housing on the 2.41 acre site of the Jetro Cash & Cash warehouse, designated as "Parcel N" in the EIR. Parcel N is located immediately adjacent to the Aquatic Center.

R-1 (CONT.)

The comments below focus on the impacts that the project will have on public access to and enjoyment of *both* the Jack London Aquatic Center *and* Estuary Park.

JLAC appreciates that *some* of the comments below may be premature; *some* of the comments below may be more-appropriately raised when the developer presents its proposed designs for the project. *All* of the comments below are inspired by the draft EIR, however, and therefore JLAC takes this opportunity to raise them.

R-2

B. Comments regarding the impacts of Parcel N housing.

1. Estuary Park and the General Plan.

(a) The issues.

The General Plan of the City of Oakland currently designates Parcel N as appropriate for an expansion of Estuary Park. *If* Estuary Park were expanded to include Parcel N, the park would reach from Embarcadero to the shores of the Oakland-Alameda Estuary, thereby increasing the park's size and enhancing its access.

R-3

It is JLAC's understanding that the City of Oakland has had *no* current plans to develop Parcel N in this manner, to finance such development or to underwrite the maintenance of a park expanded in such manner.

(b) Potential mitigations.

Parcel N design opportunities. If the City amends its General Plan to allow housing on Parcel N, it should condition such amendment on site-specific design features that maximize park-related and recreation-related usages of Parcel N's ground-floor space.

R-4

By way of example, the project proponent has already suggested the development of space in Parcel N for: (i) retail canoe/kayaking activities; and (ii) low-cost space that would serve and complement the program needs of the Aquatic Center.

While JLAC does not underestimate the challenge of designing Parcel N to accommodate both the private expectations of residents and the public expectations of park-users, (i) the project proponent has previously demonstrated its ability to rise to such challenge, and (ii) the amendment of the General Plan should include such express conditions. R-4 (CONT.)

Aquatic Center design opportunities. If the City amends its General Plan to allow housing on Parcel N, it should condition such amendment on the completion of the public-access improvements related to the Aquatic Center.

These improvements include: (i) the completion of the sixth boat-bay at the Aquatic Center (for which the pilings are already in place); (ii) installation of public toilets (perhaps as an element of the sixth boat bay), which installation is currently required under existing permits of the Bay Conservation and Development Commission; and (iii) the upgrading of other elements to improve public access to and to enhance public participation at the Aquatic Center. R-5

Timing. If the City imposes such mitigation conditions, JLAC urges that such measures be implemented at the *beginning* of the project, rather than at the end. This is a critical consideration, because the EIR suggests that Parcel N will be the *last* of the parcels to be developed.

2. Parking impacts.

(a) The issues.

Both the Aquatic Center *and* Estuary Park are serviced by a public parking lot ("the East Lot") of about 69 spaces, including a number of over-sized spaces to accommodate the boat-trailers that use the public boat-launch ramp. The park is also serviced by a second parking lot ("the West Lot") of about 15 spaces, adjacent to the Portobello Condominium project.

These 84 *existing* spaces are frequently *insufficient* to serve the *current* usages of the park and the Aquatic Center. When the parking-spaces are filled, visitors are forced to park-as-park-can, up and down the Embarcadero. R-6

JLAC anticipates that housing on Parcel N will exacerbate this parking shortage. JLAC anticipates that residents and their guests will tend to park in the East Lot whenever space is available, thereby making the Aquatic Center and Estuary Park less-accessible to other members of the public. Further, it is JLAC's understanding that the proposed project will eliminate the West Lot.

(b) Potential mitigations.

East Lot design opportunities. *First*, the streets of Parcel N should *not* directly access the East Lot. That is to say, a driver should not be able to drive his/her car directly from the East Lot into the southeastern side of Parcel N. *Second,* access to the East Lot must be controlled at the Embarcadero entrance to the lot, to prevent Parcel N residents and guests from parking in the East Lot. (At the present, the locked park-lot gate is jointly controlled by Public Works Agency and JLAC.) *Third*, planners must appreciate that *ad hoc* police action (i.e., the issuing of parking citations) will *not* provide a viable solution to these anticipated problems. R-7

Additional parking. JLAC understands that the project proposes to develop additional public-parking spaces around the periphery of the project. JLAC encourages such additional parking, but does not consider that such, without the suggestions noted above, will adequately address to the serious parking-pressures that Parcel N will impose on Estuary Park and the Aquatic Center.

3. Visual aesthetics.

(a) The issues.

The EIR reports that the project proposes that the height of Parcel N housing will range between 65 feet and 86 feet. See EIR Figure IIII-5. Because the EIR is a preliminary planning document, it does not specify the actual height of the construction, does not distinguish between VARYING heights within the construction, and does not set forth a proposed design of the construction.

(b) Potential mitigations.

R-8

The Parcel N construction should be designed so as *not* to overwhelm the Aquatic Center or Estuary Park, visually or physically.

JLAC fully anticipates that the *project proponent* can design Parcel N in a manner that is appropriate to its site and context. JLAC notes, however, that Parcel N will be the last of the parcels developed, and, as a consequence, Parcel N may well be developed by a different developer, to which the project proponent sells the development pad.

4. **The Supervision and Maintenance of Estuary Park.**

(a) **The issues.**

Estuary Park is currently *supervised* by the Office of Parks & Recreation and *maintained* by the Public Works Agency. The project proposes that: (i) the Office of Parks & Recreation will continue to supervise Estuary Park; but (ii) the park will be maintained by a special-assessment district, a property-owners association, or a similar entity. JLAC observes that while such special-purpose entities frequently serve their purposes well, they sometimes develop to a *private* rather than a *public* focus. R-9

(b) **Possible mitigations.**

When constituted, any maintenance-entity should have a significant, continuing number of public members, including representatives of the JLAC.

When constituted, any maintenance-entity should seek to engage community-based entities (such as Peralta Service Corporation, etc.) to provide maintenance services.

5. **The Supervision and Maintenance of the Aquatic Center.**

(a) **The issues.**

The Aquatic Center is currently *supervised and maintained* by the JLAC, pursuant to the management agreement between JLAC and the City of Oakland. The current iteration of the management agreement has a three-year term, ending in December 2007; the agreement is renewable at the pleasure of the City of Oakland. Under the agreement, the City of Oakland pays JLAC $160,000 *per annum*, and authorizes JLAC to retain storage- and use-fees generated by third-party users of the facility.

Any realistic assessment of the future costs of operating and maintaining the Aquatic Center will demonstrate that these *current* levels of income will be *insufficient* to operate and to maintain the Aquatic Center in the *future*. R-10

Moreover, it is not clear whether the City of Oakland will continue *any* future support of the Aquatic Center or its mission. JLAC is familiar with the City of Oakland's general financial circumstances, and the conflicting needs of Oakland's other parks and recreational facilities. JLAC anticipates the *possibility* that the City of Oakland's future support of the Aquatic Center will wane, particularly because the project proposes that entities *other* than the City of Oakland will be responsible for future maintenance of Estuary Park and related park spaces within the project.

Uncertainty about maintenance-responsibility and maintenance-funding will tend to result in: (i) the deterioration of the Aquatic Center's physical plant, (ii) the restriction of the Aquatic Center's outreach to the Oakland public, and (iii) the greater possibility that the Aquatic Center will be used only by its immediate neighbors.

(b) <u>Possible mitigations</u>.

R-10 (CONT.)

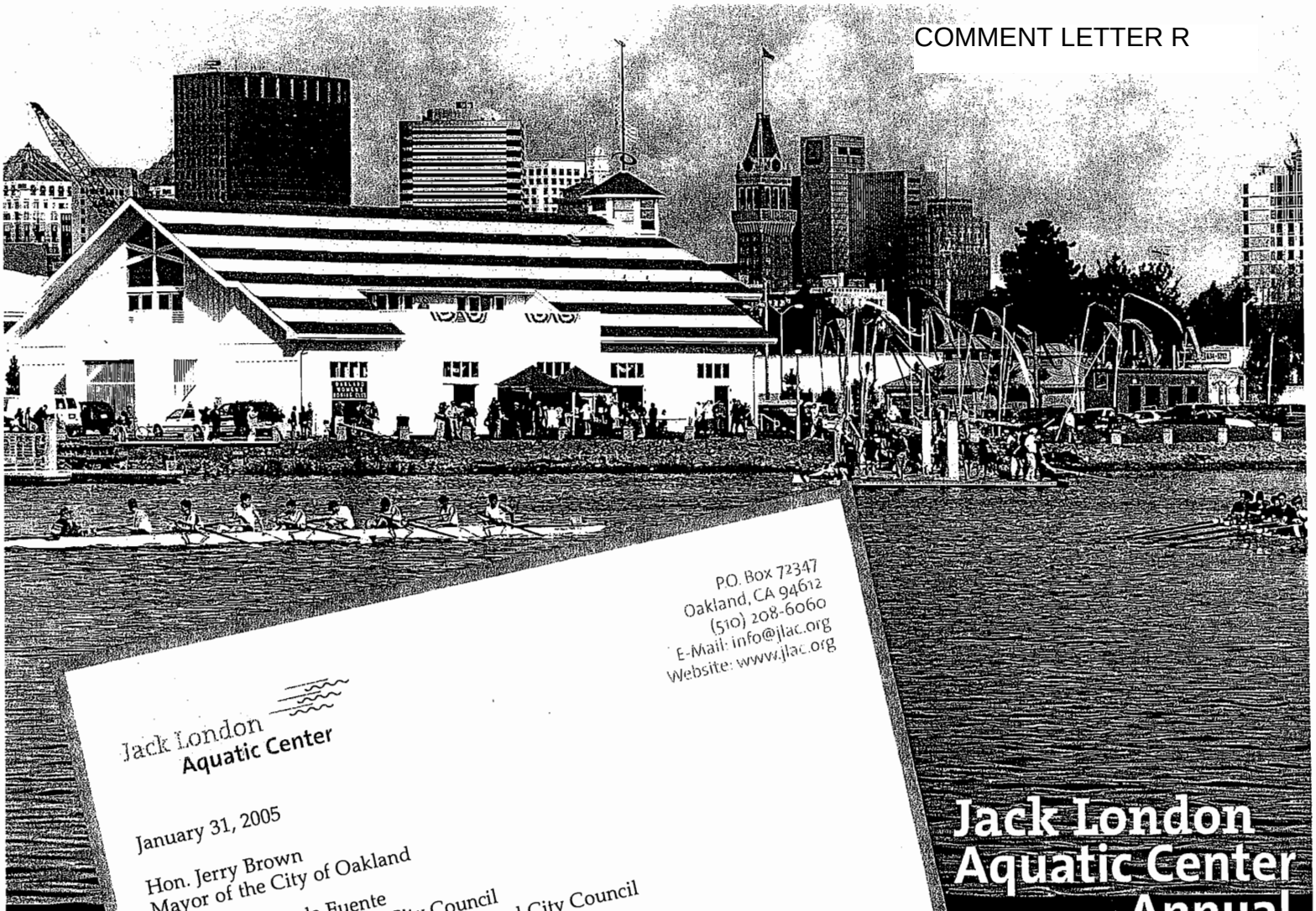
JLAC urges that in these *fiscal* concerns be addressed *early in the development process*, perhaps even as part of the EIR process. JLAC believes that the addressing of these fiscal concerns *early* is necessary to assure that the Aquatic Center will continue to serve its mission of bringing *all* of the diverse communities of Oakland – and particularly the *youth* of Oakland – to the waterfront, for recreation, competition and education.

Respectfully submitted,

Robert F. Kidd
President
Jack London Aquatic Center, Inc.

Enclosure

COMMENT LETTER R



Jack London Aquatic Center Annual Report 2004

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Jack London
Aquatic Center

January 31, 2005

Hon. Jerry Brown
Mayor of the City of Oakland

Hon. Ignacio de la Fuente
President of the Oakland City Council
and Honorable Members of the Oakland City Council

Ms. Deborah Edgerly
City Administrator of the City of Oakland

Director Audree Jones-Taylor
Oakland Office of Parks and Recreation

2004 Annual Report of Jack London Aquatic Center, Inc.

Jack London Aquatic Center, Inc. ("JLAC") operates the Jack London Aquatic Center ("the Aquatic Center") at Oakland's Estuary Park, under an agreement with the City of Oakland. JLAC submits this annual report pursuant to that agreement.

JLAC hosts a variety of rowing and paddling programs, in pursuit of its mission to serve the residents—and especially the youth—of Oakland.

The Aquatic Center is no ordinary boathouse. Some of the JLAC's programs have never been done before, anywhere. At the same time, we are impatient. Every small success opens our eyes to even greater opportunities and even greater needs.

We invite your questions and comments, and we look forward to engaging you in activities at the Aquatic Center.

Sincerely,

Robert F. Kidd
President

Wil Hobbs, Jr.
Vice President

DeDe Birch
Executive Director

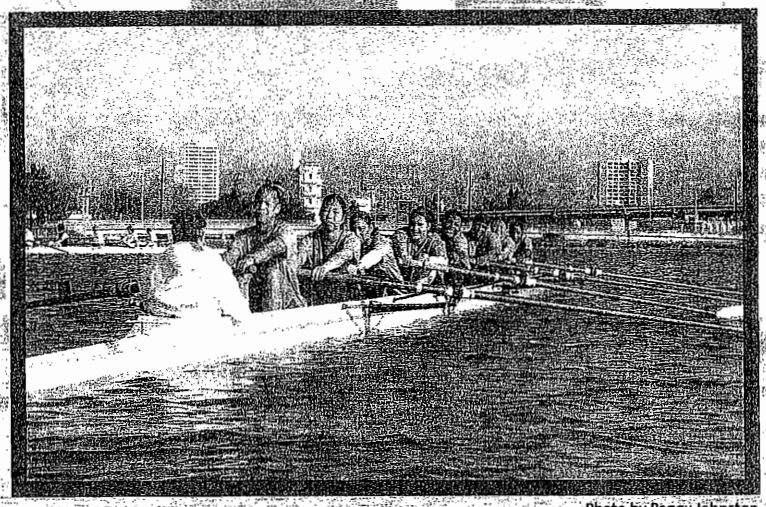


Photo by Peggy Johnston

The JLAC.

The Jack London Aquatic Center, Inc. ("JLAC") is a 501(c)(3) non-profit corporation. It was founded by Vincent Horpel 1994, at the suggestion of the late Cleve Williams, then the Director of Oakland's Office of Parks & Recreation.

JLAC operates the Jack London Aquatic Center ("the Aquatic Center"), located in Estuary Park, on the Embarcadero, between Oak Street and 5th Avenue, about one mile southeast of Jack London Square.

JLAC is lead by its executive director DeDe Birch, and is governed by a community-based board of directors. A roster of officers, directors and staff is set forth on the final page of this report.

The JLAC's Mission.

JLAC's mission is to inspire the diverse communities of Oakland—and especially the youth of Oakland—to experience the Oakland-Alameda Estuary waterfront, for recreation, education and competition.

A Short History of the JLAC and the Aquatic Center.

The Vision. For generations, Oaklanders have been cut off from their waterfront. In 1992, the Oakland League of Women Voters commissioned then-former City Attorney Richard Winnie to explore the waterfront's opportunities. His report emphasized the needs to open the waterfront to the public, and to connect the waterfront to Oakland's neighborhoods. This vision continued to develop, during monthly meetings of the Waterfront Coalition (convened by Oakland citizen Sandy Threlfall), and through the work of the Port of Oakland, and Oakland City Council and the Port/City Liaison Committee.

Design and Construction. In June 1997, Oakland's City Council authorized JLAC to construct an aquatic center in Estuary Park. The initial grant from Oakland's Measure K Open Space bond fund was complemented by grants from the City, the Port of Oakland, the California Coastal Conservancy, the Waterfront Plaza Hotel, Victoriana of San Francisco, Inc., VBN Architects, Concept Marine Associates and others.

Construction began in January 2000, and was completed ten months later. JLAC managed all aspects of design and construction, without compensation. VBN Architects and Alan Dreyfuss AIA were the design architects; Hanson-Murikami-Eshima and J.H. Fitzmaurice, Inc., were the design-build team for the boathouse; Concept Marine Associates and Peak Engineering were the design-build team for the docks. Mayor Jerry Brown presided over dedication ceremonies on October 28, 2000.

The City/JLAC Management Agreement. Effective January 1, 2002, the City engaged JLAC to operate the Aquatic Center, on behalf of the City and in pursuit of City purposes. Through the good offices of City Administrator Deborah Edgerly and Parks & Recreation Director Audree Jones-Taylor, the management agreement has been renewed for the period 2005–2007.

Programs at the Aquatic Center.

2005 Program Information On-Line.

Program information for spring and summer 2005 is available at the JLAC's website at www.jlac.org.

Our First Concern: Safety.

While the Estuary is one of the Bay Area's great "open spaces," it is *not* a playground. It is a navigable waterway, used by thousands of yachts, jet-skis, motorboats, container-ships, tugboats and barges. As a consequence, JLAC does not offer unsupervised recreation at the Aquatic Center. To maximize safety, we organize our rowing, kayaking and dragon-boat paddling activities through supervised groups. All coaches are instructed in first-aid, safety and rescue protocols.

The Vision: Every Oakland Kid's Access to Oakland's Best.

JLAC believes that Oakland owes its kids the right to engage in activities associated with its waterfront. JLAC started with kayaking for Oakland youth in 2002; added single-sculling in 2003 and girls' rowing in 2004; and will add dragon-boat paddling in 2005. While JLAC offers its activities to all Oaklanders, we focus on the kids who live in Oakland's flatland neighborhoods. In 2004, we collaborated with the following community youth groups: East Bay Asian Youth Council; St. Paul's Episcopal School Aim-High; Oakland Housing Authority; Oakland Unified School District; Upward Bound and The Unity Council.

Our Greatest Challenge: Transporting Youth to the Aquatic Center.

While the Aquatic Center solves the challenge of getting Oakland youth from land to water, there remains the challenge of getting Oakland youth *to* the Aquatic Center. Most Oakland youth do not have access to cars during the day; the schools have no buses; BART and AC Transit nodes are just a little too far away. In December 2003, AC Transit donated a 12-person bus-van to the JLAC. Using it, JLAC was able in 2004 to bring Oakland students to the Aquatic Center both *during and after* school. The challenge remains, however: getting *to* the Aquatic Center is still the most difficult obstacle to delivering JLAC's services to Oakland youth.

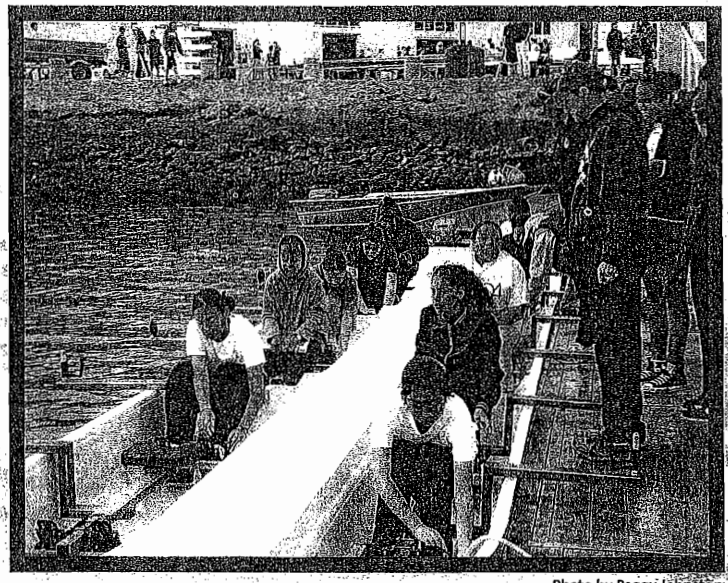


Photo by Peggy Johnston

Kayak PE Classes.

JLAC continues its collaboration with ***OUSD's Life Academy***, which began in 2002. In 2004, nine juniors and seniors kayaked for P.E. credit during spring semester; then sixty students (the entire first-year class) kayaked for P.E. credit during the autumn semester. By its AC Transit bus described on this page, JLAC provided transportation between school and Aquatic Center, during the school day. In addition, JLAC offers kayaking classes to ***Laney College*** students each spring and summer.

JLAC thanks: Life Academy (Principal Allison McDonald, teacher Erik Rice) and Laney College (President Odell Johnson, Vice President Jose Ortiz, Athletic Director Jay Uchiumi).

Opportunities/challenges in 2005: JLAC seeks opportunities to offer P.E. kayaking classes to the students of *all* of Oakland's high schools.

JLAC Junior Women's Rowing Program.

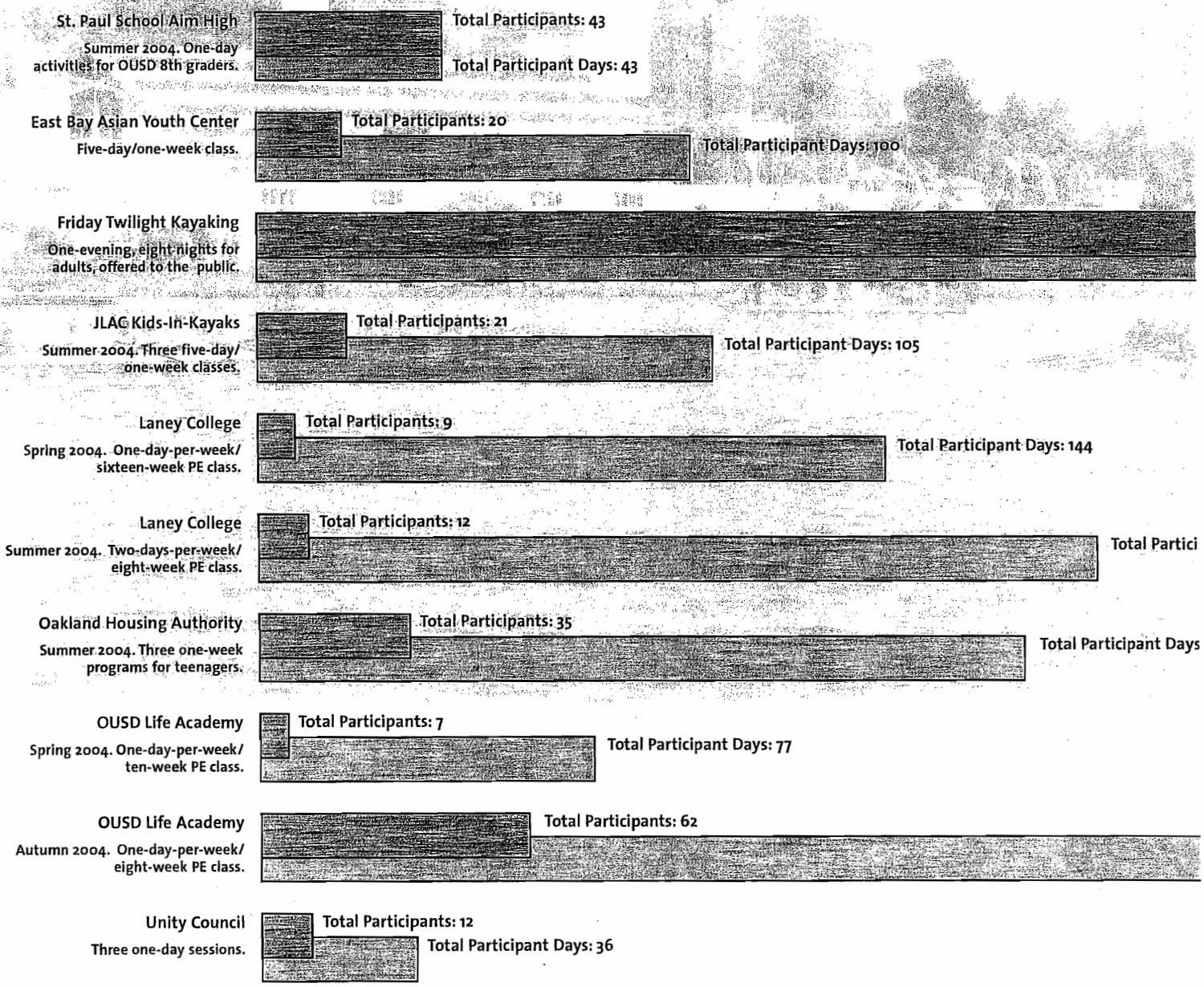
In Spring 2004, twenty-one Oakland high school girls began a ***revolution*** in the sport of rowing. As members of the first JLAC Junior Women's Rowing Team, an after-school, competitive rowing program, they demolished the social and cultural barriers that have historically limited access to the sport of rowing. During spring 2004, the crew raced against other Bay Area high school crews, and competed in the State championship regatta at Sacramento.

The 2004–2005 crew has increased to 28 rowers: 26 are African American, Asian American or Latina; they study at six of Oakland's public high schools (Oakland, Oakland Tech, Skyline, McClymonds, Fremont

Continued on page 6 . . .

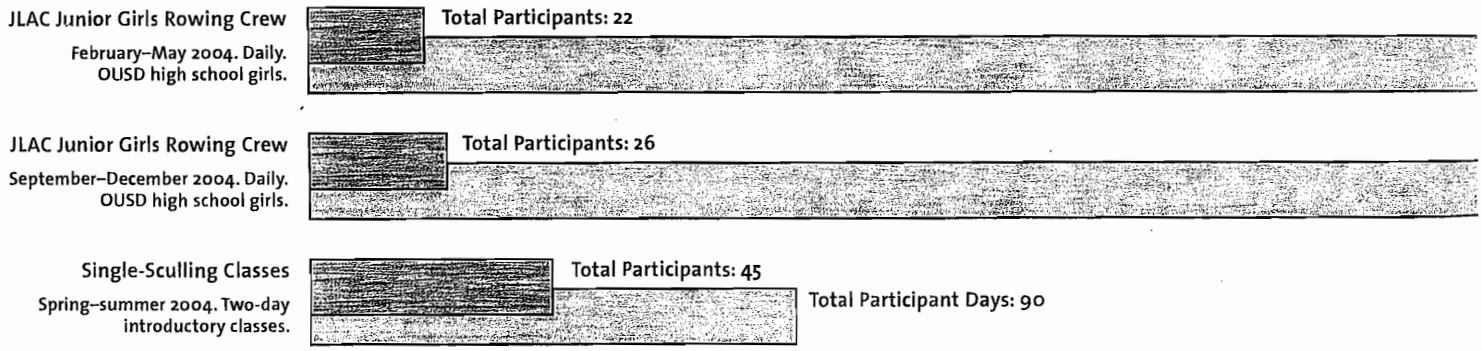
2004 Kayak Programs at JLAC, Sponsored by JLAC

Total Kayak Participants: 474
Total Kayak Participant Days: 1,621



2004 Rowing Programs at JLAC, Sponsored by JLAC

Total Rowing Participants: 93
Total Rowing Participant Days: 3,450



COMMENT LETTER R

BAY AREA BUSINESS WOMAN

CONNECTING BAY AREA WOMEN IN PRINT, ONLINE, ON AIR AND FACE-TO-FACE

Vol. 11 No. 12 September 2004

Different Strokes: Oakland Girls' Rowing Team Breaks Stereotypes

—By Mernie McLeod Santoyo

Mention rowing on a crew team and the first image that comes to many minds is the famed 150+ year-old Harvard-Yale Regatta. One of the oldest collegiate rivalries in the nation, the annual race pits privileged men against others to row for the pride of their schools.

Jenny Hale aims to break that rowing stereotype. Hale, coach of the varsity women's crew, is founding coach of the Oakland Junior Rowing Team at the Jack London Aquatic Center (JLAC). Here, Hale introduces to a new generation of rowers — young women from the surrounding urban aquatic center to learn a sport some may never have even heard of, let alone recruited for the team.

"What's interesting is that the history of the sport in urban centers and yet people of color have been excluded," says Hale, an Oakland resident who has been rowing since college and then moved on to coaching. She, more recently, began the rowing program at JLAC. "It's long overdue and I'm excited to bring this to Oakland."

throughout the school year, Hale's focus on not just the techniques of rowing but leadership and self-esteem, not performance.

JLAC Junior Rowing Team competes on the Oakland Estuary. (Photo by Peggy Johnston/JLAC)

"Any time any young kids can be involved in sports where their success is based on positive experience," Hale says. "That's something that's unique to rowing. It's a blank slate so there's no prevailing bias. Everyone is in the same boat."

The JLAC ... to swim to qualify ... swimming lessons as ... girls take less ... swim while ... to build ...

San Francisco Chronicle

NORTHERN CALIFORNIA'S LARGEST NEWSPAPER

FRIDAY, MAY 14, 2004

Public school girls find joy in rowing

Oakland program offers teens benefits of sport traditionally reserved for elite

By Patrick Hoge
CHRONICLE STAFF WRITER

RECREATION

Eighteen girls from Oakland rowed in their first major junior competition last weekend at Lake Natoma in Rancho Cordova near Sacramento.

They didn't advance past the first heat, and there may have been a lot of open water between them and the boats ahead of them, but the two crews finished without making any really embarrassing mistakes.

And they felt proud.

"This was our first really official race," said Rekeiah McCoy, 15, a sophomore at Oakland Technical High School, who had never participated in an organized sport before. "It was great!"

McCoy was one of 21 girls of various races from 10 Oakland public schools who participated in a new program aimed at making the traditionally elite sport of rowing more diverse and financially accessible.

McCoy knew she and her teammates had come a long way in just three months to get to the 2004 U.S. Rowing Southwest Regional Junior Championship Regatta, which drew teams from across the state and Arizona.

After all, when the Oakland girls first met on Jan. 26, a half-dozen of them didn't even know how to swim. Plus, the girls did not get started until after other novice teams had already had around five months to learn the basics of team rowing and to get in shape.

The program they helped pioneer was put together with a shoestring and a lot of heart by the Jack London Aquatic Center, a nonprofit agency that runs a 2-year-old boathouse on the Oakland waterfront for the city. The Oakland-Alameda estuary is an excellent place to row, and UC Berkeley has used the waterway for competitive rowing since the 19th century. But to the frustration of the Aquatic Center's board of directors, the boathouse has not been used by many Oakland youth. Berkeley High School's crew teams practice there, though, and a large, expensive private program uses the area.

Ironically, given the large number of college scholarships available, particularly to women through the sport, rowing has long attracted mostly relatively well-to-do Caucasians, said Robert Kidd, president of Jack London Aquatic Center's board of directors. One factor is cost. Rowing is an expensive endeavor, with an eight-person boat typically costing about $30,000.

The private Oakland Strokes program, which uses the aquatic center and is one of the best rowing clubs in the nation, charges each student $550 a semester.

"If we end up with a beautiful boathouse like this with only left kids and kids of means having a great time rowing . . . this place would be a failure," Kidd said. "What Oakland needs is to become a waterfront city again for the kids that live here."

The Aquatic Center paid for most of the new program, along with contributions from the Lake Merritt Rowing Club and the nonprofit Team Up For Youth program in San Francisco, which works to bring sports to low-income communities. Lake Merritt Rowing Club also donated a used boat.

(over)

Lee Stanton / The Chronicle

... for the starting line at Lake Natoma. "It was our first official race ... Rekeiah McCoy, 15

Total Participants: 253

Total Participant Days: 253

s: 192

Oha NEWS IN BRIEF

September 2004

Row Row Row Your Boat Gently Down the Stream!

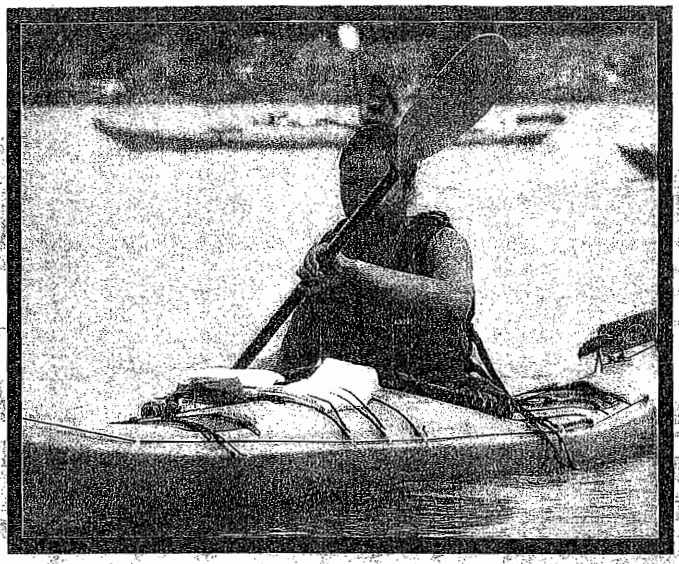
Over 35 youth from various Oakland Housing Authority sites enjoyed a week of kayaking this past summer, through a one week camp held at Jack London Aquatic Center (JLAC). Three sets of camps were held in the Oakland Estuary Park. It was a different kind of experience for the youth. Participants did not have to know how to swim to be able to participate in this event. A few youth were apprehensive at the beginning, but by the fifth day, they were all very good at kayaking. Jon Gresley, Executive Director of Housing Authority, got into the action and spent a day with the kayakers. The Oakland Housing Authority would like to thank Rotary Club of Oakland and JLAC for initiating this fun activity for the youth.

Right photos, top to bottom: OHA Kayakers; «Crash!»; Youth Kayaker helping OHA staff get in; Above: Youth carrying their kayaks.

Total Participant Days: 496

Total Participant Days: 1,540

Total Participant Days: 1,820



Continued from page 3 . . .

and Life Academy). The nominal $75 participation fee is underwritten by a grant from Team-Up for Youth and by the JLAC; a work/grant program is available for those who cannot afford this fee. Through a collaboration with the Undercurrents Swim Team, swimming classes are incorporated into the rowing program, to remove the fear of water as a barrier to rowing. The crew was the subject of many stories in the media: the *San Francisco Chronicle* (May 14); *Bay Area Business Woman* (September 12) KTVU 10 O'Clock News (May 13); *OHA News in Brief* (September); a 30-minute DVD produced by students of the Laney College media arts department.

JLAC thanks: Team Up for Youth Foundation (Executive Director Tim Johnson, Carilee Pang Chen); Lake Merritt Rowing Club (President Brian Birch); Marin Rowing Association (Executive Director Sandy Anderson); U.C. Santa Barbara crew (Coach Mike Holmes); JLAC Junior Committee chair Peggy Johnston; recruiter Dr. Linda Ricketts; Head Coach Jenny Hale; Assistant Coaches Scott Hinckley and Hilary Meu; Upward Bound (Romeo Garcia); Undercurrents Swim Team (Ben Shepard); Soroptomist International Oakland (President Carolyn Bolton); Medco Media Group (Jennifer Ongri, John Razzano, Dale Nabeta); Oakland Rotary Club No. 3 (President Dr. Tom Schmitz, Lori Sinclair, Paul Cummings).

Opportunities/challenges in 2005: *First*, JLAC will continue to grow the Junior Girls' Rowing Team, by implementing an aggressive recruiting program at the beginning of the 2005–2006 school year. *Second*, JLAC will commence planning a JLAC Junior Boys' Rowing Team, to assure be "launched" in September 2006; *Third*, to assure access through a sustainable business model.

Summer Programs.

JLAC's summer programs are accessible both through open-enrollment and through partner community-groups. Participation fees are intentionally kept low, and cover only the cost of instruction; even these fees are frequently waived, to assure that lack of means does not bar participation. Programs are tailored to fit the schedules and the special agendas of our partner community-groups.

JLAC thanks: St. Paul's School Aim High program (Head of School Karen Merry, Program Director Love Winestock); East Bay Asian Youth Center (President David Kakashiba, Program Director Peter Kim); Oakland Housing Authority (Executive Director Jon Gresley, Program Director Patricia Ison); The Unity Council (CEO Gilda Gonzales, former CEO Arabella Martinez, Program Director Rita Torres); International Dragon Boat Association (President Shirley Gee).

Opportunities/challenges in 2005: *First*, JLAC looks forward this summer to collaborating with four neighborhood recreation centers of Oakland's Office of Parks & Recreation. *Second*, we seek introductions to more community-groups. Third, JLAC looks forward to collaborating with community groups to fill the two dragon boats which the International Dragon Boat Association donated to JLAC in 2004.

Single-Sculling.

With its fleet of five "Aeros," JLAC teaches the joys of single-sculling on the Oakland-Alameda Estuary. Back-to-back classes are offered on Saturdays and Sundays. These classes are open to both youths and adults.

Opportunities/challenges in 2005: The number of classes will increase in 2005. JLAC anticipates that the graduates of these classes will become sustaining members of the JLAC community.

Friday Twilight Kayaking.

To introduce the citizens of Oakland the mysteries of the Oakland-Alameda Estuary, the JLAC organizes Friday after-work kayak trips into Embarcadero Cove and around Government Island. These "expeditions" last about two hours, and frequently conclude at a nearby restaurant.

Opportunities/challenges in 2005: Similar trips can be specially organized on other evenings and on weekends for community-, church- and work-groups.

Programs Offered by Others at the Aquatic Center.

JLAC licenses Aquatic Center space to independent programs. The resulting license-fees help underwrite JLAC's programs at the Aquatic Center. The ***Oakland Strokes*** program serves 250 high school boys and girls, about ten percent of whom are Oakland residents. At the US Rowing Junior Championship at Cincinnati in May 2004, Strokes "eights" won one gold medal and two silver medals. The ***Berkeley High School*** rowing program serves 110 boys and girls; the BHS boys' lightweight "eight" finished fifth at Cincinnati, the highest finish by a public high school crew. The ***University of California Lightweight Crew Club*** serves 100 men and women from the Berkeley campus of U.C. This program is a club program, under the supervision of the U.C. Department of Recreational Sports, and is distinct from the Golden Bear intercollegiate crews that row out of the new Gary Rogers boathouse. ***Oakland Parks & Recreation Sailing*** offers intermediate and advanced classes, to complement beginning classes offered on Lake Merritt. Members of the ***Oakland Parks & Recreation Sailing Club*** are entitled to sail the OPR sailboats anchored at the Aquatic Center.

The Community Room.

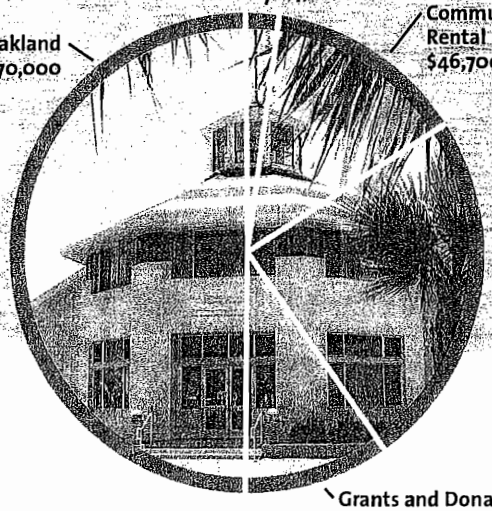
You can rent the second floor community room of the Aquatic Center, with its balconies overlooking Lake Merritt Channel and the Estuary, for your party, wedding, special event or business meeting. The room accommodates up to 185 guests, and is serviced by a commercial-grade catering kitchen. Under the City/JLAC management agreement, this room is made available to the City of Oakland and the Port of Oakland *gratis* ten days each year. In addition, JLAC's access grant program underwrites community-groups' uses of the room. For more information about the community room, click onto **www.jlac.org/communityroom**.

Finances.

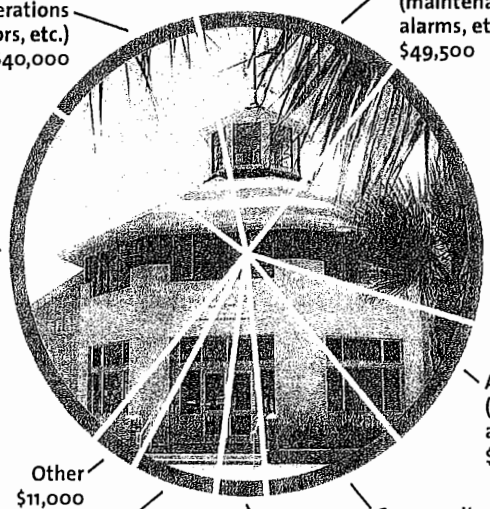
The JLAC "Pie."

Under the City/JLAC management agreement, the City provides $170,000 per annum. In addition, JLAC retains revenues derived from the rentals of the second-floor community room and of four of the ground-floor boat-bays (to the Oakland Strokes, Berkeley High School crew, the University of California Lightweight Crew Club and individuals). JLAC receives no revenue from the fifth boat-bay, which is occupied by the Oakland Office of Parks & Recreation. The following charts are for Fiscal Year 2003–2004 (July 1, 2003–June 30, 2004).

Income and Grants—total $341,500



Operating and Capital Disbursements—total $346,100



Our Supporters.

JLAC thanks our 2004 supporters: City of Oakland • Port of Oakland • Team Up for Youth Foundation • Citibank • Rotary Club of Oakland No. 3 • Hon. Nate Miley • Kaiser Permanente • Soroptomist International of Oakland • Lake Merritt Rowing Club • California Canoe & Kayak • Marin Rowing Association • University of California Santa Barbara Crew • International Dragon Boat Association • Martin B. McNair • Cheryl Brink • Sandy Threlfall • Vince Horpel • CES National • Joseph Repsch • Echlin Opportunity Fund • Dara Altobelli-Turchi • Lonestar Productions • Oakland Harbor Partners • Amy Wu • Waterfront Action, Inc. • The directors of the JLAC.

JLAC Board of Directors.

Ethnicity: 8 Euro-American; 7 African-American; 2 Hispanic; 1 Asian-American
Gender: 13 male; 5 female
Residence: 11 Oakland; 7 non-Oakland
Employment: 15 Oakland; 3 non-Oakland.

President Robert F. Kidd. Attorney with the Oakland law firm of Stein, Rudser, Cohen & Magid LLP.
Vice President Wil Hobbs. Vice President, Community Bank of the Bay.
Treasurer Bruce Mowat. Principal of the Oakland accounting firm Mowat, Mackie & Anderson, LLP.
Hon. Alona Clifton. Trustee, Peralta Community College District.
Fred Conrad, DDS. Dentist.
Sharon Creer. Realtor and sports agent for professional athletes.
Shirley Gee. University officer, Leland Stanford, Jr., University.
Jon Gresley. Executive Director, Oakland Housing Authority.
Richard Griffoul. Director of Marketing and Communications, Oakland Museum of California.
John Q. Halley. Manager, Allergy and Dermatology Department, Kaiser Permanente.
Michael Hammock. Recreation General Supervisor, Oakland Office of Parks & Recreation.
Daniel Herbert. Managing Director, Textainer Services, Textainer Equipment Management; Chair of the Oakland Strokes.
Peggy Johnston. Former member of U.S. Rowing Team and U.S. Olympic Committee; Chair of the JLAC Junior Rowing committee.
Keith Miller. President of California Canoe & Kayak.
Thomas Limon. Public Market Manager, The Unity Council.
Robert Thombs. Management Assistant, Oakland CEDA/Planning & Zoning.
Rita Torres. Assistant Director, Community & Family Asset Development Division, The Unity Council.
Michael Wilhite. Businessman, business consultant.

JLAC Advisory Board.

Hon. Carl Morris. Presiding Judge of the Juvenile Court, Alameda County Superior Court.
Lee Chamberlain. Special Agent, U. S Drug Enforcement Agency.
Ken Porter. Director, Great New Beginnings.
Denise Sangster. President, GlobalTouch, Inc.
Ben Shepard. Director, Undercurrents Swim Team.
Sandy Threlfall. Executive Director, Waterfront Action, Inc.
Henry Williams. Vice President–Western Division, Comerica Bank.
Richard Winnie. County Counsel for the County of Alameda.

JLAC Staff.

Executive Director DeDe Birch.
Business Manager James Puskar.
Community Room Scheduler Dee Johnson.
Head Rowing Coach Jenny Hale.
Assistant Rowing Coach Scott Hinckley.
Assistant Rowing Coach Hilary Meu.

Report Design: Sharyn Gayton,

Letter R– Jack London Aquatic Center

R-1 Comment is noted and accurately describes the proposed development on Parcel N adjacent to the Aquatic Center.

R-2 Comment is noted and acknowledges that some comments may pertain to the proposed project designs.

R-3 The City's plan that depicts the expansion of Estuary Park north to the Embarcadero is the Estuary Policy Plan, as depicted in DEIR Figure V-1 and discussed in the context of Estuary Plan Policies on DEIR pp. IV.A-13 to 14 (*Open Space and Recreation*). The Measure DD bond measure to finance a series of improvements and maintenance related to parks and open spaces specifically identifies improvements to Estuary waterfront parks, including the expansion of Estuary Park. The project sponsor's proposal to develop 20.7 acres of new public waterfront parks along the Estuary does not preclude the future use of Measure DD funds for improvements in the project area.

R-4 The comment suggests conditions of approval related to the Parcel N development that do not pertain to CEQA issues but with the use of ground-floor retail space within the project.

R-5 The comment suggests potential improvements to Aquatic Center facilities that do not pertain to CEQA issues. To the extent that the project is required to provide facilities that will encourage and facilitate public access to the waterfront area (such as public toilets or additional boat bays), the City and BCDC will make these determinations prior to acting on the project. The City would also consider the timing of any such improvements as it considers the appropriate overall phasing of the project.

R-6 The proposed project parking supply on Parcel N is 300 off-street spaces and 34 on-street spaces. As stated on DEIR p. IV.A-32, the project would incorporate a parking control and management program that would ensure available public, street parking for park and open space users as well as visitors of the onsite retail/commercial uses. See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management measures. As stated on DEIR p. IV.D-19, no changes are proposed to the Aquatic Center *and related parking areas* that make up approximately three acres of impervious surface (*emphasis* added).

R-7 The streets of Parcel N are designed to directly access the East lot, in part to facilitate shared parking for the Aquatic Center and Estuary Park. This would allow visitors to take advantage of on-street parking around the Parcel N frontage if the Aquatic Center lot were to be full. Interconnected streets of this nature also improve the quality of the pedestrian environment.

The Draft Transportation Demand Management (TDM) Plan forecasts peak parking demand for Parcel N at about 314 spaces, through the use of shared parking and other

strategies; see Master Response D for a discussion of proposed parking management measures. The peak demand would occur during the weekday evenings. At times when Aquatic Center and other recreational demand would be higher, demand from Parcel N uses would be lower (i.e., about 209 and 243 spaces on weekday and Saturday afternoons, respectively. The project would provide 300 off-street parking spaces on Parcel N, plus 83 metered on-street parking spaces around the perimeter. A management plan would also provide for overflow parking.

The on-street parking spaces would be available to all members of the public, including recreational users and Aquatic Center visitors. Only a small number of these on-street spaces are expected to be used by the project. Therefore, the project would increase the supply of available parking around Parcel N. Given the ample supply of parking in the project's garage and around the perimeter, there is no reason to believe that residents or guests would park in the East Lot.

Parking pricing, enforcement and other management strategies are an important component of the Oak to Ninth Project, and a dedicated transportation coordinator is planned to oversee the parking system. JLAC may wish to consider adopting similar strategies (e.g., metering or time limits) for the East Lot, instead of, or in addition to, access controls, such as a locked gate. There may also be opportunities for shared enforcement and management should JLAC wish to pursue them.

R-8 To the extent that the location, design, height, bulk and orientation of the proposed building on Parcel N is incompatible with Aquatic Center or Estuary Park from a CEQA standpoint, these impacts are addressed in Section IV.K (Visual Quality) of the DEIR. From a design perspective, the City decisionmakers will evaluate the project through the Preliminary Design Plan (PDP) currently proposed.

An additional project variant is introduced in Chapter II of this document to explore an alternative site configuration of Parcel N. As depicted in **Figure II-1** in this document, the variant changes the site configuration to allow less paving, efficient circulation and open space around the building. The distribution of heights on the Parcel N building would be varied from the project, with the overall maximum height being 185 feet (new tower) with the podium heights varied and up to 64 feet. This information and analysis is provided in this document to allow City decisionmakers to consider this alternative layout around the Aquatic Center and Estuary Park.

R-9 The comment suggests possible entities that should be included as part of any park maintenance entity that the project sponsor may establish. This is not a CEQA issue pertaining to the physical environmental impacts of the project. As discussed in Master Response H, the DEIR (pp. III-18 and IV.L-17 and IV.L-18) explains that the project sponsor will be responsible for providing for the maintenance of the open spaces. It continues that the project sponsor could do so through the establishment of 1) a project homeowners association, 2) a Community Facilities District or Community Services District (in conjunction with the City), or 3) other mechanism approved by the City. The

specifics of a maintenance mechanism would be established through the required conditions of approval for the project or a Development Agreement between the City and the project sponsor.

R-10 The comment raises potential impacts that the project could have on the management and funding of the Aquatic Center. The project does not propose any physical changes to the Aquatic Center facilities or its existing mechanisms and arrangements for ownership, management, operation, or maintenance. Furthermore, the proposed maintenance responsibility of Estuary Park by some maintenance entity, as described in Master Response H and above in Response R-9, does not have implications for the City's continued financial support of the Aquatic Center. This is not a CEQA issue addressing the physical environmental impacts of the project.

COMMENT LETTER S

OAKLAND HERITAGE ALLIANCE

October 24, 2005

RECEIVED
OCT 24 2005
City of Oakland
Planning & Zoning Division

Margaret Stanzione, Project Planner
City of Oakland
Community and Economic Development Agency
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

RE: Draft EIR, Oak to Ninth Avenue

Dear Ms. Stanzione,

Oakland Heritage Alliance, a twenty-five year old organization with more than a thousand members, appreciates the opportunity to comment on the DEIR for the Oak to Ninth Avenue project.

The first section of these comments covers our primary questions about the DEIR and related project issues. The second section discusses the project alternatives presented. The third section details additional observations and questions that arise from the report.

PART I: MAJOR CONCERNS

NINTH AVENUE TERMINAL IS A VALUABLE HISTORIC BUILDING

The DEIR recognizes that Ninth Avenue Terminal is a highly rated historic building, likely eligible for the National Register of Historic Places (IV.E-13 et seq). Its rehabilitation could generate tax credits if the building were to be preserved. Can the EIR include an objective study of potential reuse and adaptive reuse possibilities for the Ninth Avenue terminal structure (the platform and shed), and how to incorporate it into the project? Include fuller study of any alternative partial preservation measures, with the understanding that full preservation is the best way to avoid negative impacts to the cultural resource. S-1

TERMINAL DEMOLITION NOT NECESSARY FOR CARRYING OUT ANY OF THE DEIR VERSIONS OF THE PROJECT

Why is the substantial demolition of the Terminal and its platform included in the project? The EIR admits that full preservation would have little impact on the rest of the project, and could go on no matter how many units or how much parkland is included elsewhere.
A complete reuse of the Terminal is compatible with most of the goals of the project (". . . could be combined with the proposed project and other alternatives." V-38.) S-2

OHA asked a structural engineer to do a brief on-site visual inspection. This thoroughly experienced, independent licensed engineer felt that the building was eminently reusable, that there was no evidence of serious sinking, buckling, cracking or warping in the shed, that the walls were constructed to be strong, and the roof light, so that rehabilitation is reasonable. The openness of the structure, he said, would make any required seismic strengthening relatively simple, and the steel trusses were a good method of giving the building rigidity. He declared his readiness to move his office into the Terminal building as soon as it becomes available for use. S-3

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THE SUBALTERNATIVE, THE PROPOSED PROJECT AND ALL THE DEMOLITION OR PARTIAL DEMOLITION ALTERNATIVES

The brief DEIR sub-alternative discussion at V-38 is inadequate, and contains an erroneous or garbled statement of impact.

What is the rationale for the demolition or partial demolition of the Terminal? What reason would rise above the threshold required for a "finding of overriding considerations?"

a) that demolition would increase the acreage called open space, a "park" on a concrete platform above water? (III-16)

b) that a small façade or bulkhead preservation project (II-1: ". . . 15,000 square feet of the Terminal's Bulkhead Building . ..") would rise to the level required under CEQA of a design of equal or better quality? S-4

c) that if the terminal were retained "the amount of pervious surface that would be removed would be less than with the project and each development alternative that propose large, new open space area in where the wharf currently exists" (V-39)?

d) that the wharf is more structurally unsound with the terminal shed on it than it would be with a load of grass and dirt?

The above four points do not add up to a rationale for demolition of an important cultural resource.

a) appears an attempt to compensate for the large reduction in open space as compared to the Estuary Policy Plan, which requires a much fuller discussion, as commented upon by others such as John Sutter, Waterfront Action, and the League of Women Voters; S-5

b) does not adequately mitigate for loss of the historic building:

Retention of 7% of the building is *not* a serious mitigation, and may give dangerous currency to the idea that façade retention is a city-sanctioned or federally-sanctioned approach to historic preservation, which it is not. Can the EIR preparers discuss how retention of 7% of a building could be done consistent with the Secretary of Interior Standards? Which of the general standards would it follow? How can retention of a thin slice wider than it is long can convey any sense of the scale of the building or of the maritime and industrial history of the area? S-6

> FROM SECRETARY OF INTERIOR STANDARDS: "The first treatment, Preservation, places a high premium on the retention of all historic fabric through conservation, maintenance and repair. It reflects a building's continuum over time, through successive occupancies, and the respectful changes and alterations that are made.
>
> "Rehabilitation, the second treatment, emphasizes the retention and repair of historic materials, but more latitude is provided for replacement because it is assumed the property is more deteriorated prior to work. (Both Preservation and Rehabilitation standards focus attention on the preservation of those materials, features, finishes, spaces, and spatial relationships that, together, give a property its historic character.)

"Restoration, the third treatment, focuses on the retention of materials from the most significant time in a property's history, while permitting the removal of materials from other periods.

"Reconstruction, the fourth treatment, establishes limited opportunities to re-create a non-surviving site, landscape, building, structure, or object in all new materials. " S-6 (CONT.)

c) seems to assume that the new "parkland" would be an earthen structure, when the developer has said much of it would be constituted of earth and turfgrass atop the extant concrete platform on pilings. Contrary to the DEIR "impacts" at V-39, then, would it contribute any permeable land? Is this intended as bay fill? It is difficult to discern from the DEIR, and needs clearer description. S-7

d) From a structural point of view, a load of earth, water, grass, tree planters, pesticides and park benches might well weigh more and require more maintenance than the existing sturdily built and comparatively lightweight shed. S-8

INADEQUATE DISCUSSION OF CONTINUED USE OR ADAPTIVE REUSE OF THE TERMINAL BUILDING

The EIR should analyze sources of funding which might support reuse of the Terminal, its relationship to the development of usable open space as called for in the Estuary Policy Plan, and how to maintain this historic asset. Consider:

a) Measure DD funding, already allocated for use in the area, and a reasonable public investment which could be put toward public facilities, and cannot be repurposed for use elsewhere

b) Federal historic tax credits (20% of value of rehabilitation cost cold be substantial) if all or most of the building is retained

c) Savings, tax deductions or benefits if all or some of the building can be used for alternative energy projects

d) Potential for community reinvestment credits or other means to fund a viable project.

e) A green building analysis: would adaptive reuse keep material out of the waste stream, save the energy expended to create new building materials, and reduce the need for hauling debris to landfill and new materials onto the site? S-9

f) What flexibility might be forthcoming in uses allowed in a historic building, as compared to new construction? A consultation with State Lands Commission, State Office of Historic Preservation, and BCDC might clarify potential uses allowable. At II-1, Paragraph four: "The project would retain a minimum of 15,000 square feet of the terminal's bulkhead building envisioned to contain a variety of uses consistent with the Tidelands Trust" However, such a "token" preservation of a small bit of the building would irrevocably damage a historic resource. The State Lands Commission might consider historic preservation as an allowable activity, thus giving a bit more scope for potential uses inside the building. S-10

g) What are some possible alternative uses for the building? Might they include any of these: marine use, marine services, ferry stop, docking facility, boat hoists, commercial and tourist busi- S-11

ness, sports activities, film businesses, arts businesses, farmer's market, parking, alternative transportation? Could it house design, historic preservation, planning, engineering, architecture, and similar businesses complementary to those located in the Fifth Avenue area? Could some limited use for loading and unloading of small shipments be maintained? Could tugboats continue to tie up there? Could the terminal building house businesses which could both serve tourism and the new residents? If there are to be 5000 new residents, how many hotel rooms will be needed to accommodate their visitors? Could a modest waterfront hotel or inn locate in the Terminal building? With the approval of regulatory authorities, could a work-live studio facility be incorporated? S-11 (CONT.)

h) Governmental and nongovernmental funding sources, such as state bond monies.

i) Income generated from new uses (or old ones) and how they might contribute to the upkeep of the building. The building is currently in use, and is not abandoned.

MITIGATIONS FOR DAMAGE TO CULTURAL RESOURCES ARE INADEQUATE

The mitigations described in the DEIR are minimal and verge on nonexistent (II-13, IV.E-22) unless a preservation alternative is followed. If the project does demolish all or most of the terminal, then what is appropriate mitigation? Demolition of all or 93% of a huge historic building results in a serious adverse impact. Examples of appropriate mitigation might include: S-12

-funding for rehabilitation or restoration of an equivalent 4-acre historic area elsewhere

-rehabilitation of another similar large publicly-owned marine building within Oakland

-rehabilitation funds for historic restoration of buildings in the Central City East Redevelopment Area, to an amount at least equal to the estimated cost of a rehab of the Ninth Avenue Terminal.

VIEWS: HISTORIC STRUCTURES PROVIDE IMPORTANT VISUAL KEYS AND CONTEXT

At IV.K-9, The DEIR asserts "that the proposed buildings would not result in a substantial, demonstrable negative aesthetic effect." However, demolition of the Terminal does result in an important negative effect, that is, the disappearance of an important visual cue and reminder of Oakland's maritime history. This is particularly evident from the water side of the Terminal, where a thirty-two-foot wide walk along the platform would make an excellent segment of Bay Trail, running alongside the big loading doors, and giving a sense of the scale of shipping operations.

Include discussion of: S-13
-views of historic Ninth Avenue Terminal from other stretches of the bay trail
-views of historic Ninth Avenue Terminal from Alameda
-views of historic Ninth Avenue Terminal from the estuary
-views of estuary from the water edge of the wharf, with the historic Ninth Avenue Terminal on one side (shielding one from the presence and noise of the freeway) and water on the other
-views of historic Ninth Avenue Terminal from residential units
-views over historic Ninth Avenue Terminal from higher residential floors
-views of the whole area from outside its limits, such as from public areas in the hills, public parks in adjoining neighborhoods, and so on.
In San Francisco, The California State Lands Commission stated that the historic preservation of Piers 1 1/2, 3 and 5 "is a Public Trust activity, given that significant Public Trust uses and public

access, including access to view historic maritime structures, are incorporated into the project." (2003) S-13 (CONT.)

ALTERNATIVES DISCUSSION INADEQUATE

All the alternatives require further study and reworking. Please see the discussion following. Additional alternatives should be presented, perhaps some that do not give the developer or residents' association control of the open space and historic building. S-14

DESIGN COMPATIBILITY AND ACCESS TO NEIGHBORING AREAS

The issues of compatibility and access to neighboring communities are insufficiently studied, in particular design compatibility with Fifth Avenue artisan colony and access to and links with the adjoining inland neighborhoods. S-15

PROCESS INADEQUATE

How does this EIR approval provide enough discussion to fulfill the functions of a Specific Plan (IV.A-16) or give enough equivalent public discussion to allow for a general plan amendment? Moving toward a DDA simultaneously with reworking all zoning and general plan provisions, and reducing public participation to a series of formal hearings, is a deficient public process. We support the idea that our city should plan first, and build developments second. Separate these functions. A better process might in the end be a faster and less acrimonious one too. The city and Port may assert the technical legality of this process, but it is unwise and short-sighted; nor is it conducive to future public participation in urban planning efforts to short-circuit a community discussion of what we should do with this large parcel of publicly-owned waterfront. In general we support the comments by the League of Women Voters and by John Sutter, in addressing procedural issues. S-16

IS PHILBRICK BOATWORKS A HISTORIC RESOURCE?

We believe that the Philbrick Boatworks assessment may not be adequate. Please do further research into the historic, architectural and cultural importance of this longstanding and well-known boatbuilding operation. Due to the short time allotted for comment, we have not had the opportunity to research this one, but we beg the indulgence of the preparers: if more information or leads become available in the next week or so, we would like to submit it. S-17

ARCHAEOLOGY

We concur with the views of Anna Naruta that the archaeological mitigations mentioned in the DEIR are extremely inadequate (II-29, IV.E-1). This project requires a proper archaeological assessment well before construction begins; people operating heavy equipment cannot be expected to fill in for trained personnel, and have little incentive to be on the lookout. It is likely that there was Native American use of this area. Rewrite the mitigation to do the archaeological procedures professionally and early, and avoid costly delays. S-18

PHASING, PHASING, PHASING

Page III-22 says that 1,139 units, more than a third of the project units, would be constructed by 2010. However, the first open space components don't show up until 2012, and an early piece of the Bay Trail until 2014. For the last of the Bay Trail segments, the proposal is to wait until 2018. On this schedule, Oakland will lag behind many other Bay Trail projects. S-19

In that amount of time, a good adaptive reuse of the Ninth Avenue Terminal could very likely be achieved, with a segment of Bay Trail running along its platform.

Where are the guarantees? In other Oakland projects, later phases are sometimes transformed into unrecognizability, or don't happen at all. Promises made are not necessarily carried out. Mitigation and monitoring often are not carried out, either through a lack of institutional memory or because of staffing shortage. Property and development rights change hands, often more than once.

-How can the phasing be improved such that preservation of Ninth Avenue Terminal, open space development, and other public benefits progress along with the development rather than waiting for its completion?

-Can this project be monitored in an ongoing way by a dedicated assigned staffperson, for the life of the project?

-Can the entire Ninth Avenue Terminal and wharf be retained and continue to function until a complete, funded, approved and achievable building scheme is ready to go forward on that site, whether it is a rehabilitation project, or a partial demolition?

-Can some form of completion bond be instituted, so that we do not suffer a change of course that results in an irremediable loss to the historic resource without a concomitant benefit to the public?

S-20

Historically, this is public land reclaimed with difficulty from private entrepreneurs with private profits at heart. Can the EIR compare the impacts if all this land were transferred into private control, and if the public areas identified in the EPP (and where Ninth Avenue Terminal still functions)were to remain in public ownership for publicly-oriented re-use? Within Oakland's borders, there are many informants who could do such an analysis, including those with proven experience in putting together funding packages, taking bond measures to voters, and finding government funds for projects. Can we explore some of these avenues before jumping into an irrevocable land deal, putting public land into private control forever?

S-21

Sincerely,

Naomi Schiff

Naomi Schiff
President

The DEIR's Project Alternatives Discussion Is Deficient

CEQA requires the EIR to "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." *CEQA Guidelines § 15126.6(a).* The purpose of this requirement is to "foster informed decisionmaking and public participation." *Id.*

The DEIR does not satisfy these requirements. The selected project alternatives do not include any development alternative that is both comparable to the project and does not include demolition a substantial portion of the Ninth Avenue Terminal. The preservation alternatives are based on open space and housing density assumptions that are markedly different from the proposed project. The preservation alternatives therefore do not fairly and impartially present the feasibility of preserving the Terminal.

"'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." *CEQA Guidelines § 15364.* Because open space and density considerations will likely be significant to the City's assessment of the economic feasibility of preserving the Terminal, the absence of a preservation alternative with open space and density characteristics comparable to the project disables the City from fairly making the feasibility assessments that CEQA requires. S-22

The DEIR identifies five alternatives to the project:

No.	Name	Description
1A	No Project	Status quo
1B	No Project/Estuary Policy Plan	Development in accordance with the EPP (no residential)
2	Enhanced Open Space/Partial Ninth Avenue Terminal Preservation and Reuse	Mixed use development, including residential, with preservation of only the 1920s portion of the Terminal
3A	Reduced Development/ Partial Ninth Avenue Terminal Preservation and Reuse	Mixed use development, including residential, with preservation of only the Terminal building
3B	Full Ninth Avenue Terminal Preservation and Reuse	Mixed use development, including residential, with preservation of the

		Terminal building and the wharf

The DEIR identifies project characteristics "that are assumed to occur with each of the alternatives (except the no project alternative)." *DEIR at pp. V-3 to -4.* This list omits open space characteristics. Each of the alternatives other than the no project alterative is assumed to include open space consistent with the Estuary Policy Plan ("EPP"). But the project itself does not include open space consistent with the EPP.

Each of the alternatives other than the no project alternative assumes open space substantially greater than the project:

Alternative	**Description**	**Open Space (including Estuary Park)**
--	Project	28.38
1A	No Project	7.1
1B	Estuary Policy Plan	41.5
2	Preservation of 1920s Terminal	40.6
3A	Preservation of entire Terminal	39.92
3B	Preservation of entire Terminal and wharf	39.92

S-22 (CONT.)

Each of the alternatives other than the no project alternative has approximately 12 more acres of open space than the project, the equivalent of over 40% more open space than the proposed project. By way of specific comparison, the project contemplates about 28 acres of open space, including about four acres due to the demolition of 90% of the Ninth Avenue Terminal. Thus, the project includes about

24 acres of open space that the Terminal does not currently occupy. On the other hand, the full preservation alternatives (3A, 3B) envision preservation of the entire Terminal, or the equivalent almost 40 acres of open space not occupied by the Terminal. The DEIR thus compares the project with full preservation alternatives that utilize 6 more acres of existing open space than the project; nearly 70% more open space than the project.

Each of the alternatives selected other than the no project alternative respects the open space requirements of the EPP, while the project does not. The DEIR does not explain the rationale for making an assumption in each of the alternatives that does not hold for the project itself. Since the project does not comply with the EPP, there is no reason why the preservation alternatives must be subject to the EPP's open space requirements. S-22 (CONT.)

This unexplained disparity in open space assumptions between the project and the proposed alternatives contributes to disparities in the residential densities between the project and the various project alternatives. These are summarized in the following table:

Alternative	Description	Total Dwelling Units in Project	Total Dwelling Units in Subarea 5	Maximum Building Height in Subarea 5
--	Project	3,100	2012	65/240
1A	No Project	0	0	65/240
1B	Estuary Policy Plan		0	60
2	Preservation of 1920s Terminal	1,800	1550	65/240
3A	Preservation of entire Terminal	540	432	50
3B	Preservation of entire Terminal and wharf	540	432	50

The proposed number of dwelling units falls precipitously from the project to the full preservation alternatives (3A, 3B). This is not explained. It appears to be the combined result of the increase in open space discussed above and a similarly unexplained reduction in building masses. The full preservation alternatives have only 17% of the number of units proposed for the project. Subarea 5 is the most intensive residential part of the project. The proposed building heights in subarea 5 for the full preservation alternatives (50 feet) are considerably lower than those proposed for the project (65 feet up to 90, plus 240-foot towers). This difference in heights, as well as likely differences in the size of the building footprints, dramatically affects the density of the full preservation alternatives, as well as the partial preservation alternative.

The DEIR provides no explanation of why a density that will permit 1800 dwelling units is proposed for Alternative 2, which proposes to demolish only the 1950s portion of the Terminal, while only 540 units are proposed for Alternative 3, which proposes to retain that portion of the Terminal. There is no discussion why the retention of the 1950s portion of the Terminal necessitates such a dramatic reduction in the residential potential of the project. Nor is there any consideration of increasing the residential densities in subareas other than subarea 5 to compensate for loss of density in subarea 5 due to the preservation of the Terminal, even assuming that such a loss was necessary. S-22 (CONT.)

The DEIR's alternatives discussion is also deficient in the following respects:

- Failing to explain why only approximately 120,000 square feet of the Terminal is proposed for reuse under the full preservation alternatives, when the Terminal includes 165,000 square feet;
- Omitting discussion of the potential for public access and views from the Terminal under the partial and full preservation alternatives;
- Stating that the EPP assumes that the Terminal would be completely demolished and the wharf partially demolished (DEIR at p. V-11), when the EPP states that the "City will make all reasonable efforts to avoid or minimize adverse affects on the Character-Defining elements of Potential Designated

S-22 (CONT.)

> Historic Properties which could result from private or public projects requiring discretionary City actions (*id.* at p. F-11).
>
> * * * * *

The DEIR must adequately describe the rationale for selecting the alternatives, and identify alternatives that were considered but were rejected as infeasible during the scoping. The DEIR fails in each of these respects. It provides no explanation for varying open space and residential densities so that the City cannot make a meaningful apples-to-apples comparison of the preservation alternatives with the project. The alternatives discussion implies that historic preservation will necessitate sacrificing the residential potential of the project. In fact, this is merely an assumption of the DEIR, not a proposition for which it provides any analysis.

The DEIR is deficient because it does not include adequate alternatives that will enable the City to evaluate the feasibility of preserving the Ninth Avenue Terminal and wharf. Reasonable alternatives based on comparable assumptions regarding open space and density are needed to enable the City to make this impartial analysis.

OAKLAND HERITAGE ALLIANCE

Margaret Stanzione, Project Planner
City of Oakland
Community and Economic Development Agency
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

RE: Draft EIR, Oak to Ninth Avenue

Dear Ms. Stanzione,

Below are additional comments to the DEIR While these may seem somewhat repetitive, others are not repeated elsewhere in our main letter. The stucture of the DEIR causes elements to occur and recur in a scattered fashion making a highly structured comment letter difficult. S-23

PAGE II-2:
"dredging activities and straightening the existing undulating and unprotect condition of Clinton Basin's shoreline." Is undulation bad? It is hard to understand how there could be marsh habitats in a marina. What are the locations of proposed marsh habitats? S-24 S-25

Page II-2:
"3,534 onsite parking spaces. . ." "Approximately 450 spaces for use by park and marina users." Where would visitors to the 3100 units (perhaps 5000 residents?) park? If condos are inhabited by more than one person, might some of them have two cars? In Adams Point, with much better access to transit, new construction is required to build 1.1 spaces/unit. At 1.1, 3410 spaces would be needed by residents, leaving too few spaces for commercial visitors, for visitors to residents, and for visitors to the open space and historic terminal building. S-26

II-5
Under the Environmentally Superior Alternative, the assertion "it is recognized..." makes some assumptions that might be worthy of further discussion. In particular, one might question the idea of "provide housing with access to alternative modes of transportation" (3) since this proposed housing is not particularly convenient from the transportation point of view. It is not served by transit lines, and the distance to BART is much greater than the distance assumed in transportation planning literature that people are willing to walk. In addition, there are difficulties to overcome in crossing the quite-active railroad tracks. Related questions: S-27

a) If the developer enters into some agreement to provide shuttle service or to work with AC Transit in some way, what is the duration of such service? Can it be guaranteed in perpetuity? There have been examples of terminated shuttles in Oakland in the past. How is the city protected from such termination? S-28

b) Where is an analysis of a pedestrian/bicycle footbridge or other mechanism for safely traversing the railroad tracks?
How would schoolchildren be able to get to schools without being in mortal danger? S-29

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MITIGATIONS TABLE
Page II-12 something seems to be missing from C-7 mitigation measures. S-30

Page II-12
E.3: Mitigation measures for demolition of the terminal are extremely inadequate and must be reworked.

Photography and recordation of the resource is required, but it is not really a mitigation at all. It does not mitigate the loss. S-31

E.5: If the terminal were to be preserved, surely there would be a way to design a compatible nearby use, contrary to the assertion of E.5. Does this mean that because a building would come close to it, demolition would be an appropriate response? To meet Secretary of Interior Standards one might recommend a compatible design, rather than to advocate demolition of an important resource. S-32

Page II-15:
G.4: Retention of the Ninth Avenue Terminal could protect Bay Trail users from the loud freeway noise at the site; on the seaward side of the building, the building provides baffling from the at-grade portion of the freeway. This should be included in a discussion of the value of retention of the entire building. S-33

A-2: No mention is made of the lengthy public process which contributed to the current EPP plan. A joint set of approvals of many different regulatory actions tends to obscure the lack of planning and the nonconformance of the project with a more open and representative process. In two-minute meeting testimony, it is not reasonable to expect sufficient public participation to arrive at a project plan which has the public interest at its core. While this might not be of critical concern in a private development, since the public IS the landowner, it seems here inappropriate to give short shrift to their involvment. How can the interests of the public in what amounts to a general plan amendment be served by this EIR process, which is not a planning process, but an environmental assessment? S-34

II-17
B Transportation
Are the transportation, circulation and parking mitigations adequate? We are concerned that historic areas of the city such as Chinatown, the Produce Market, the Waterfront Warehouse area, and our soon-to-be-built southwest end of Lake Merritt may be adversely affected. These areas of the city must be made inviting for pedestrians in order to continue to function in a way that will draw visitors and residents onto the streets. We doubt that retiming signals will make the traffic situation acceptable. Many of the mitigations seem to be conditions upon actions of other entities, such as CalTrans and perhaps Union Pacific, who may or may not be willing to commit to mitigation measures. Address the mechanism for enforcement of such mitigation measures, other than faith. S-35

The mitigations should include means for real substantial progress in getting residents and visitors out of their cars, to wit:

a) electric vehicles for short hops such as to Jack London Square (perhaps powered by solar energy generated by solar roofing panels on a preserved Ninth Ave. Terminal), so that residents can carry groceries and so on. S-36

b) shuttle service IN PERPETUITY, established by funding to AC Transit or equivalent transit agency, on a permanent basis.

c) special bike and pedestrian accommodations for train and road crossings for greater protection.

d) carshare station (perhaps at Ninth Avenue Terminal, which could accommodate indoor parking easily)

e) appropriate pedestrian/bike bridge or other protected crossing to avoid traffic, train, and pedestrian accidents.

S-36 (CONT.)

Page II-43
F. Geology, Soils and Seismicity:
Does the city or the port have liability in case the assessment in this EIR of the liquefaction and other dangers is wrong? S-37

Due to the freeway and train tracks potentially blocking access in an emergency, should the development provide boats as emergency equipment? S-38

I. Filling at Clinton Basin: Is this filling necessary? S-39

III-8. Might it be appropriate to consider reuse of Ninth Ave. Terminal to provide neighborhood serving retail and commercial as well as visitor-serving commercial and retail for the development, rather than parceling out small amounts of commercial throughout the devfelopment, if State Land Commission concurred? S-40

Area south and west of Terminal building would be a great forecourt for the development and should definitely be retained. No explanation is given for why it should be removed; it does not seem to hurt anything by being retained. S-41

Any Planned Waterfront Zoning District should incorporate standards for historic preservation. S-42

PROJECT PHASING

III-22
Park areas and historic preservation project should begin in Phase I, not Phase IV.

Phases IV and V:
Retain all of Ninth Avenue Terminal until such time as absolutely final permits and plans are in place, financing secured, and guarantees are in place. In the meantime, investigate feasibility of doing a LEED project in the terminal, study feasibility of having it supply solar energy for alternative transit or adaptive reuse in the building, and to seek funding for adaptive reuse of the building.

The Phase VIII park improvements occur much too late; no building should occur on the estuary park site, and the park should be developed in Phase I, perhaps with Port or City constorl of the parkland.

S-43

B. PROJECT OBJECTIVES (III-24):

Whence come the objectives? Perhaps there should be a statement explaining who sets the objectives and what the basis is. S-44

Bullet point two: "Provide a mixture of dwelling sizes and types. . . " should generate a discussion of affordable housing in the EIR. S-45

Bullet point three: "Provide a range of commercial uses. . . " Coordinate the commercial program with that of the San Antonio district, and attempt not to further damage the central business district by duplicating services with those offered there. S-46

Include historic preservation in the project objectives. S-47

The claim of close proximity to abundant transit opportunities ignores train tracks, overstates the convenience of the location, overestimates people's willingness to walk, overestimates their capacity to carry their shopping bags, and doesn't take into consideration that there can be inclement weather or late night personal security issues. S-48

At III-25, bullet 10: "Provide infill development in furtherance of Smart Growth principles" Reuse of historic buildings is considered to be a component of smart growth. This should be explicitly stated. S-49

IV.A-3: DOES THE PORT OF OAKLAND OWN THE PROJECT SITE PROPERTY? S-50
We were under the impression that Trust Lands are owned by the public and administered by the Port on their behalf. Please clarify.

IV.B-60
The discussion of railroad operations and their impact on vehicular traffic (including any potential bus traffic) is deficient. The three paragraphs are inadequate to the amount of impact the railroad has and will have on the area. Did the preparers consult with planning staff at Union Pacific? Did they take into consideration the increase in train frequency generated by a planned rail link between Sacramento and San Jose? With the current rise in fuel costs, it would be reasonable to expect increases—not decreases—in rail freight. Surely the Port itself would be able to provide information on this topic. Particularly weak: "Because no set schedule exists. . . more or fewer trains could operate along this line in the future." By consultation with Union Pacific, more specific information should be obtained. The rail traffic does already have an impact on vehicular traffic crossing the tracks at Jack London Square and at Fifth Avenue. This is unlikely to lessen. S-51

Additionally, what provision is to be made for pedestrian and bicycle safety across these at-grade train crossings? The EIR should study options for protected crossings. It is particularly hard to envision children walking to La Escuelita from the development. Even if the very low ratio proposed in the DEIR, .1 student per household, is accurate, that generates 310 students. Even if some of them get rides some of the time, additional study is required to address the issues of children traversing the tracks on a daily basis. Since the DEIR is promising us a "transit-oriented" lifestyle, it must be assumed that some adults, too, are pedestrians walking to BART, for which they must also cross the tracks. The 13% of children expected to attend private school may also be expected to use transit or walking to get to school or home from school, even if they bus or BART part of the way. Either architectural protection (a pedestrian overpass) or a some other protective mechanism (fulltime crossing guards?) must be provided. S-52

Page 18 of Carey & Co. report:
Oakland Heritage Alliance questions the finding that the Philbrick Boatworks is not of historic interest, and we request further study of the resource, and the history of the enterprise, at 603 Embarcadero. Again, we request that the EIR preparers accept any late information we can find about this property. S-53

Sincerely,

Naomi Schiff

Naomi Schiff
President

Letter S – Oakland Heritage Alliance

S-1 See Master Response B and Response to Comment Q-2.

S-2 The comment asks "Why is the substantial demolition of the Terminal and its platform included in the project?" The fundaments of the proposed project are found in the project objectives that start on DEIR p. III-24. The alternatives analysis provided in DEIR Chapter V provides the environmental analysis of a range of alternatives to the project, including varying levels of preservation of the Ninth Avenue Terminal. City decisionmakers will ultimately decide on the adequacy of the range of alternatives included in the DEIR as well as a preferred alternative.

S-3 See Response to Comment E-8. Additionally, the comment relays determinations made by a licensed structural engineer about the Terminal building's structural condition, scope of rehabilitation necessary, and the extent of seismic strengthening required. According to the comment, these determinations are based on a brief visual inspection of the building. The proposed project design to date relies on confirmed findings prepared after extensive, site-specific structural and geotechnical investigations cited in the DEIR. Furthermore, the preliminary analysis of the shed building conducted by Rutherford & Chekene indicates that while the concrete walls and steel truss frames are in generally good condition, they do not have adequate capacity to resist seismic forces and do not meet governing building codes. Any portion of the building that would remain under the proposed plan would have to be rehabilitated to bring it to current building code standards. Consistent with information provided in Response to Comment E-8, the design and seismic upgrades for all aspects of the project will be in compliance with all current and applicable building codes for building and seismic performance.

S-4 The DEIR alternatives analysis in Chapter V, and specifically, the Full Ninth Avenue Terminal and Adaptive Reuse Preservation Sub-Alternative starting on DEIR p. V-38, are not intended to provide "a rationale for demolition" of the Terminal. The alternatives are provided in the DEIR, as required by CEQA, to "compare the effects of a reasonable range of project alternatives to the effects of the project." (CEQA Guidelines 15126.5) This analysis provides City decisionmakers the ability to make an informed and reasoned choice about the project. If the City chooses to allow full or partial demolition of the Terminal, it would be required to prepare and adopt statement of overriding considerations in support of its choice, as it previously did prior to adoption of the Estuary Policy Plan for which a significant unavoidable cultural resources impact was identified for full or partial demolition of the Terminal.

In response to the four questions posed in the comment: a) Demolition of the Terminal would allow the proposed 9.74-acre Shoreline Park to occur generally within the existing footprint of the Terminal; b) Prior to acting on the project, the City would determine whether affirmative findings (overriding considerations) for the project could be made under Historic Preservation Element Policy 3.5, which considers the design of the retained structure and the public benefit of the project compared to preservation of the

existing structures. c) Removal of the Terminal to provide the proposed 9.74 acres of grass-covered open space would reduce the impervious surface area in this area of the site. d) The DEIR does not (nor is it required to) compare the structural capacity of the existing wharf with the Terminal to that of the existing wharf with park facilities (see Response to Comment E-8).

S-5 The project would provide a total of 20.7 acres of new open space. The Estuary Plan does not provide open space acreage assumptions, however, a total of 35.7 acres of new open space was analyzed in the Estuary Plan EIR and illustrated in the Estuary Policy Plan (DEIR p. IV.L-16 and Table IV.L-2). The open space configuration in the Estuary Plan (Figure III-10: Oak to 9th District Illustrative Open Space Key Map) is similar to that of the proposed project. Open spaces would line the entire waterfront, and a large new open space would be located at the east end of the site where the Ninth Avenue Terminal currently exists. Unlike the project, unpaved open space would occur along Clinton Basin and along the entire length of the Embarcadero, except generally east of Clinton Basin.

The alternatives in the DEIR demonstrate a range of varying open space scenarios ranging from 7.7 *total* acres (Alternative 1A: No Project) to 41.5 *total* acres (Alternative 1B: No Project / Estuary Policy Plan Alternative). Also, the Estuary Policy Plan open space configuration is addressed in Alternative 1B (No Project / Estuary Policy Plan). Additionally, a full discussion and analysis of the proposed park facilities is provided under Impact L.4 starting on DEIR p. IV.L-15. No further discussion or analysis of the proposed reduction in open space compared to the Estuary Policy Plan is warranted.

S-6 The comment seems to overlook that the DEIR has determined that substantial demolition of the Ninth Avenue Terminal would remain significant and unavoidable even with application of the identified mitigation measures (Impact E.3 and Mitigation Measures E.3a through E.c). Retaining the Bulkhead Building is not identified as a mitigation measure. Regarding Mitigation Measure E.3b, which requires that the Bulkhead Building's reuse and rehabilitation comply with the Secretary of the Interior's Standards for Treatment of Historic Properties**,** the mitigation clearly states that further review of detailed final design plans (including, but not limited to, proposed window treatments, materials palette, awnings, signage, and interior configurations) by a qualified professional must occur. This process would establish which standards the project would follow, based on the final approved project, and to what extent. Subsequently, the findings would be subject to review and final approval by the City. Since compliance with the standards is required by the project if any portion of the Terminal is retained, identification of specific standards is not required for purposes of adequately identifying the impact or adequate mitigation measures to reduce the project impact to the extent feasible.

S-7 As described on DEIR p. IV.D-20, the project would remove a portion of the pile-supported pier along the southernmost edge of the Ninth Avenue Terminal. The existing pile supported pier along the eastern shoreline of the site (beneath a portion of the

Terminal) would be retained and improved with earth and grass over the existing concrete pier. This is depicted in DEIR Figure IV.D-3 on DEIR p.IV.D-22. Newly created earthen and grass areas, even atop a subsurface pier, would allow for increased infiltration and reduced stormwater runoff. The runoff from this area would infiltrate into surface soils and eventually flow into the Estuary via a new stormwater collection system proposed by the project.

In contrast, the Sub-Alternative discussed on DEIR p. V-39 would not remove the portion of the pile-supported pier along the southernmost edge of the Ninth Avenue Terminal. This is because, as described on DEIR p. V-38, the entire Ninth Avenue Terminal building and its related wharf form an intact historic resource. As a result, less existing impervious surface would be removed, which means less reduction in the speed and amount of stormwater runoff from the site.

S-8 As stated in Response to Comment S-4, the DEIR does not compare the structural capacity of the existing wharf with the Terminal to that of the existing wharf with park facilities. Similarly, the DEIR does not compare the potential weight of park facilities with the Terminal structure. Consistent with the comment, the DEIR is not required to analyze such comparisons to assess the physical environmental impacts under CEQA. Nonetheless, as with the shed building, preliminary engineering analysis indicates that while the pier structure appears capable of supporting public open space improvements, the seismic performance would not satisfy governing building code standards. The pier would need to be rehabilitated regardless of proposed use. Depending on thickness, soil may add more load to the structure than that imposed by the building. However, the proposed rehabilitation scheme could be devised to accommodate the thin lift of proposed lightweight soil without a significant change in design strategy or cost. Regarding maintenance, the effort to inspect and maintain a building would be more than an open space. The frequency and type of maintenance of the pier structure would not be different if the building is retained or an open space is constructed.

S-9 An analysis of possible sources of funding that might support reuse and maintenance of the Terminal is beyond the appropriate scope of the DEIR as it pertains to an array of funding opportunities and not to the physical environmental impacts of the project. This does not preclude the City from requesting information on how these sources could be applied to the Ninth Avenue Terminal should it be retained. To the extent that fiscal considerations may be relevant to the City's deliberations on the project or its alternatives, the project sponsor has prepared an economic feasibility and constraints report (capital and operational) on retaining all or parts of the Ninth Avenue Terminal.

S-10 The DEIR analysis is based on the existing information provided by the State Lands Commission regarding allowable Tidelands Trust-consistent uses that could occur on the project site. Any future consultation among agencies regarding increasing the scope of potential uses that could occur within Trust lands would be considered by the City

decisionmakers of the project as they consider the appropriate land use mix for the project. See Master Response G, which discusses public trust use restrictions.

Also, to counter an erroneous assertion in the comment, the DEIR does not conclude or suggest that preservation of the Bulkhead Building (as proposed by the project) would "irrevocably damage a historic resource."

S-11 See Master Response B and Response to Comment S-9.

S-12 As stated in the discussion of Impact E.3 regarding substantial demolition of the Ninth Avenue Terminal (DEIR p. IV.E-26), "Implementation of Mitigation Measures E.3a and E.3b would somewhat reduce this impact as much as feasible. However, because the demolition of substantial portions of an historical resource represents an irreversible change to the historical resource, this impact would remain significant and unavoidable, even after mitigation." These mitigations are consistent "other potential measures" identified in the Historic Preservation Element of the General Plan.

If the City chooses to approve the project and allow full or partial demolition of the Terminal, it have to find the mitigation measures identified in the EIR to be adequate and would be required to prepare and adopt statement of overriding considerations in support of its choice, as it previously did prior to adoption of the Estuary Policy Plan for which a significant unavoidable cultural resources impact was identified for full or partial demolition of the Terminal.

S-13 The conclusion of the project's less-than-significant impact on visual character and quality is based on the comprehensive analysis provided in Section IV.K (Visual Quality and Shadow) of the DEIR. Numerous simulations are provided to support this finding. Most importantly, the DEIR conclusion is based on an assessment of the project compared to the significance criteria provided in City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines: "Substantially degrade the existing visual character of quality of the site and its surroundings." The comment asserts that demolition of the Terminal would result in an important negative effect – the disappearance of an important visual cue and reminder of Oakland's maritime history. While the removal of the Terminal would result in a noticeable change in the visual character of the area, there are two key points in response to the comment. First, the Terminal's removal, with respect to it being an *historic reminder*, is captured by the significant and unavoidable impact resulting from its substantial demolition (Impact E.3). Second, acknowledging the subjective topic of visual quality (as stated on p. IV.K-9 of the DEIR), the DEIR reasonably concludes that the project would not result in a "substantial adverse effect" - the existing conditions include industrial, manufacturing, and service uses, industrial shed buildings, shoreline debris, limited physical and visual access to the water, minimal usable open space. Project conditions would provide open spaces, shoreline improvements and access, new mixed-use development, right-of-way improvements, landscaping and amenities.

The comment suggests several additional views to be analyzed in the DEIR. Of this list, DEIR Figure IV.K-2 shows the historic Ninth Avenue Terminal from Alameda. A view "of the whole area from outside its limits" is provided in Figure IV.K-13, which shows the project site from San Antonio Park located approximately 1.5 miles northeast of the site. The 15 total viewpoints simulated for the DEIR analysis were selected by the City to represent an array of short-, medium-, and long-range views of and across the site, from exterior *public* viewpoints and from within the site. The visual simulations are considered adequate to conduct the CEQA analysis provided in the DEIR and to assist City decisionmakers as they evaluate the project impact on visual character and views and scenic vistas.

S-14 As discussed in detail in Master Response B and summarized in Response to Comment M-3, the City of Oakland has considered the selected alternatives to constitute 'a range of reasonable alternatives to the project…which would feasibly attain most of the basic objectives of the project' (CEQA Guidelines Section 15126(a))." The alternatives in the DEIR are considered to generally align with the overall goals and policies of the Estuary Policy Plan, present possible project alternatives. The alternatives reflect input received from the community and Planning Commission during the EIR scoping process, public hearings on the DEIR, and the City's community design process that has occurred separate from the environmental review process. The DEIR alternatives analysis is provided to show the physical environmental impacts of a range of alternatives to the project primarily with respect to site configuration, density, preservation of the Ninth Avenue Terminal. City decisionmakers will ultimately decide on the adequacy of the range of alternatives included in the DEIR.

The comment incorrectly presumes that the developer or residents association could have "control" of the open space and historic building. As stated on DEIR pp. III-18 and IV.L-18, the project sponsor would be responsible for installing improvements and maintenance of parks/open spaces in the project area, with the appropriate maintenance mechanism to be established through an agreement with the City. The City or Port would own the open spaces, and the City would be responsible for approving park improvements, programming allowable park uses, and granting/permitting activities within parks. The ownership and maintenance responsibilities of parks and open spaces, however, do not affect the project's impacts on the physical environment under CEQA.

S-15 Impact A.1 and Impact A.3 identify, discuss, and provide appropriate mitigation measures that address the design and land use compatibility of the project with adjacent and nearby areas, as well as access between these areas. Discussion is also provided on DEIR pp. IV.A-15 (*Land Use Continuity, Access, and Circulation Connections*) and IV.A-16 (*Fifth Avenue Point*) within the discussion of Estuary Policy Plan policies. Thus, adequate discussion is provided in the DEIR to address the potential impacts of the project. In Chapter V of the DEIR, the effect of each project alternative on these topics is discussed under *A. Land Use, Plans and Policies* to a level of detail appropriate for the alternatives impact under CEQA.

S-16 See Master Response A.

S-17 As described above under Response to Comment O-1, the historic significance of the Philbrick Boat Works building was reviewed under federal, state, and local evaluation criteria for its potential historic significance by Carey & Co., consulting architectural historians for the proposed project. Carey & Co. found that while the building has been in use as a long-term boatbuilding operation, it does not qualify as a historic resource under federal, state, or local evaluation criteria, and therefore would not be considered a historic resource for CEQA purposes. As such, the amount of review and research into the building's cultural importance for CEQA purposes was adequately provided in the DEIR.

S-18 As discussed in the DEIR, the project site is considerably developed with artificial fill material and built structures, concrete, and asphalt. An archaeological field reconnaissance was conducted despite the lack of visible native surface or native topography. The utility of pedestrian survey techniques is highly dependent on 1) how visible the site is to allow detection the presence of archaeological materials at or below a given place, and 2) the site obtrusiveness, or the ease by which the materials can be discerned by the archaeologist. Both of these conditions are minimal at the project site. However, in the opinion of the registered archaeologist conducting the DEIR assessment, full testing survey does not appear warranted based on the following facts:

- The project site is either in bay waters or consists of considerable artificial fill material. While it is always possible that re-deposited archaeological remains may be present in the fill, the probability is low enough not to warrant extensive discovery techniques.

- Given the conditions of the project area, a regime of test-pitting to identify archaeological material, e.g., organic residues or artifacts associated with cultural activity, would require the use of chemical or instrument anomalies gained from remote sensing devices or through actual hand test-pitting. The probability of detecting site elements is a function of the number of test pits used and/or the sensitivity of the equipment used. Both methods are expensive and time-consuming processes that do not appear needed given the low probability of discovering sites in the artificial fill.

See Response to Comment BB-8 for additions and revisions proposed to mitigation measures identified in the DEIR for Impact E.3

S-19 See Master Response G.

S-20 A Mitigation Monitoring and Reporting Program (MMRP) will be prepared for the project and must be adopted as part of project approval. The MMRP will identify each mitigation measure, the party(ies) responsible for implementing the mitigation measure, and the timeframe for implementation. The City shall require implementation of these

measures as conditions of project approval, and their implementation will be monitored through the Mitigation Monitoring and Reporting Program (MMRP).

The comment poses four questions related to the phasing and monitoring of the project, none of which address issues pertinent to the environmental analysis of the DEIR. The City could choose to consider alternative phasing of any aspect of the project, and its monitoring, or implementation of a completion bond in its deliberations beyond the scope of the physical environment impacts of the project under CEQA.

S-21 Ultimate ownership of the project site would not affect the physical environmental impacts resulting from the project. Alternative 1B: No Project / Estuary Policy Plan reflects the scenario described by the comment in which public ownership and publicly oriented reuse would occur.

S-22: The comment asserts that the alternatives analysis in the DEIR do not meet the CEQA requirements to describe a range of reasonable alternatives to the project, because the density and open space characteristics of the preservation alternatives are not comparable to the project. As a result, the comment concludes that the City cannot undertake a fair feasibility analysis. The fundamental purpose of the alternatives analysis is to examine project alternatives that would feasibly attain most of the project objectives while avoiding or substantially lessening the significant adverse impacts of the project.

For the Oak to Ninth Avenue Project, significant impacts are not limited to the Ninth Avenue Terminal Building and preservation concerns. Members of the community have called for examination of alternatives with greater open space and reduced density in order to reduce other significant impacts of the project. In fact, other than the No Project alternative, both the alternative with a reduction in density to 540 units and a reduction to 1,800 units would avoid or lessen a number of the project's significant impacts unrelated to historic resources. The range of alternatives covered in the document includes Alternative 3 (Enhanced Open Space/Partial Ninth Avenue Terminal Preservation and Adoptive Reuse), which was suggested by OHA including their suggestions for open space and density. Additionally, the alternatives discussion includes a Sub-Alternative "Full Ninth Avenue Terminal Preservation and Adaptive Reuse" that could be implemented in conjunction with the project or any of the alternatives. This broad range of alternatives, and in particular the range of alternatives for preserving all or a portion of the Terminal building, meets the goal of promoting informed public participation and the decision-making. Thus, the DEIR complies with CEQA mandates for examining a reasonable range of alternatives.

Moreover, there is no requirement under CEQA that the alternatives analyzed must be economically comparable. Such a requirement would constrain the analysis of alternatives that could avoid or substantially lessen the project's significant adverse impacts. The economic feasibility of the alternatives will be examined in the context of the City's consideration of the project approvals.

S-23 Comment is noted and acknowledges that the following comments may be repetitive to some addressed above within Letter O.

S-24 The DEIR statement does not intent to imply that the existing undulating aspect of the Clinton Basin's shoreline is "bad". As described on DEIR pp. III-18 and IV.D-20 (in greater detail than on DEIR p. II-2 of the Summary chapter cited by the comment), the proposed improvements in Clinton Basin are to allow rebuilding and expansion of the existing marina facilities, and create a new retaining wall-like edge that will provide a pedestrian promenade along its perimeter.

S-25 The comment's question about how marsh habitat could exist in a marina indicates a misinterpretation of the text on DEIR p. II-2: "The project would improve the existing shoreline along the project site with varying treatments, including marsh habitats, and riprap, and bulkhead walls." Figure IV.D-3 on DEIR p. IV.D-22 shows the existing wetland/marsh restoration area as well as proposed new vegetated shorelines where new marsh habitat could emerge. These areas are primarily at South Park adjacent to the wetland restoration area and along Channel Park along the east shore of Lake Merritt Channel.

S-26 See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management measures.

S-27 See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures.

S-28 See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures.

S-29 See Master Response F.

S-30 The comment points out that the complete Mitigation Measure text for Impact C.7, as stated starting on DEIR p. IV.C-30, is omitted from p. II-12 of the summary table of impacts and mitigation measures. The complete text of Mitigation Measures C.7a through C.7k is added to the summary text. As there are no revisions to that text, this addition is indicated in Chapter IV of this document, Changes to the DEIR.

S-31 The comment asserts that the mitigation measures for demolition of the Ninth Avenue Terminal are extremely inadequate. As described on DEIR pp. IV.E-26 – 27, Mitigation Measures E.3a (photography) and E.3b (adaptive reuse of the terminal bulkhead) "would somewhat reduce this impact [of demolition] as much as feasible. However, because the demolition of substantial portions of an historical resource represents an irreversible change to the historical resource, this impact would remain significant and unavoidable." As such, the DEIR acknowledges that mitigation measures identified would not fully reduce the impact to a less-than-significant level, and that the loss of substantial portions of the terminal would be significant and unavoidable.

The DEIR also notes that, "CEQA requires an analysis of preservation alternatives(s) in order to ascertain whether there are feasible options to the project that would lessen the significant unavoidable impacts to less than significant. A series of preservation alternatives to the project are included in Chapter V of this EIR, including an alternative that would preserve the entire Terminal building and its associated wharf structure." Only selection of a project alternative that would maintain the entire terminal building and its associated wharf would fully mitigate the potential loss of the building.

S-32 The comment asserts that if the Terminal were to be preserved that there would be a way to design a compatible use nearby. This assertion is contrary to significant and unavoidable Impact E.5. As discussed under Impact E.5 (p. IV.E-28 of the DEIR), "The City should continue to pursue landmark nomination of the Bulkhead Building and delineate the S-7 Preservation Combining Zone immediately around it to ensure its long-term protection as a representation of Oakland's important maritime past. If designated as a landmark in the future, the proposed project may affect this building's historical setting through potentially incompatible or incongruous adjacent new construction. As the designs of the proposed mixed use, multi-story project have not been finalized, it is possible that the project could affect its historic setting as an Oakland City Landmark. This would be considered a significant and unavoidable impact." The DEIR also notes that, "a series of preservation alternatives to the project is included in Chapter V of this EIR, including an alternative that would preserve the entire Terminal building." As such, the DEIR adequately addressed potential compatibility of new structures adjacent to the terminal bulkhead building, were it to be designated as a landmark in the future.

S-33 As asserted in the comment, it is possible, though not documented, that the existing Ninth Avenue Terminal structure could reduce freeway noise as perceived by future Bay Trail users as they pass along the seaward side of the building. For the CEQA analyses conducted for the DEIR, Impact G.4 recognizes the significant and unavoidable impact that would result from the project locating public parks (and residential uses) in a noise environment where outdoor noise levels are above what is considered "normally acceptable" for these uses (pursuant to the City's Noise Element). The impact discussion on DEIR p. IV.G-28 acknowledges that sound attenuation can occur for area located away from I-880, with some sound blockage *potentially* attributable to buildings between the receptor and I-880.

S-34 As is pertinent to the DEIR analysis, a description of the Estuary Policy Plan and its relationship to other elements of the General Plan is provided on DEIR p. IV.A-11. With regard to the review process that the City has elected in lieu of the specific planning process, see Master Response A.

S-35 See Master Response C for a description of significant and unavoidable traffic impacts.

S-36 See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures.

S-37 The comment raises a question of liability responsibility in case the assessments in the EIR for the project are incorrect. The comment does not discuss any potential environmental impacts of the project or adequacy of the analysis in the DEIR. All engineering and development activities on the site would occur according to specific engineering documents and plans prepared, reviewed, and approved by qualified licensed and certified professionals as required by law. See also Response to Comment II-6, below.

S-38 The discussion of emergency access/railroad operations on DEIR p. IV.B-60 recognizes that long freight train could limit access to the site to the 16th Avenue alternative route. However, the City has indicated that the availability of alternative routes would minimize any significant delay in response time, given the relative frequency and duration of train obstructions at both 5th Avenue and Oak Street crossings. Potential environmental impacts that would require additional services/facilities (per CEQA significance criteria) are discussed in Section IV.L of the DEIR (Public Services and Recreational Facilities). As discussed on DEIR pp. IV.L-10 and IV.L-13, the Oakland Police Department and Oakland Fire Department indicate that any anticipated delay in response would not require the construction of new or physically altered facilities in order to maintain acceptable response time.

S-39 See Response to Comment E-4.

S-40 See Response to Comment S-10 and Master Response B.

S-41 The project proposes to remove a portion of the pile-supported pier along the southernmost edge of the Ninth Avenue Terminal. The substructure of the southernmost portion of the pier was constructed later than the northern sections, and initial engineering investigations show that this portion is substantially more damaged that the northern portions to be retained and improved as part of the project.

S-42 Comment is noted. The City decisionmakers can consider the inclusion of historic preservation standards as it deliberates the proposed Planned Waterfront Zoning District (PWD-1).

S-43 The comment suggests shifts in the project phasing of the project and recommends activities that could occur within the revised phasing, specifically related to demolition of the Terminal and phasing of park areas. The City could choose to consider an alternative phasing of any aspect of the project in its deliberations, however, this aspect of the project does not address a physical environmental impact over CEQA. See Master Response G regarding the phasing of park space in particular.

S-44 The project objectives presented in Chapter III (Project Description) of the DEIR (pp. III-24 through III-25) are the result of collaboration between the City and the project sponsor. As directed by Section 15124(b) of the CEQA Guidelines, the Project Description in the EIR shall include “a statement of the objectives sought by the proposed

project." The objectives help guide the development of alternatives in the EIR and will help the preparation of findings or a statement of overriding considerations, if necessary. The City (as Lead Agency) has the discretion to determine if the project objectives are appropriate. It is also up to the City and the project sponsor to determine whether or not the project adequately meets the stated objectives.

S-45 The DEIR provides discussion of affordable housing on DEIR pp. IV.A-28 and IV.A-29 within the context of the *Central City East Redevelopment Plan* and the *Central City Urban Renewal Plan*. Additional detail is provided on DEIR p. IV.J-42 within the detailed analysis of Potential for Indirect Physical Impacts (*Development of Affordable Housing*).

S-46 Starting on DEIR p. IV.J-33 (*Potential Indirect Impacts of Proposed Retail Development*), the DEIR provides a detailed discussion of the project's relationship to adjacent commercial uses. In response to comments received on the Notice of Preparation (NOP) of the EIR, the DEIR includes and analysis that addresses the retail market effects of the project and whether the proposed retail/commercial space in the project could cause ripple effects of store closures and consequential long-term vacancies that would result in physical deterioration and urban decay. On DEIR pp. IV.J-33 through IV.J-40, the DEIR discusses the existing underserved Oakland retail market, the type of retailing envisioned for the project, the anticipated additional retail spending from project residents, comparative retail spending and sales for the project, the complementary relationships of the project retailing and that in nearby neighborhoods, and the contribution of other new retailing citywide. The DEIR concludes that the project would not lead to significant indirect physical impacts related to retail markets, including existing neighborhood commercial districts and corridors in surrounding areas of Oakland, and specifically not on the Eastlake District.

S-47 See Response to Comment S-44.

S-48 The comment speaks to the project objective "develop housing in close proximity to abundant transit opportunities, including BART, Amtrak, the San Francisco Bay Regional Ferry, and AC Transit." The comment suggests that this objective ignores existing obstacles (rail tracks) and considerations relative to the user preferences and behavior. The comment is noted. See also Response to Comment S-44, Master Response D (*Transit Measures* and *Bicycle Measures*), and Master Response F.

S-49 The project sponsor's objective to Further Smart Growth principles is based primarily on the development of 3,100 new housing units within the City of Oakland, in proximity to major employment centers rather than in outlying communities that result in increased traffic congestion, lengthy commutes, and fuel consumption, etc. See Response to Comment S-44.

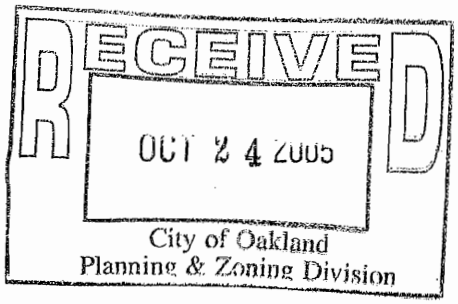
S-50 The Port of Oakland is the property owner of all property on the project site, including trust lands.

S-51 See Responses to Comment Letter A.

S-52 See Master Response F.

S-53 See Response to Comment O-1.

COMMENT LETTER T



October 24, 2005

Margaret Stanzione
City of Oakland
Community and Economic Development Agency
Planning Division
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

Subject: **Draft Environmental Impact Report for the Oak-to-Ninth Mixed Use Development Project**

Dear Ms. Stanzione:

On behalf of the San Francisco Bay Trail Project, I am writing to submit comments on the Draft Environmental Impact Report (DEIR) for the Oak-to-Ninth Mixed Use Development Project (Oak-to-Ninth Project) located in the City of Oakland. The Bay Trail Project is a nonprofit organization administered by the Association of Bay Area Governments (ABAG) that plans, promotes, and advocates for the implementation of the Bay Trail. The Bay Trail is a planned 500-mile continuous network of multi-use bicycling and hiking paths that, when complete, will encircle San Francisco and San Pablo Bays in their entirety. It will link the shoreline of all nine Bay Area counties, as well as 47 cities. To date, more than half the length of the proposed Bay Trail system has been developed. T-1

The Bay Trail alignment runs along the entire waterfront and shoreline's edge of the proposed project area and along the entire length of Embarcadero to the north of the project area. Completed Bay Trail segments currently exist along Embarcadero, at Estuary Park towards the West, and at Brooklyn Basin towards the East. The Bay Trail Project is very pleased that the Oak-to-Ninth Project proposes to develop and maintain the Bay Trail alignment along the entire waterfront and shoreline's edge of the project area. Although the DEIR does discuss the Bay Trail, we have the following comments to strengthen the DEIR's discussion and analysis of the Oak-to-Ninth Project's impacts and mitigation related to the Bay Trail.

1. The Bay Trail Plan is discussed in the *Land Use, Plans, and Policies Section*, however a detailed analysis of the Oak-to-Ninth Project's consistency with the Bay Trail Plan, Bay Trail alignment, and Bay Trail Design Guidelines is not included in this Section. The *Land Use, Plans, and Policies Section* should be revised to provide a more detailed discussion and analysis of the proposed Oak-to-Ninth Project's consistency with the Bay Trail Plan, Bay Trail alignment, and Bay Trail Design Guidelines. Any inconsistencies should be mitigated, and the proposed mitigation should be identified and discussed in the DEIR. Currently, the DEIR provides very general information on the alignment and design of the proposed Bay Trail segments. As a result, we are not able to provide detailed comments on the specific alignment and design of the Bay Trail proposed with the Oak-to-Ninth Project. T-2 T-3

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2. The mitigation analysis for both the project-specific and cumulative impacts of the Oak-to-Ninth Project on Parks and Recreation simply states "Mitigation: None Required". Although it is not explicit, we assume that the no-mitigation-required determination was made based on the public open space and Bay Trail that would be provided as a part of the proposed development project. The *Parks and Recreation Impacts Section* does provide a discussion of the parks, open space, and Bay Trail proposed with the Oak-to-Ninth Project. Since the proposed project would create significant impacts to Parks and Recreation without the Bay Trail segments and associated open spaces proposed with the project, either the proposed Bay Trail segments and associated open space should be identified as mitigation for Parks and Recreation impacts, or the mitigation summary language should be modified to read "Mitigation: None required as long as the Bay Trail segments and open spaces proposed with the project are implemented by the project sponsor." T-4

3. Since the Bay Trail is a planned regional trail that will encircle the entire San Francisco Bay and connect communities along its shoreline, it serves as an important commuter alternative. This is further demonstrated by the Bay Trail's inclusion in the Metropolitan Transportation Commission's 2001 Regional Bicycle Plan. As such, the development of the Bay Trail segment proposed with the Oak-to-Ninth Project should be included as mitigation for the transportation, air quality, and noise impacts related to the increased traffic created by the proposed project. Commuters choosing to utilize the Bay Trail rather than automobile roadways would reduce the impacts related to increased automobile traffic and congestion. T-5

4. The location of the Bay Trail segments proposed with the project along the entire shoreline should be identified as mitigation for the visual and aesthetic impacts created by the buildings and other structures proposed with the Oak-to-Ninth Project. T-6

5. Although the DEIR states that the Oak-to-Ninth Project would include a **continuous** public pedestrian trail and Class I bicycle facility along the entirety of the project's waterfront as part of the Bay Trail, all of the Figures in Chapter III of the DEIR show a gap in the Bay Trail along the waterfront at the property identified as "Private Lands: Not a Part of Project". This gap is located between the proposed Channel Park and South Park. The proposed Bay Trail development along the waterfront of the project site should include the development of the Bay Trail along this gap area as mitigation for park, recreation, transportation, air quality, noise, visual, and aesthetic impacts. The DEIR should be clarified to include the development the Bay Trail along this gap. T-7

6. The DEIR should include a discussion and analysis of the expected lifespan or longevity of the wharf areas that would accommodate the proposed Bay Trail and associated open space areas. Any impacts that would result from this analysis including maintenance impacts should be mitigated, and the proposed mitigation should be identified and discussed in the DEIR. T-8

7. On page III-18, the *Channel Park and South Park Section* should include a discussion that the Bay Trail would be developed as a part of these parks. The *Estuary Park and Jack London Aquatic Center Section* should clarify whether the existing Bay Trail facilities would remain the same in Estuary Park or be improved as a part of the project. The DEIR should also provide language that clearly states that the proposed Oak-to-Ninth Project would connect the proposed Bay Trail segments to the existing Bay Trail segments at Estuary Park to the West and at Brooklyn Basin near the Oyster Reef Restaurant to the East. T-9

8. Since the Bay Trail segments and open spaces proposed with the Oak-to-Ninth Project are mitigation for the project impacts to Parks and Recreation resources, the proposed Bay Trail segments and open spaces should be completed prior to the occupancy of the first residential or T-10

commercial unit. The language under the *Project Phasing Section* of Chapter III should be changed to state that the proposed Bay Trail segments and open spaces for the entire project area must be completed prior to the occupancy of any residential or commercial unit completed as part of the Oak-to-Ninth Project. T-10 (CONT.)

9. On page III-28, the section on BCDC should include a discussion that projects subject to BCDC approval must provide maximum feasible public access under State law. T-11

The Bay Trail Plan and Policies and Bay Trail Design Guidelines may be obtained on our website at http://baytrail.abag.ca.gov/, or by contacting me at the telephone number below.

The Bay Trail Project appreciates the opportunity to comment on the DEIR for the Oak-to-Ninth Project and looks forward to working with you on this project. Please do not hesitate to call me at (510) 464-7915 if you have any questions regarding the above comments or the Bay Trail.

Sincerely,

Lee Chien Huo
Bay Trail Planner

Cc: Kathryn Hughes, City of Oakland, Public Works Department

Letter T– San Francisco Bay Trail

T-1 Comment is noted. The comment provides context for the Bay Trail Project organization and the Bay Trail alignment

T-2 The DEIR describes the *San Francisco Bay Trail Plan* and the City's *Oakland Waterfront Promenade and Bay Trail Alignment Feasibility Study Design Standards* that are based on the Bay Trail Plan policies and design guidelines. The following discussion is provided after the second paragraph of the San Francisco Bay Trail Plan on DEIR p. IV.A-33:

"The Bay Plan contains policies that guide future uses of the bay and shoreline and encourage new shoreline development to provide public access to the bay, to the maximum extent feasible. It incorporates a series of Bay Plan Maps of specific areas along the shoreline, and these maps are based on, and show how to apply, the Bay Plan policies. The project site in within Bay Plan Map No. Five (Central Estuary), which designates a portion of the site west of Lake Merritt Channel as a Waterfront Park Priority Use Area. BCDC has regulatory authority for all portions of the project site waterside of BCDC's 100-foot shoreline band (including that portion of the priority use area), and the project uses and facilities within the 100-foot shoreline band would be subject to approval by BCDC's Design Review Board to ensure compatibility with policies for public access, appearance, design, and scenic views."

The DEIR text outlined above provides the level of discussion appropriate for inclusion in the DEIR. Overall, the project's proposed waterfront Bay Trail alignment is consistent with the goals of the Bay Trail Plan.

T-3 To the extent that the project complies with or is consistent with the specific alignment and design guidelines of the Bay Trail, the City will assess the project's consistency with such guidelines (as outlined in its draft design standards) as a part of its discretionary design review of the project and is not included in the DEIR. As stated in Response to Comment E-12, detailed plans of each of the proposed parks (including trail alignments) would be prepared by the project sponsor as part of the Final Development Plan (FTP) submittal to the City. Park space and trail exhibits depicted in the DEIR (DEIR Figure III-7, revised as **Figure III-1**, Shoreline Parks and Trail Network, in Chapter III of this document) are conceptual. These exhibits are at an appropriate level of detail necessary to conduct the CEQA analysis and for the Preliminary Development Plan (PDP) approval currently sought by the project sponsor.

T-4 The analysis of parks and recreation impacts discussed on DEIR pp. IV.L-15 through IV.L-18 and on DEIR p. IV.L-22 are evaluated pursuant to significance criteria provided in the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines and stated on DEIR p. IV.L-9. In short, the project would not result in or require new or altered facilities to maintain park service ratios, increase the use of parks or recreational facilities to result in substantial physical deterioration of the facility, or construct park or

recreational facilities that would have an adverse physical effect on the environment. As a result, the project would not result in a significant impact, and therefore no mitigation is required.

T-5 Development of segments of the Bay Trail as part of the project precludes the need to include such an action as a mitigation measure.

T-6 The comment states that Bay Trail segments along the entire shoreline should be identified as mitigation for visual and aesthetic impacts created by the buildings and other structures proposed by the project. As analyzed in detail in Section IV.K of the DEIR (Visual Quality and Shadow), the project would not result in a significant impact on aesthetics (Impact K.1) analyzed on pp. IV.K-7 through IV.K-9, or on views/scenic vistas (Impact K.2) discussed on pp. IV.K-10 through IV.K-39. The less-than-significant impact findings are based on the significance criteria provided in the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines and stated on DEIR p. IV.K-6: essentially, "the project would not have a substantial adverse effect on a scenic vista or substantially degrade the existing visual character of quality of the site and its surroundings." Therefore, no mitigation is required.

T-7 As stated in Response to Comment B-11, the proposed trail alignment is modified in this document (**Figure III-1**, Shoreline Parks and Trail Network, in Chapter III) to depict the additional continuous alignment that would occur with respect to the outparcel in a way that would not require "closure" of the 200-foot gap across the outparcel. Although a continuous shoreline trail alignment would be most fully consistent with policies and visions in the City's General Plan (and a number of other plans associated with access to the waterfront), the project sponsor does not own, and does not intend to acquire, the outparcel, therefore the trail segment over the "gap" cannot be proposed as part of this project.

T-8 Consistent with information provided in Response to Comment E-8 and stated in Response to Comment S-3, the design and seismic upgrades for all aspects of the project will be in compliance with all current and applicable building codes for building and seismic performance. Analysis regarding the expected structural lifespan of the wharf areas is not within the purview of the DEIR, except to the extent that maintenance activities would pose potential adverse environmental impacts, which are already addressed throughout Chapter IV of the DEIR (Setting and Impact Analysis). See also Response to Comment E-8.

T-9 As mentioned in Response to Comment B-9, the following is stated on DEIR p. III-14:

"These improvements would include the continuous public pedestrian trail and Class I bicycle facility along the entirety of the project's waterfront, linking an existing Bay Trail segment that currently ends at Estuary Park to Brooklyn Basin where the trail currently continues east to the Martin Luther King Regional Shoreline and beyond. The trail would also follow both sides of Lake Merritt Channel, crossing east-west over Lake Merritt

Channel Bridge (over the Embarcadero), allow for extension for future City projects aimed at improved connections between Lake Merritt and the Estuary. The trail would accommodate pedestrians and bicycles and a variety of users within a maximum 40-foot-wide right-of-way along the waterfront of the project site."

Supported by Figure III-7 in the DEIR (which is modified in this document as **Figure III-1**, Shoreline Parks and Trail Network, in Chapter III), the information regarding the alignment of the proposed trail is already provided.

The following text is provided under the *Estuary Park and Jack London Aquatic Center* on DEIR p. III-18 to clarify the proposed improvements to the existing Bay Trail segment along Estuary Park:

> ***Estuary Park and Jack London Aquatic Center***
>
> The project would improve the existing Estuary Park through re-vegetation of the approximately 3.5-acre lawn/play field, shoreline protection (discussed below), and extending the waterfront Bay Trail that would edge the park and Lake Merritt Channel. The project would not change the existing picnic table/seating area pavilion and waterfront access facilities adjacent to the park and the Aquatic Center (boating and fishing docks and boat launch), and no new structures are proposed. <u>The existing Bay Trail facilities along the shoreline of Estuary Park would be removed and replaced with a segment of the</u> continuous public pedestrian trail and bicycle facility that would line the project's waterfront to the extent feasible.

T-10 As stated in Master Response G, the new and improved parks/opens spaces and trail segments are proposed as part of the project and are not required a mitigation measures to reduce significant project impacts to parks and recreational facilities, as the comment asserts. The project would result in a less than significant impact on this topic, as discussed on DEIR pp. IV.L-15 through 18, and requires no mitigation. See Master Response G for a complete discussion of the phasing of open space and trail improvements.

T-11 Recognition and discussion of the BCDC's charge to ensure public access…" to the maximum extent feasible," is appropriately stated on DEIR p. IV.A-30 under the discussion of *San Francisco Bay Plan and San Francisco Bay Area Seaport Plan*. The following text is added to DEIR p. III-28 under *San Francisco Bay Conservation and Development Commission*:

- **San Francisco Bay Conservation and Development Commission (BCDC) - The project would be subject to review by the San Francisco Bay Conservation and Development Commission (BCDC), a state agency. The project would be required to obtain BCDC permits and approvals for all development proposed within the Agency's jurisdiction, including**

filling, dredging, ~~and~~ shoreline alteration, and waterfront development that requires public access.

COMMENT LETTER U

WATERFRONT action

P.O. BOX 11456
OAKLAND, CA 94611-0456

October 23, 2005

RECEIVED
OCT 24 2005
City of Oakland
Planning & Zoning Division

Margaret Stanzione, Project Planner
City Of Oakland
Community and Economic Development Agency
250 Frank Ogawa Plaza, Suite 3315
Oakland, CA 94612

RE: Comments on the Oak to Ninth Avenue Project DEIR
Sent via e-mail:mstanzione@oaklandnet.com

Dear Ms. Stanzione:

This is Waterfront Action, Inc.'s response to the Draft Environmental Impact Report for the Oak to Ninth Avenue Project.

Waterfront Action is a citizen-based non-profit organization. Our mission is to promote full implementation of the Estuary Policy Plan and the Lake Merritt Park Master Plan; to protect the public trust; and to educate the citizens about the region's waterfront and its assets. As Executive Director, I bring my experience of historic waterfront processes to the organization. I worked on the League of Women Voters of Oakland Waterfront Study in 1992-1993, and I attended the two day charette workshop (funded jointly by the City and Port) in June of 1995 to dream the vision for the waterfront. In addition I served on the Estuary Advisory Committee for two years, and worked with other committee members to support passage of the Estuary Policy Plan (EPP) by the Planning Commission, the Port Commission and the City Council in June 1999, thereby incorporating it into the City's General Plan. U-1

Waterfront Action's response includes the following position points:

- **The June 8, 1999 EPP should serve the base line against which the project is measured in the DEIR**. The EPP has been adopted as part of the City's General Plan, and as noted below, SB1622 calls for consistency with it. U-2

- **The DEIR appropriately recognizes that the project must conform to the provisions of SB 1622, as adopted:** "The City's approval of the project will be conditioned upon subsequent compliance with the provisions of SB1622 [p. IV.A-33]. U-3

- **The DEIR does not provide a clear analysis of the project's conformance with EPP policies**. From the DEIR discussion of the EPP [IV.A-11 through IV.A-14], it is difficult to understand how the proposed project conforms to policies OAK-1 through OAK-12. Indeed, it entirely fails to address several policies. Waterfront Action believes that the DEIR should show for each EPP policy, how the project: **a)** is consistent with the policy, **b)** conflicts with the policy, or **c)** does not address the policy, which should then be addressed through alternate implementation planning. U-4

voice & fax (510) 336-1824 web www.waterfrontaction.org email info@waterfrontaction.org

- **The project's non-conformance to the EPP cannot properly be addressed by future amendments to the City's general plan**; SB 1622 calls for the project's proposed land-swap to "effectuate the principles and objectives contained in regional and local land use plans, especially the estuary plan…"[Sec 3(a)] SB1622 refers to the EPP in its form in 2004, when the legislation was passed. Similarly, it calls for "public access consistent with policies OAK-9, OAK-10, OAK-11, and OAK-12 of the estuary plan in effect on June 1, 2004…"[Sec 4(D)(h)]. If the project is proposed to conform to some other, future amended EPP and General Plan, then the provisions of 1622 are not satisfied and further legislation will be required to address these new circumstances. U-5

Following are Waterfront Action's detailed comments and questions regarding the DEIR's conformance with a range of EPP policies. Each comment identifies the relevant EPP policy number: U-6

OAK-1: *Protect and enhance the natural and built components that establish the waterfront's unique environment.*

The Ninth Avenue Terminal Shed is a historic element reflecting the long history of waterfront industry that continues to bring commerce to Oakland. To reduce it to a shadow would not "protect and enhance…the built components" existing on the site. Filbrick's Boat Works, founded in 1934 and located in a historic building, is one of the few remaining wooden boat builders. This is both a historic and public trust use. It is slated to be demolished. U-7

How does the project address the following specific EPP policies?

OAK-1.1: *Encourage the preservation and enhancement of wetland areas.*
OAK-1.2: *Provide for continuous pedestrian and bicycle movement along the water's edge.*
OAK-1.3: *Undertake remediation of contaminants in conjunction with development and/or improvement of relevant sites.* U-8

OAK-2: *Establish a well-structured, integrated system of major recreational facilities which accommodate a wide variety of activities and which take advantage of the unique waterfront setting. Promote a variety of recreational experiences.*

By creating streets that do not connect to the Embarcadero at right angles, the developer is blocking the view corridors necessary for the public to see not only the water but the parks scheduled in the project. U-9

How does the project address the following specific EPP policies?

OAK-2.1: *Expand Estuary Park. Encourage aquatic sports within the mouth of Lake Merritt Channel. Expand & Rehabilitate Estuary Park. Develop the Jack London Aquatic Center. Develop the mouth of Lake Merritt Channel as a protected water space for aquatic sports.*

OAK-2.2: *Create a major new park on the east side of the mouth of the Lake Merritt Channel, at the Estuary.*

OAK-2.3: *Enhance Clinton Basin. Rehabilitate the marina. Establish a linear open space composed of a series of smaller parks around Clinton Basin. Provide for a limited number of new recreational slips east of Fifth Avenue.*

OAK-2.4: *Establish a large park in the area of the existing Ninth Avenue Terminal to establish a location for large civic events and cultural activities.*
Recognize that the Ninth Avenue Terminal shed, or portions thereof, may be suitable for rehabilitation and adaptive reuse. (Page 91)

OAK-3: *Link the estuary to Lake Merritt by enhancing the Lake Merritt Channel.* U-9 (CONT.)
It appears that this goal is outside the scope of this project.

OAK-4: *Provide for lively, publicly oriented activities that complement the adjacent waterfront parks and open spaces.* U-10
Housing adjacent to open spaces can privatize or otherwise restrict the public celebration space anticipated in the EPP. There would need to be the caveat about public parks and potential events written into the disclosures of every for-sale unit in the project.

How does the project address the following specific EPP policies? U-11

OAK-4.1: *Preserve and expand the existing Fifth Avenue Point community as a neighborhood of artists and artisan studios, small businesses, and water-dependent activities.*

OAK-4.2: *Promote development of educational and cultural interpretive facilities.*

OAK-4.3: *Facilitate the relocation of break-bulk cargo operations from the Ninth Avenue Terminal.*

OAK-4.4: *Promote development of commercial- recreational uses in the vicinity of the Crescent Park and Clinton Basin.*

OAK-4.5: *North of the Embarcadero, encourage a mixed-use district while maintaining viable industrial uses.*

OAK-5: *Initiate more specific planning of the entire Oak to Ninth District.* U-12
The Port and the City jointly decided not to do a Specific Plan. Why was this action not brought before City Council? Response to a specific project cannot substitute for a Specific Plan (IVA-16).

OAK-6: *Explore the future potential for a new BART station and a major parking facility on BART property at Fifth Avenue and East Eighth Street.* U-13
This is outside the scope of this project.

OAK-7: *Coordinate with CalTrans on the upgrade of the I-880 Freeway to improve regional access to the waterfront.* U-14
The City is the lead agency for this effort.

OAK-8: *Enhance Fifth Avenue as the principal pedestrian and vehicular linkage to the public open space surrounding the mouth of the Lake Merritt Channel.*
This is a critical piece in terms of public safety that is not discussed in the DEIR. How does the proposed project address this policy?

Points of concern: U-16

II-43 B.6 The "project would increase potential for pedestrian safety conflicts.
Mitigation: none required"
IV.A-15: "Stronger physical circulation connections to nearby areas are not likely to occur."

When adding over 3,000 people to an area, is there not an obligation to enhance pedestrian safety? Fifth Avenue, as currently configured, is a dangerous intersection at the Embarcadero. This will be the main ingress and egress from the development. Pedestrians must have safe alternatives to get over the Embarcadero roadway.

IV.B-8: "The Embarcadero/Fifth Avenue intersection operates under stop sign control on three approaches;...The heavy eastbound traffic flow (about 500 vehicles during each peak hour) is forced to stop and can often experience long delays."
IV.B-60: "Railroad Operations: Because no set schedule exists for freight rail operations, more or fewer trains could operate along this line in the future."

U-15 (CONT.)

There is no mention of Amtrak's Capitol Corridor plans for significantly increasing the number of Oakland to San Jose commuter trains. Where is the analysis of future plans of both Amtrak and Union Pacific affecting this significant Fifth Avenue corridor?

This single intersection Fifth Avenue at the Embarcadero has a number of issues that will significantly impact automobile traffic, bicycle and pedestrian crossings. Who will provide a full assessment of railroad impacts including traffic studies at Fifth Avenue and Oak to determine the most effective mechanisms for providing safe passage to and from the proposed project?

Key elements in the EPP were incorporated into the legislation (SB1622) necessary for the Public Trust trade to move forward. These elements include OAK-9 through OAK-12:

U-16

OAK-9: *Improve the Embarcadero east of Oak Street as a multimodal landscaped parkway with bicycle, pedestrian and vehicular facilities*

Is the proposed project consistent with this policy? How?

OAK-10: *Create a network of pedestrian-friendly streets that opens up views and access to the water*

The EPP specifies: *"The configuration of streets should be aligned to promote views and access to the shoreline, provide convenient access to and parking for open spaces, and discourage fast-moving through traffic. Streets should include generous provisions for pedestrians and be landscaped in a manner that extends the open space amenity inland from the shoreline." (p. 98)*

U-17

By creating streets that do not connect to the Embarcadero at right angles, is the proposed project is blocking the view corridors necessary for the public to see not only the water but the parks scheduled in the project?

Is the proposed project consistent with this policy?

OAK-11: *Design parking to be convenient and complementary to the public orientation of uses within the area.*

Points of concern:

U-19

Page IV.B-71(footnote 18) "The proposed project would provide covered parking at minimum rates of one space per residential unit, one space per 500 sq. ft. of commercial space, and one space per five boat slips. The project also would provide parking in surface lots in the open space acres of the site (about 75 spaces for project build out), and on-street parking within the project site (about 375 spaces for project build out). The surface lot spaces and on-street spaces do not count toward satisfying the Code requirement."

The parking requirements listed do not reflect the reality of multiple bedrooms generally having multiple cars. A current example of the City permitting one space per unit is the Jack London (loft) District between Alice and Oak, 2nd and 4th Streets. There is no street parking available to support the commercial uses. The Jack London District Neighborhood Association did a survey after completion of the loft developments, and parking demand worked out to be approximately1.46 spaces (urban housing standard) per unit. For 3100 units, that would use up 4526 spaces which would still result in a shortfall of 542 spaces (when you add the 3534 plus 375 on-street plus 75 for open space). U-18 (CONT.)

Will there be sufficient parking for public access areas?

OAK-12: *Establish a management program for special events access and parking.*

These policies are not being met by the present proposed project. All large open spaces have housing adjacent to them. To avoid privatizing or otherwise restricting the public celebration space anticipated there should be a requirement that the public parks and potential events should be written into the disclosures for every for sale unit in the project. U-19

Page III-22 Project Phasing
"The project would be remediated and developed over a period of approximately 11 years…Improvements (re-vegetation) of Estuary Park and the adjacent Bay Trail would occur by 2018." U-20

The improvements should occur as the staging occurs, so that the first phase of approximately 1,100 units would be accompanied by a functioning Bay Trail and open space area.
Note: this is the approach that the Mission Bay Project in San Francisco is using.

Thank you for your review and consideration of these comments.

Sincerely,

Sandra Threlfall
Executive Director

Letter U – Waterfront Action

U-1 Comment is noted and introduces the commenting organization and participation on the Estuary Advisory Committee.

U-2 Alternative 1B: No Project / Estuary Policy Plan allows the impacts of the proposed project to be compared with that of future possible development under the Estuary Policy Plan. CEQA requires a no project alternative to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project. According to Section 15125(e), "Where a proposed project is compared with an adopted plan, the analysis shall examine the existing physical conditions at the time the notice of preparation is published, or if no notice of preparation is published…as well as the potential future conditions discussed in the plan. Alternative 1B analyzed in the EIR provided the analysis of "potential future conditions" under the Estuary Policy Plan.

U-3 Comment is noted and accurately states that the project approval will be conditioned upon subsequent compliance with the provisions of SB1622, as indicated in the DEIR (p. IV.A-33).

U-4 As stated on DEIR p. IV.A-5, CEQA does not require that the DEIR include every General Plan policy that *could* apply to the project. However, all of the Estuary Policy Plan objectives and policies that most directly pertain to the project are included and discussed at length. The policy discussion in Section IV.A of the DEIR (Land Use, Plans and Policies) is consistent with the City's position that the General Plan necessarily contains competing policies and that it must determine whether "on balance" the project is consistent (i.e., in general harmony) with the General Plan. Further, the City's approach to the land use discussion in the DEIR emphasizes its assertion (through adopted City Resolution No. 79312) that "the fact that a specific project does not meet all General Plan goals, policies, and objectives does not inherently result in a significant effect on the environment within the context of CEQA."

Starting on DEIR p. IV.A-13, the extensive discussion of the project's relationship to Estuary Plan policies is organized by the following major themes pertinent to the project: *Open Space and Recreation; Wetland and Marsh Habitats; Ninth Avenue Terminal; Land Use Continuity, Access, and Circulation Connections; Fifth Avenue Point;* and *Specific Planning*. Policy references are cited throughout the narrative discussion in order to clearly connect each discussion point back to its applicable policy.

Oak to Ninth Avenue District policies in the Estuary Policy Plan that are not discussed in the Land Use, Plans and Policies section of the DEIR address issues outside the scope of the project (OAK Policy 6, New BART Station; OAK Policy 7, Special Events Management Program) or are intended for action by the City (OAK Policy 12, Coordination with Caltrans on I-880 Upgrade). See Responses to Comments A-20 and U-13 and U-14, below.

U-5 The comment asserts that the proposed amendments to the Estuary Policy Plan and General Plan would fail to satisfy the provisions of Senate Bill 1622 which calls for the proposed Tidelands Trust State Lands exchange to be consistent with the "principles and objectives" of the Estuary Policy Plan. Since the trust exchange is not part of the proposed project, it is premature to assume this trust exchange would not be consistent with the Estuary Policy Plan as proposed for amendment. The SB 1622 legislation requires that the exchange parcel to be acquired be consistent.

U-6 Discussion of the potential demolition of the Ninth Avenue Terminal, as it addresses Estuary Plan Policy (EPP) OAK-1, is provided on DEIR page IV.A-15. The EIR concluded that the Philbrick Boat Works building at 603 Embarcadero was not a historic resource under CEQA. New information regarding this buildings was provided subsequent the publication of the DEIR, and Response to Comment O-1 presents further evaluation of the Philbrick Boat Works and the building and maintains that the property is not a historic resource under CEQA.

U-7 The DEIR discusses the project's consistency with EPP OAK-1.1 (wetland preservation and enhancement) on DEIR p. IV.A-14, under *Wetland and Marsh Habitat*, and wetland impacts and mitigation measures (Impact I.2) are discussed on DEIR pp. IV.I-21 through IV.I-26.

As stated on DEIR p. IV.A-12, "Many objectives and policies in the Estuary Plan are addressed by policies in the LUTE and discussed under *Project Consistency with LUTE Policies*, above. Overall, these include the project's consistency with policies that encourage mixed-use development on the waterfront, improved public assess to the shoreline for multiple users (pedestrians, bicycles, etc), expanded parks and large open spaces, opportunities to use alternative modes of transportation (including transit), as well as the preservation and sensitivity of new development to adjacent communities and sensitive environments." The DEIR discusses the project's consistency with EPP Policy OAK-1.2 (provide for continuous pedestrian and bicycle movement along the waters edge) on DEIR p. IV.A-10, within the discussion of General Plan Land Use and Transportation Element (LUTE) Policies, *Open Space and Access*. See also Response to Comment B-11 and **Figure II-1** in this document which shows the modified proposed trail alignment.

The DEIR discusses how the project will "undertake remediation of contaminants in conjunction with development and/or improvement of relevant sites" (consistent with EPP Policy OAK-1.3) starting on page III-20. Related impacts and mitigation measures are addressed in Section IV.H (Hazardous Materials) of the DEIR.

U-8 The DEIR discusses how the proposed project would create a "system of major recreation facilities…and promote a variety of recreational experiences," (EPP Policy OAK-2), as well as how the project relates to "expanding and rehabilitation Estuary Park…develop the mouth of Lake Merritt Channel as a protected water space for aquatic sports," (EPP Policy OAK-2.1) is discussed starting on page IV.A-13, *Open Space and Recreation*.

Additional discussion of the project's proposed improvements in and around Estuary Park and the Jack London Aquatic Center and to facilitate water activities is on DEIR pp. III-12 and III-14, *Proposed Parks, Open Space and Trails*, and the discussion of parks and recreation impacts (Impact L.4) starting on DEIR p. IV.L-15. The project does not propose changes to the Jack London Aquatic Center facility.

A description of the "major new park on the east side of the mouth of the Lake Merritt Channel" (EPP Policy OAK-2.2) is provided on DEIR p. III-18 under Channel Park and South Park, and depicted in Figure III-7 (on DEIR p. III-17). Additional discussion is presented in the analysis of parks and recreation impacts (Impact L.4) starting on DEIR p. IV.L-15.

Proposed improvements at Clinton Basin and the provision of new recreational slips in this area (EPP Policy OAK-2.3) are discussed on DEIR p. III-19 under *Proposed Marinas, Shoreline Improvements, and Water Orientation*; the discussion of *Open Space and Recreation* Estuary Plan Policies starting on DEIR p. IV.A-13; and the discussion of parks and recreation impacts (Impact L.4) starting on DEIR p. IV.L-15.

A description of the "large park in the area of the existing Ninth Avenue Terminal" (EPP Policy OAK-2.2) is provided on DEIR p. III-16 under *Shoreline Park / Ninth Avenue Terminal Bulkhead Building*, and covered further within the policy discussion under *Ninth Avenue Terminal*, on DEIR p. IV.A-15. Recognition that that Terminal may be suitable for rehabilitation and adaptive reuse is addressed in the range of project alternatives analyzed in Chapter V (Alternatives), which includes Alternative 2, Enhanced Open Space / Partial Ninth Avenue Terminal Preservation and Adaptive Reuse; Alternative 3 (Reduced Development/ Ninth Avenue Terminal Preservation); and a Full Ninth Avenue Terminal Preservation and Adaptive Reuse Sub-Alternative.

"Linking the Estuary to Lake Merritt by enhancing Lake Merritt Channel," is, as the comment states, outside the scope of the proposed project. However, the DEIR discusses the proposed trail improvements that would facilitate future connections along Lake Merritt Channel, as would the creation of new Channel Park.

U-10 Regarding EPP Policy OAK-4 (provide for lively, publicly oriented activities that complement the waterfront spaces), the DEIR states on p. III-18, that "the project sponsor is not proposing to hold events (such as concerts or festivals) at the project site. However, it is possible that in the future, upon further review and approval by the City of Oakland, entities could sponsor such organized events at the new public open spaces created by the project." Additionally, the City would consider this policy as it collaborates with the project sponsor and other pertinent agencies (e.g., EBRPD, BCDC) on the specific programming of the new parks space. The comment regarding for-sale unit disclosures regarding potential events does not address the adequacy of the Draft EIR or potential impacts on the physical environment under CEQA. The City may consider this as a condition of approval for the project or Development Agreement.

U-11 A description of the project's relationship to Fifth Avenue Point (EPP Policy OAK-4.1) is provided on DEIR p. IV.A-16, *Fifth Avenue Point*, and further in the discussion of Impact A.1 (physical division of an established community) on DEIR p. IV.A-35, and Impact A.3 (land use compatibility / Change in environment) on DEIR p. IV.A-40. See also Response to Comment S-15.

With regard to EPP Policy OAK 4.2 (educational and cultural interpretive facilities), all proposed reuses in the retained and rehabilitated Bulkhead Building or either of the full and partial preservation alternatives would include "Tidelands Trust uses such as community, cultural, or recreational uses (i.e., public meeting rooms, banquet/festival space, or museum space focused on the cultural and maritime history of the Oak to Ninth Avenue area and the Ninth Avenue Terminal)." The retained and rehabilitated Bulkhead Building of the Ninth Avenue Terminal is described on DEIR p. III-16 and within the Estuary Plan Policies discussion under *Ninth Avenue Terminal* (DEIR p. IV.A-15). The full and partial preservation alternatives are described and analyzed in Chapter V (Alternatives).

The relocation of existing businesses on the project site (EPP Policy OAK-4.3) is not a topic addressed by CEQA to the extent that no change in the physical environment would occur. However, the DEIR provides informational discussion regarding issues facing the City regarding the relocation of waterfront industrial uses on p. IV.J-29. Further, Impact J.2 (DEIR p. IV.A-28) concludes that the project would not have a significant impact related to the displacement of existing businesses or jobs from the project site.

. The proposed commercial and recreation uses that would be located near Crescent Park and Clinton Basin (as encouraged by EPP Policy OAK-4.4) is described on DEIR p. III-8 under Proposed Residential and Retail Uses. Greater detail of the proposed retail uses is provided in Section J (Population, Employment and Housing) on DEIR Table IV.J-12 (Retail/Commercial Uses and Employment Estimates) on p. IV.J-23.

The project site does not include area north of the Embarcadero that are addressed by EPP Policy OAK-4.5.

U-12 See Master Response A.

U-13 The project site does not include property north of the Embarcadero for consideration of a new BART station (EPP Policy OAK-6). Furthermore, establishing a new BART station would be considered a long-range endeavor that would be driven by policy- and decisionmakers beyond the scope of this project.

U-14 Development of the Oak to Ninth Project would be in compliance with EPP Policy OAK-7 because it would not prevent Caltrans from upgrading the I-880 freeway, and would in fact help facilitate possible reconfiguration of freeway ramps by realignment of The Embarcadero away from the freeway near 9th Avenue.

U-15 The comment raises concern with the DEIR's less-than-significant finding of Impact B.6 (pedestrian safety), which is discussed in detail in the context of existing traffic control devices and the relationship of vehicular traffic volumes and pedestrian safety starting on DEIR p. IV.B-55. Also, see Master Response F for a discussion of issues associated with pedestrian activity at nearby railroad crossings.

The comment raises concern with the DEIR statement that "stronger physical circulation connections to nearby areas are not likely to occur." The comment has removed the statement from its DEIR context, which states that "Without removal of I-880 and rail yards, which is not foreseeable, stronger physical circulation connections to nearby areas are not likely to occur."

The comment raises concern with the traffic delays at Embarcadero / 5th Avenue under existing conditions, and the comment is noted. The project's impact on traffic delays at Embarcadero / 5th Avenue is discussed in Impact B.2c, Impact B.1d, and Impact B.3i in Section IV.B (Transportation, Circulation and Parking). See also Response to Comments J-1 and J-3 regarding Capitol Corridor operations.

U-16 The DEIR states that "the project would improve and widen segments of the Embarcadero into a landscaped parkway along the frontage of the project site," within the Estuary Policy Plan discussion under Open Space and Recreational (DEIR p. IV.A-13), consistent with EPP Policy OAK-9. See also Response to Comment B-11 and **Figure II-1** on page II-3 of this document which shows the modified proposed trail alignment which includes the Embarcadero.

U-17 The comment asks whether creating streets that do not connect to the Embarcadero at right angles would block view corridors to the water and proposed parks. This consideration is discussed in the DEIR within the discussion of LUTE Waterfront Policies (specifically Policy W3.4), which states, "The design and layout of the project would consider potential effects on adjacent uses. Existing views of the Estuary from public vantage points, as well as from points inside the project site, are nonexistent or limited due to the location of existing buildings, including the Ninth Avenue Terminal. The proposed street alignments coupled with the siting of new buildings of varied heights, would allow for additional and expanded views of open spaces and the Estuary from onsite and offsite locations." (DEIR p. IV.A-9). This is echoed in the DEIR discussion of Open Space, Conservation and Recreation Element (OSCAR) policies on DEIR p. IV.A-20.

The visual simulations are considered adequate to conduct the CEQA analysis provided in the DEIR and to assist City decisionmakers as they evaluate the project impact on visual character and views and scenic vistas. Additionally, as analyzed in detail in Section IV.K of the DEIR (Visual Quality and Shadow), the project would not result in a significant impact on views/scenic vistas (Impact K.2), as discussed on DEIR pp. IV.K-10 through IV.K-39. The related analysis is supported by photo simulations that

depict views from the Embarcadero as well as along proposed internal streets (DEIR pp. IV.K-10 through IV.K-39).

Prior to acting on the proposed project, the City and BCDC will consider the extent to which the proposed street configuration on the site facilitates new views of the waterfront and open spaces, and thus satisfies relevant waterfront access (visual and physical) policies, specifically EPP Policy OAK-10 raised by the comment.

U-18 See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management measures.

U-19 See Response to Comment U-10.

U-20 See Master Response G.

COMMENT LETTER V

Friends OF OAKLAND PARKS AND RECREATION

A Non-Profit Corporation Since 1981 • Office at the Lakeside Park Garden Center

P.O. BOX 13267, OAKLAND, CA 94661
510-465-1850 • 510-465-1852 Fax
oaklandparks@sbcglobal.net • www.oaklandparks.org

Friends of Oakland Parks and Recreation ("Friends") is a not for profit, dedicated to improving parks and recreation activities in the City of Oakland. The mission of Friends includes the development and maintenance of new park and recreation space.

The disposition of the Oak Street to 9th Avenue area (Oak-to-Ninth) represents an important park and recreation opportunity for Oakland. V-1
The current financial landscape of the City has made the creating and maintaining of new park and recreation areas increasingly difficult.
Financial difficulties have lead to public-private partnerships, resulting in successful urban waterfront developments that properly balance the public interests with the practicalities of private residential-commercial development.

"Friends" supports the project given the following conditions:

1. Sufficient open space/parkland be provided to establish a major recreation destination able to support a wide variety of inviting recreational activities and spaces - the largest of these along the lines of a community music festival or other community event.

2. The entire "Cash & Carry" site should be set aside to connect with Estuary Park for additional open space/parkland. V-2

3. The plan establishes and incorporates strategies to attract the general public to use this newly created recreation space.

4. A number of visual corridors are incorporated into the plan in order to create a strong connectivity between the waterfront open space/parkland and the rest of Oakland.

Background and comment:

The Estuary Policy Plan (EPP) was adopted in 1999 by the City Council and, after a lengthy public process, was incorporated in the General Plan. The vision of the EPP, as expressed and illustrated in the Plan:

"Shoreline access and public space policies are intended to establish this area of the Estuary as the major recreational destination in the city. The Plan recommends a series of large open spaces, intended to provide for a wide variety of recreational experiences. Developing a series of well-defined open spaces would change the entire nature of the waterfront in this area, transforming it from an industrial backwater into a recreational centerpiece of the city. In total, these sites would represent one of the most significant additions of urban parkland within the entire Bay Area. They would create both a regional and local asset of major proportions." V-3

Friends believes that the intent of the EPP embodies an important public policy. However, Friends also recognizes that much has been learned about waterfront planning and much has changed in City finances since the EPP was adopted.

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Therefore, Friends supports the maintenance of the intent of the EPP in terms of creating public access and significant new recreational opportunities.

1. Encourage Awareness of the Park and Open Space Elements of the Development. In developing park and open space, one goal should be to encourage the use of the space. This goal requires consideration of many elements, including the size of the space, visual access, structure of the space and the sensory experience of the park user. The Oak to Ninth site poses unique challenges and opportunities in this regard. Visual access from and the visual site lines looking toward the City side of the project are impacted by the presence of the freeway. Care needs to be taken to balance the value of letting passersby's know of the park, while at the same time not adversely affecting the experience of park users. Innovative approaches in signage, street design, landscaping, pedestrian and bicycle access, transit stops, related amenities attractive gateways and pathways to and within the development will support this goal. Exactly how this is accomplished should be carefully considered. V-3 (CONT.)

   The developer should work with the City, and other interested parties to assure that this part of the Estuary will be designed to encourage use and enjoyment of the area.

2. Maximize Both the Existence and Use of Park and Open Space. The amount of open space is a significant concern to Friends. Also of concern is that the overall project functions in a way that encourages use of the park space. The location of the project is such that it will need to have amenities that encourage its use as a destination park. Certainly, the waterfront itself will do this to a degree. The presence of restaurants, coffee shops and other amenities will also facilitate the use, as demonstrated in other urban locations such as Marina Green, Vancouver and Portland. We know that if density is to low, it becomes difficult to maintain other amenities. We do not feel that we have the expertise to determine what the perfect balance should be. However, we do feel strongly that in considering the layout and the density of the project, the objectives should include: V-4
   a. Maximizing open space.
   b. Creating multiple park uses, such as walking, play areas for children and community gathering areas.
   c. Ensuring that non park amenities that encourage and are complimentary with park use will be present.

The redevelopment of our waterfront is currently the most important land use decision before the city. As Oakland's last massive parcel for a long, long time, the City must ensure that the development of Oak-to-Ninth is nothing less than the best it can be. The new development should have the look and feel of an open waterfront park, perhaps with point towers set apart in large open spaces. Generous vistas should be available from all vantages. The renewed area should provide attractive amenities, and should be inviting for walking, biking, jogging, sitting, and enjoying new experiences. V-5

Oakland is a waterfront city, but many are hardly aware of that fact because, for so long, so much of our waterfront has been off limits to the public. With the availability of the Oak-to-Ninth area, Oakland is provided the unusual opportunity to open the waterfront to its people and leave - or not leave - a legacy to our children and grandchildren. Oakland should work cooperatively with the Port's chosen developer to assure that our Estuary is an Oakland jewel for generations to come. Moreover, Oakland must ensure that "the public good" V-6

is a guiding principle in our collective decisions about how best to balance the beauty of the Estuary with public access and private investment.

Respectfully submitted,

Tom Guarino

Tom Guarino
President, FOPR

Letter V– Friends of Oakland Parks and Recreation

V-1 Comment is noted and introduces the commenting organization, and acknowledges the financial difficulties associated with the creation and maintenance of new park and recreation areas.

V-2 The comment identifies four conditions of project support. The City may consider each of the conditions as it deliberates its action on the project and formulates its conditions of approval. Generally, the conditions raised in the comment concern 1) sufficient provision of open space/parkland, 2) Expansion of Estuary Park to the Embarcadero, 3) strategies to attract the public to new open spaces, and 4) visual corridors between the waterfront, open space/parkland, and the rest of Oakland. Adequate information and analysis regarding each of these conditions is provided in the DEIR. Conditions 1 through 3 related to open space and parkland are discussed on DEIR pp. III-12 through III-19 and analyzed as Impact L.4 on pp IV.L-15 through IV.L-18. Condition 4 related to visual accesses is analyzed as Impact K.2 on pp. IV.K-10 through K-39.

V-3 The comment recommends topics for which "innovative approaches" will "let passersby know of the park, while….not adversely affecting the experience of park users." Topics raised by the comment (signage, street design, landscaping, pedestrian and bicycle access, transit stops, related amenities, attractive gateways and pathways to and within the development) are all aspects of the proposed project design which the City decisionmakers will review, and as necessary, modify prior to its action on the project. To the extent that any of these aspects poses a potential impact on the physical environment under CEQA, the impacts are addressed in the Chapter IV (Setting and Impact Analysis) of the DEIR. See also Master Response H regarding Non-CEQA Topics and Considerations.

V-4 The comment identifies three objectives that should influence the "layout and density" of the project: a) maximize the amount of open space, b) create multiple park uses, and c) complementary non-park amenities. As stated in Response to Comment V-3, the City will consider each of these objectives prior to acting on the project. The DEIR discusses each of these topics on DEIR pp. III-12 through III-19 and under Impact L.4 (Parks and Recreational Facilities) on pp. IV.L-15 through IV.L-18.

V-5 The comment addressed topics related to the design of the project, which the City will consider during its design review of the project. The comment does not address the adequacy of the Draft EIR or CEQA issues, except that the DEIR analyzes the project impact on existing views and scenic vistas under Impact K.2 on DEIR pp. IV.K-10 through IV.K-39.

V-6 Comment is noted and does not address issues concerning the adequacy of the Draft EIR of the topics pertinent to CEQA.

The Jack London District Association
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October 24th 2005

Margaret Stanzione,
Project Planner,
City of Oakland CEDA Planning Division,
250 Frank H. Ogawa Plaza,
Suite 3315,
Oakland, California 94612

RE: Draft EIR for the Oak to 9th Avenue project

Dear Ms Stanzione

The Jack London District Association (JLDA) would like to make the following comments on the Oak to Ninth Avenue Draft EIR document.

1. Measure DD Coalition statement support

As members of the Measure DD Coalition we support their statement on this project. While it does not specifically cite the DEIR (it was drafted before DEIR publication) we believe it identifies several general issues that are at odds with the main project described. W-1

We feel that the adopted 1999 Estuary Policy Plan (EPP) document represents the most recent expression of the wishes of a very broad range of Oakland's community for this area. Therefore without further study and public comment, e.g. a site specific plan as identified in the EPP, the planning commission should not recommend a project that is at odds with the EPP. W-2

The alternative projects described in the DEIR do seem to offer some hope of reconciling the developer's wishes with the EPP and as such we would strongly encourage the alternatives to be considered. W-3

For reference the three main points from the Measure DD coalition statement are repeated below:

> The Measure DD Coalition strongly urges close adherence to primary EPP objectives by any development plan being considered for adoption, namely:
>
> *i) Assure maximum physical and visual access for the public to the Estuary and the surrounding parks from the Embarcadero and from interior streets.* W-4
> Visual access is a major organizing feature of the EPP, in which all roadways and view corridors provide direct vistas to the water. In the developer's plan, visibility of the water is blocked from the Embarcadero, and from practically all streets within the development. Visibility, of course, is vital for parks, and encourages their use. Lake Merritt's parks are heavily used because they are so visible. At minimum, the developer should work with

W

the City, the Coalition, and other interested parties to assure that this part of the Estuary will – to the greatest extent possible – be "opened up" in the similar ways.

ii). Maximize "open space" in the proposed development consistent with the Estuary Policy Plan.

The EPP calls for a beautifully designed and sited 11-acre park landward of the 9th Avenue Terminal. In the developer's plan, the 11-acre park is replaced by an approximate 4-acre pier resulting from demolition of the 9th Avenue Terminal' thus losing both a major proposed park, and an historic building. Also, the present General Plan policy to demolish the warehouse at Oak Street and replace it with 5 acres of open space should be enforced. The development of Oak-to-Ninth should invite, not exclude, the public from Oakland's waterfront. It should benefit all Oakland residents, not just those who are sufficiently privileged to live there. W-5

iii). Foster innovative approaches (in signage, street design, landscaping, pedestrian and bicycle access, transit stops, related amenities) to ensure maximum visibility of the Estuary, and attractive gateways and pathways to and within the development.

The redevelopment of our waterfront is currently the most important land use decision before the city. As Oakland's last massive parcel for a long, long time, the City must ensure that the development of Oak-to-Ninth is nothing less than the best it can be. The new development should have the look and feel of an open waterfront park, perhaps with point towers set apart in large open spaces. Generous vistas should be available from all vantages. The re-newed area should provide attractive amenities, and should be inviting for walking, biking, jogging, sitting, and enjoying new experiences. W-6

2. Traffic impacts in the Jack London District

JLDA has noted that the DEIR includes numerous significant and unavoidable impacts on key traffic intersections within and boarding our district, most importantly 5th & Oak, 5th & Broadway and 6th and Jackson. These intersections are the same ones already forecast to be significantly impacted by the Jack London Square redevelopment project, and the Oak to 9th Avenue project will only serve to compound the issues. Our main concern is that now the mitigations are readily admitted to have no way to solve the traffic problems, especially in the 2025 projection. With the continued development of residential housing projects in our area we can only see further exasperation of the traffic problems bringing gridlock in the future. W-7

Even worse, the mitigations that are suggested all require "optimization" of the flow where the optimization is simply to get more traffic onto the 880 freeway. As was previously noted in comments on the Jack London Square Redevelopment DEIR by CalTrans the freeway south on ramp at Oak is currently operating "at capacity". The response to this comment was only that the project did not add a significant amount of traffic to 880 flow. But it failed to address the specific 880-S on-ramp at Oak Street, and since the JLS Redevelopment final EIR traffic has become even worse. A virtual standstill off traffic on 880-S from Jackson St and for several miles south is now a daily phenomenon between 4pm and 6pm. W-8

3. Proposed demolition of most of the Ninth Avenue terminal

We urge you to head the comments made at the recent Landmarks Preservation Advisory Board meeting on October 17th. The board members expressed unanimous disapproval of the substantial demolition of this building, favoring keeping a much greater extent of the building with adaptive reuse. W-9

We feel that this is in line with the Measure DD coalition comments regarding this building, and as such it is a strong endorsement for considering the alternatives in the DEIR which do not include the demolition of most of the terminal building. W-9 (CONT.)

4. Provisions for public use of park areas

We feel that the project provides inadequate parking for public use of the open spaces, and for visitors to even the remnant of the terminal building. Even the proposed 450 spaces includes a substantial number of spaces of on street parking within the project – the community of Jack London District knows that on street parking will be heavily utilized by residents and business users to park extra cars. This especially true since the parking space allocation for residents falls far short of the average use – given this projects distance from BART, lack of bus service, and its proximity to the freeway it is extremely likely that residents there will have two vehicles per household. Thus all those extra cars will be parked on-street when not utilized which will effectively exclude the majority of those spaces from being used by visitors. This is **exactly** the situation experienced within the Jack London District and is caused by inadequate provision of off-street parking, and the false expectation that merely building residential developments with approximately 1.00 spaces per household will magically limited private individuals vehicle ownership. W-10

Therefore while developers are free to continue their experiment on influencing vehicle ownership by limit parking we believe this main project must address the provision of dedicated parking for visitors. If they do not the public spaces will become unusable by people from the surrounding communities and the public space **will** have effectively been annexed for private use by those living within the development – something that is clearly unacceptable.

Thank you for this opportunity to make comments,

Sincerely

Simon Waddington

Secretary,
Jack London District Association
248 3rd St., #845
Oakland, CA 94607
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STATEMENT OF THE MEASURE DD COMMUNITY COALITION

ON

PROPOSED DEVELOPMENT OF THE OAK – TO – NINTH AREA

The Measure DD Community Coalition is a broadly representative body of 150 concerned citizens, organizations, and dedicated staff. The Coalition was sanctioned by the City Council to monitor the progress of activity, and to oversee the financial integrity of the myriad of parks, open space, and waterways developments authorized under the Measure DD bond referendum, overwhelmingly adopted in 2002 by the Oakland electorate.

The Coalition has a special interest in the impending development of the Oak Street to 9th Avenue area (Oak-to-Ninth), not only for its projected magnitude, but particularly the project's potential impact on open space, Estuary access, visibility, and questions of level of development appropriate to the largest undeveloped waterfront area remaining in the city.

The Coalition also recognizes a variety of successfully developed urban waterfront developments in the United States and that, in large measure; these successes result from viable partnerships of public interests together with private residential-commercial developers. In appreciation of this fact, and that significant public resources are provided by Measure DD to develop usable, attractive open space, the Coalition strongly urges that public policy must insist on development that augments and encourages public access to the Estuary, and which assures that the "public interest" is paramount in decisions affecting the development of Oak-to-Ninth.

The Port of Oakland's selected developer for the Oak-to-Ninth area proposes development that differs greatly from the Estuary Policy Plan (EPP). The EPP was adopted in 1999 by the City Council and, after a lengthy public process, was incorporated in the General Plan. The vision of the EPP, as expressed and illustrated in the Plan:

> ***"Shoreline access and public space policies are intended to establish this area of the Estuary as the major recreational destination in the city. The Plan recommends a series of large open spaces, intended to provide for a wide variety of recreational experiences. Developing a series of well-defined open spaces would change the entire nature of the waterfront in this area, transforming it from an industrial backwater into a recreational centerpiece of the city. In total, these sites would represent one of the most significant additions of urban parkland within the entire Bay Area. They would create both a regional and local asset of major proportions."***

Given the current financial landscape of the city, achieving these goals makes public-private partnership all the more important. However, it is equally important to not allow development that will squander open space or implement designs that fail to serve the interests of all of Oakland. Innovative development adjacent to the Estuary has the potential to enhance the long-term vitality of Oakland's waterfront. However, it is equally essential that the public must not lose in the process.

Under the developer's proposal, 42% of the open space called for in the EPP (approximately 12-14 acres) is eliminated (excluding Estuary Park, an existing City park). The EPP "envisioned" opening up Estuary Park (now a "stealth" park) to public view from the Embarcadero, by demolishing a large warehouse and replacing it with 5 acres of open space. The developer's plan would build a large residential complex at the warehouse site, thereby forever hindering Estuary Park from public view.

The Measure DD Coalition strongly urges close adherence to primary EPP objectives by any development plan being considered for adoption, namely:

1. *Assure maximum physical and visual access for the public to the Estuary and the surrounding parks from the Embarcadero and from interior streets.*

   Visual access is a major organizing feature of the EPP, in which all roadways and view corridors provide direct vistas to the water. In the developer's plan, visibility of the water is blocked from the Embarcadero, and from practically all streets within the development. Visibility, of course, is vital for parks, and encourages their use. Lake Merritt's parks are heavily used because they are so visible. At minimum, the developer should work with the City, the Coalition, and other interested parties to assure that this part of the Estuary will – to the greatest extent possible – be "opened up" in the similar ways.

2. *Maximize "open space" in the proposed development consistent with the Estuary Policy Plan.*

   The EPP calls for a beautifully designed and sited 11-acre park landward of the 9th Avenue Terminal. In the developer's plan, the 11-acre park is replaced by an approximate 4-acre pier resulting from demolition of the 9th Avenue Terminal' thus losing both a major proposed park, and an historic building. Also, the present General Plan policy to demolish the warehouse at Oak Street and replace it with 5 acres of open space should be enforced. The development of Oak-to-Ninth should invite, not exclude, the public from Oakland's waterfront. It should benefit all Oakland residents, not just those who are sufficiently privileged to live there.

3. *Foster innovative approaches (in signage, street design, landscaping, pedestrian and bicycle access, transit stops, related amenities) to ensure maximum visibility of the Estuary, and attractive gateways and pathways to and within the development.*

   The redevelopment of our waterfront is currently the most important land use decision before the city. As Oakland's last massive parcel for a long, long time, the City must ensure that the development of Oak-to-Ninth is nothing less than the best it can be. The new development should have the look and feel of an open waterfront park, perhaps with point towers set apart in large open spaces. Generous vistas should be available from all vantages. The re-newed area should provide attractive amenities, and should be inviting for walking, biking, jogging, sitting, and enjoying new experiences.

Oakland is a waterfront city, but many are hardly aware of that fact because, for so long, so much of our waterfront has been off limits to the public. With thanks to Measure DD and the availability of the Oak-to-Ninth area, Oakland is provided the unusual opportunity to open the waterfront to its people: an historic opportunity to leave – or not leave – a legacy to our children and grandchildren. Oakland lost its waterfront to rapacious politicians in the 1850s; it took 60 years of litigation to get it back. The City should not now lose it again. Oakland should work cooperatively with the Port's chosen developer to assure that our Estuary is an Oakland jewel for generations to come. Moreover, Oakland must ensure that "the public good" is a guiding principle in our collective decisions about how best to balance the beauty of the Estuary with public access and private investment.

The statement above represents the consensus of representatives and attendees at Measure DD Coalition meetings held in May, June, and July 2005 , and is thus a statement of the "sense" and "will" of the Coalition's active attendees.

Letter W– Jack London District Association

W-1 The comment is noted and states support of the Measure DD Coalition statement, which is provided as an attachment to the comment letter and included as part of Comment Letter 7 (Coalition of Advocates for Lake Merritt).

W-2 See Master Response A.

W-3 The comment encourages consideration of the project alternatives [by the City]. Prior to its action on the project, City decisionmakers will evaluate the project alternatives analyzed in Chapter V of the EIR and determine whether to approve the project, an alternative or a combination of these.

W-4 See Response to Comment U-17.

W-5 The Estuary Policy Plan depicts an 11-acre Crescent Park on land created by demolition of the Ninth Avenue Terminal. The comment erroneously states the project would create a "4-acre pier resulting from demolition of the 9th Avenue Terminal…." As described on DEIR p. III-16 (and depicted in Figure III-7 on p.III-17) and on Table IV.L-2 (DEIR p. IV.L-17), the proposed Shoreline Park would be 9.74 acres created in the location of the demolished Terminal. The comment describes the expansion of Estuary Park north to the Embarcadero and encourages the project's compliance with this Estuary Plan vision. The DEIR presents and analyzes alternatives (Chapter V) that consider this expansion of Estuary Park as described in the Estuary Plan. City decisionmakers will consider this information as they evaluate the project and the project alternatives in their deliberations on the project.

W-6 See Response to Comment V-3.

W-7 See Master Response C for a description of significant and unavoidable traffic impacts. The commenter's concern, given the best available information and the professional judgment of City staff and the EIR consultants, is adequately addressed in the DEIR.

W-8 See Master Response E regarding optimization of signal timing, and its appropriate use as a mitigation measure. The purpose of an EIR is to analyze the potential impacts associated with the project seeking approval by the Lead Agency, not to solve problems that the project would not create nor significantly contribute to. As stated on DEIR p. IV.B-37, the EIR analysis considers the project impact at the intersection of 5th and Oak Streets at the I-880 Southbound On-Ramp to be significant and unavoidable because it is not certain that the mitigation measure (signal optimization) could be implemented because the City of Oakland, as lead agency, could not implement the mitigation measure without the approval of Caltrans. However, in the event that the mitigation measure could be implemented, the project impact would be less than significant.

W-9 Comment is noted and encourages the City to consider the full and partial Ninth Avenue Terminal preservation alternatives presented and analyzed in the DEIR (Chapter V, Alternatives).

W-10 See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management measures.

COMMENT LETTER X

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OCT 2 4 2005
CITY PLANNING COMMISSION
ZONING DIVISION

Oakland Planning Commissioners
City of Oakland
250 Frank Ogawa Plaza
Oakland, CA 94612

Dear Planning Commissioners:

On behalf of the Eastlake Revitalization Initiative (ERI), a program of the East Bay Asian Local Development Corporation (EBALDC), and The Eastlake Merchant's Association (ELMA), we are writing to comment on the Oak to 9th future development and emphasize how, if planned and executed thoughtfully, the project can positively impact the Eastlake community.

The new Oak to 9th development provides Oakland with an important opportunity to transform our shared public land into a new waterfront neighborhood that all of Oakland can enjoy and benefit from. We are asking for a truly integrated neighborhood that will be incorporated into the surrounding community, especially the neighboring commercial district Eastlake. X-1

The Eastlake Neighborhood is located within the San Antonio District of Oakland along International Boulevard and East 12th Street, from 1st to 14th Avenue and lies only 5 blocks north of the future Oak to 9th Development. Eastlake is multi-cultural commercial district mostly comprised of South East Asian and Latino business owners who serve a multiracial working class neighborhood.

ELMA and ERI advocate for maximizing integration of the future development by making a physical and commercial connection. This can be accomplished by:

1) Increasing public access to the waterfront. An appropriate design will make 5th Ave a working link between the Oak to 9th development and the surrounding neighborhoods through streetscaping, pedestrian and bike paths and signage. This project offers an opportunity to both bring Oakland residents to the waterfront and to bring the waterfront's new residents to shop and experience adjacent Oakland neighborhoods, such as Eastlake.Having parking areas and facilities that facilitate customer movement between Eastlake and Oak to 9th will aid in maximizing the number of people who use both spaces. X-2

2) Pedestrian safety mitigations around key streets and intersections, such as 5th Avenue, Oak Street, 14th Avenue, etc. There is concern especially for children and seniors as they may cross back and forth between East Lake, Chinatown, and Oak to 9th. X-3

3) An integrated marketing strategy that includes Eastlake. Promoting Eastlake caterers and other contractors for First Source contracting lists and highlighting the Eastlake commercial corridor (i.e. "we are near the Eastlake Neighborhood") would be the beginning. X-4

3) Active outreach by the developer to ELMA and local chambers to offer them information about leasing opportunities at Oak to 9th and to offer the right of First Refusal for those leasing opportunities in Eastlake. X-4 (CONT.)

ELMA and ERI are asking for a clear and strong integration of the Oak to Ninth development with Eastlake. Our comments are based on several meetings that provided input from Eastlake commercial and neighborhood residents. We would welcome inclusion in comment processes in the future. X-5

Sincerely,

Lynette Lee by LP

Lynette Lee, Executive Director
East Bay Asian Local Development Corporation

Jose Macias by LP

Jose Macias, President
East Lake Merchants Association

Letter X– East Bay Asian Local Development Corporation and East Lake Merchants Association

X-1 Comment is noted and introduces the commenting organization and goals for the project.

X-2 See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management and public access measures.

X-3 As described on DEIR pp. IV.B-55 to IV.B-57, the proposed project would include a continuous public Class I trail along the entirety of the project shoreline, linking an existing Bay Trail segment, which ends at Estuary Park, to 10th Avenue, where the trail currently continues east to the Martin Luther King Regional Shoreline and beyond. As further described on those pages, traffic control devices (traffic signals with pedestrian signal heads), as well as striped crosswalks, would safely accommodate the added vehicular and pedestrian traffic by controlling the flow of the traffic streams through positive guidance. The Pedestrian Master Plan (PMP), which is part of the City's General Plan, includes PMP Policy 1.2, which recommends use of traffic signals and their associated features (e.g., pedestrian signal heads) to improve pedestrian safety. The DEIR also discusses pedestrian safety as an issue of concern to the City of Oakland, adoption of the above-cited Pedestrian Master Plan, and the Revive Chinatown Streetscape and Pedestrian Improvement Project that will improve pedestrian safety by reducing conflicts with vehicles and by providing pedestrians with better information about safely crossing streets. On that basis, the project would have a less-than-significant impact on pedestrian safety, and no added measures beyond those identified in the DEIR would be required.

T-4 The comment recommends an "integrated marketing strategy" specifically identifies "first source" contracting and promotion of the Eastlake commercial corridor. This comment does not address the issues addressed by the DEIR or that are pertinent under CEQA. The DEIR does, however, discuss the potential indirect impacts that the project could have on nearby retail markets and areas, starting on DEIR p. IV.J-33. The comment similarly raises topics regarding leasing opportunity information and outreach desired by the project sponsor, which is not addressed in the DEIR under CEQA. See also Master Response H.

T-5 The comment is noted and restates the commenting organizations' goals for the project and future participate.

COMMENT LETTER Y

FIFTH AVENUE INSTITUTE
#3 Fifth Avenue
Oakland, CA 94606

RECEIVED
OCT 24 2005
City of Oakland
Planning & Zoning Division

October 23, 2005

Margaret Stanzione
Project Planner
City o Oakland
Community and Economic Development
Agency
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

Re: Comments on DEIR, Oak to Ninth Avenue Project
State Clearinghouse No. 2004062013

Dear Ms Stanzione:

Enclosed please find the comments of the Fifth Avenue Institute to the Draft Environmental Impact Report for Oak to Ninth.

Sincerely,

Charles M. Weber, Jr.
Director

COMMENTS OF FIFTH AVENUE INSTITUTE UPON DRAFT ENVIRONMENTAL IMPACT REPORT OF THE OAK TO NINTH AVENUE PROJECT: STATE CLEARING HOUSE NO.: 2004062013 (AUGUST, 2005)

1. The Notice of Preparation of an Environmental Impact Report was not posted as required by law. Y-1

2. The project site admittedly contains "wetlands", and is immediately adjacent to the navigable waters of the Oakland Estuary. Portions of the site are clearly within the province of the U.S. Army Corps of Engineers. However, apparently no Notice of the Preparation or participation therein has been given to Federal Agencies, specifically the Corps of Engineers, U.S. Fish and Wildlife Service, etc. Y-2

3. There is no discussion of why a combined EIR/EIS is not being prepared.

4. For projects that must comply with both CEQA and NEPA, the guidelines and NEPA regulations strongly urge local, State and Federal Agencies to work together to prepare single documents that will satisfy both State and Federal law. (Section 21083.5; Guidelines, Section 15222; 40 C.F.R. Part 1506, Section 1506.2). The resulting documents, of course, will be inadequate if they only satisfy one or another Statute or set of regulations or guidelines. (Section 21083.5; Guidelines, Section 15221, Subdivision A) Y-3

5. Section 21061 of the Capital Public Resources Code states, "The purpose an Environmental Impact Report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in which the significant effects such a project might be minimized; and to indicate alternatives to such a project."

   Thus, <u>detailed</u> information is what is to be sought. Detailed information in the form of a specific plan is clearly absent.

6. In April, 2001, the Port of Oakland published a "Request for Developer Qualifications: Oak to 9th District properties." A binder which commences with the words, "Pleased to announce a unique and existing waterfront development opportunity. The Port of Oakland is inviting highly qualified developers to submit information on their ability to partner in a specific plan process, and to design and develop a first-class mixed use project on Oakland's largest remaining waterfront development site: the specific plan area is the Oak to 9th District . . . ." Y-4

   The "Response to the Request for Qualifications" submitted by Oakland Harbor Partners, LLC for the Oak to 9th mixed use development, beautifully

printed and widely circulated, referred to the Specific Plan process at some length. It was pointed out that "Under California law, a Specific Plan is intended to implement the policies of the community's General Plan, by providing more specific direction on the location, type, mix and intensity of the land uses and open space, the configuration and pattern of transportation facilities; the public services, facilities and infrastructure necessary to support new development; standard and guidelines to promote community design objectives; and an implementation program that describes the phasing, financing and regulatory actions necessary to realize the plan. An accompanying Environmental Impact Report is required under the California Environmental Quality Act (CEQA)." Y-4 (CONT.)

For the Oak to 9th area, the Specific Plan will include the entire 120 acre planning on both sides of the Embarcadero. "The Specific Plan process involves the opportunity to create a meaningful dialogue with the Oakland community regarding the future of this key waterfront asset. Community outreach will be an important aspect of our Specific Plan process."

In other words, it has been widely represented to the community at large that a Specific Plan will be prepared and that its preparation will involve significant community input. It appears that no Specific Plan has been prepared in direct violation of the promises to the community referred to above. The Specific Plan process would permit community input into the Plan, rather than simply community comment on an EIR.

7. It is clear that the project would generate a vast amount of traffic, and that the street pattern of the adjacent areas is in no way competent to deal with such traffic. Y-5

8. Section 21092.4 requires that for a project of Statewide, regional or area wide significance, the lead Agency shall consult with transportation planning Agencies and public Agencies which have transportation facilities within their jurisdiction which Agencies could be affected by the project. As used in this Section, "transportation facilities" includes major local arterials and public transit within five miles of the project site and freeways, highways and rail transit service within ten miles of the project site." The I-880 freeway, at peak hours, is presently clogged in the entire 5th Avenue area. Traffic envisioned by the project cannot be handled without an examination of transit solutions and significant offsite traffic modifications, far beyond those proposed. On-loading and off-loading of the adjacent freeway would become extremely dangerous. Much of the project traffic would utilize the freeway at least two times a day, as there are no nearby work places. Further, the impact of the I-880 retrofit project at the same time as project construction would appear to create even more significant impact, which has not been discussed. The traffic section is vastly inadequate. Has Cal Trans engineering staff been involved? Y-8 Y-7

9. The Oakland Estuary Plan: The City of Oakland expended substantial funds, and many local individuals and groups spent significant amounts of time, in preparation of detailed Oakland Estuary Plan. This Plan was prepared for the Port of Oakland and the City of Oakland by Roma Design Group in association with others, in February, 1998. This time, energy, funding and effort was expended over a two year period, ending just five years prior to the preparation of the Draft EIR. The nine page discussion of the Oakland Estuary Plan, labeled as a "no project alternative" is confusing. The document does not answer why the Oakland Estuary Plan has been substantially disregarded. Y-8

10. As pointed out in the Oakland Estuary Plan, view corridors should be created. Impact upon parks and the project's impact upon the Bay Trail should be studied. The existing document does not adequately discuss the Bay Trail. Y-9

11. Preservation of a greater portion of 9th Avenue Terminal should be studied, and alternative re-use of significant portions of the facility should be studied.

The Fifth Avenue Institute prepared a plan for the adaptive reuse of the Ninth Avenue Terminal and presented it to the members of the Landmarks Preservation Advisory Board for consideration. A copy of that plan is attached. Y-10

12. A community inclusive iterative planning process should be utilized, rather than simply permitting the public to comment upon a fait accompli. E.g., Specific Plan. Y-11

13. Marine related uses should be studied. Y-12

14. Tidelands Trust issues should be completely analyzed as part of the Environment Impact process, e.g., lands exchanged for what? Y-13

15. Health and Safety Code Section 33367(d)(4) requires that a redevelopment plan conform to the jurisdiction's adopted General Plan. This being the case, in view of the Estuary Policy Plan, in view of the promise that a specific plan would be prepared, the vague generality and ambiguity of the existing proposal is vastly insufficient to formulate specific responses. No where are the ambiguities more demonstrated in that the Estuary Policy Plan is designated "no project". Y-14

16. The Bay Trail appears to be deferred until 2018. Since the Bay Trail is primarily a product of legislation, deferring a portion of it until 2018 does not seem up to the whim of a private developer. Y-15

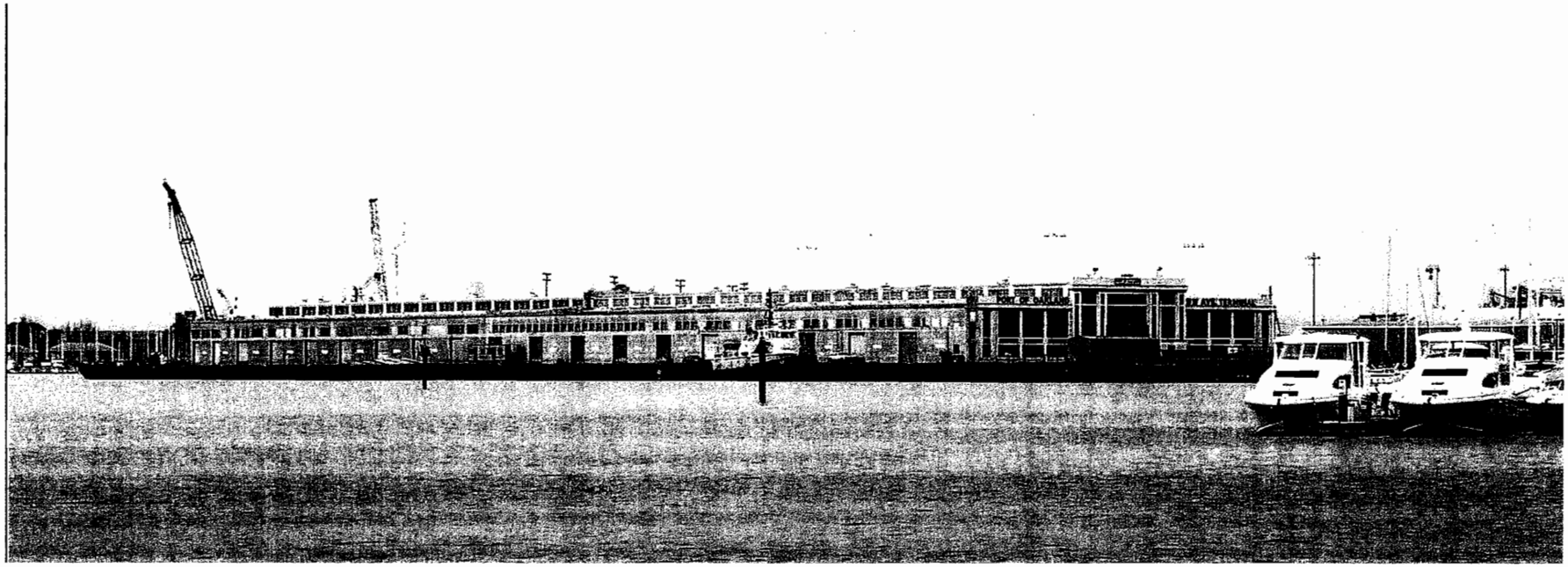
17. SB 1622 requires public meetings to review the Trust Lands Exchange. The DEIR does not mention when these public meetings will occur, if ever. Y-16

18. The DEIR appears to be silent on any actual plan to preserve public view. Y-7

19. The DEIR has a great many general statements, but lacks specifics. E.g., "the project would encourage public access". "The project would be consistent with most Estuary Plan policies". "The project would be consistent with most applicable General Plan policies". "Therefore, the project's effect on scenic vistas would be less than significant". Such general statements are not only unspecific, they tend to be false and misleading. Y-18

20. Soils instability is observable in the immediate area of the proposed development. Liquefaction is clearly a strong probability, in the event of earthquake. "According to maps, the project site is in an area expected to have a very high potential to experience liquefaction." The DEIR is silent as to any meaningful response to this issue Y-19

COMMENT LETTER Y



Proposal for Preservation
Ninth Avenue Terminal
Oakland, California

Prepared by:
Fifth Avenue Institute
October, 2005

Proposal

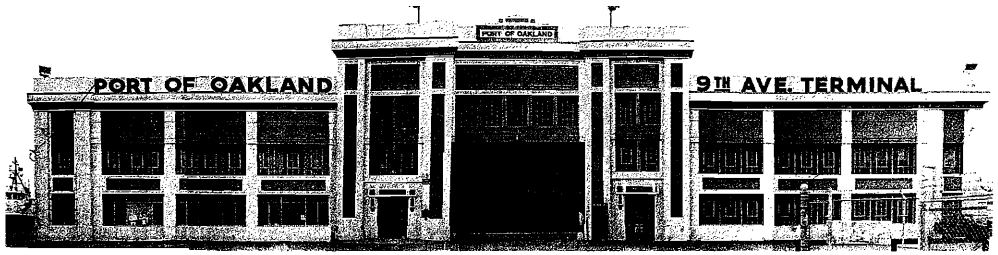
This proposal is submitted in accordance with the Draft Environmental Impact Report pertinent to Case File Number ER 04-0009 relative to the following categories:

Land Use, Plans and Policies
Cultural Resources
Public Services and Recreation

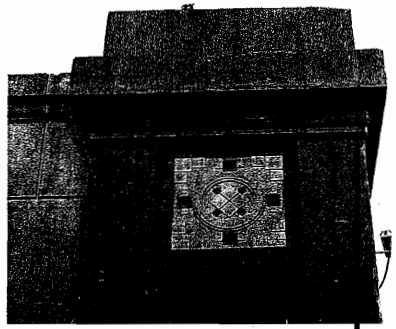
Y-20

Proposal

Preserve the Ninth Avenue Terminal to create a cultural, educational and recreational center that reflects the unique history, talents and interests of people of Oakland and the East Bay. Y-20

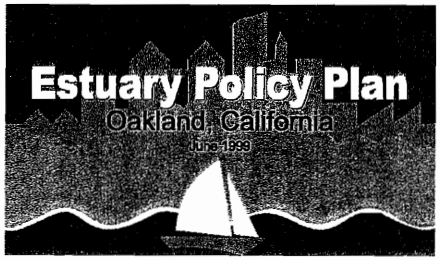


History and Statistics



- Built in 1930 as a state of the art harbor improvement, with a 500' addition in 1951.
- Last surviving maritime terminal financed by the 1925 harbor bond.
- Strongly linked to the establishment of the Board of Port of Oakland Commissioners, sworn in February 12, 1927, that was a requirement of the bond.
- Last surviving break-bulk cargo terminal on the Oakland waterfront.
- Continuous operation since October, 1930
- Size: 1,004' long, 180' wide, 47' in height.
- Supported by approximately 1,000 wood pilings.

Y-21



Ninth Avenue Terminal

OAK-2.4: Establish a large park in the area of the existing Ninth Avenue Terminal to establish a location for large civic events and cultural activities. Maritime activities and support services that operate in and around the terminal shed should be relocated. (See Policies OAK-4.3)

The park is envisioned as primarily an open, unobstructed green field that is flexible in use. It should be large enough to accommodate large numbers of people associated with special events, cultural activities, city festivals, etc.; yet, at the same time be designed to be attractive to individuals or small groups of people on a more regular basis. Y-22

The park should be oriented to maximize access and views of the Estuary. It should be adjoined by commercial, hotels, and public uses, which can benefit from the civic events and cultural activity programming. (See Policy OAK-4.2)

The 9th Avenue Terminal provides an exciting opportunity for public-oriented activities and open spaces. Recognize that the Ninth Avenue Terminal shed, or portions thereof, may be suitable for rehabilitation and adaptive reuse. However, the terminal building impedes public access to and views of a key area of the Estuary.

Y-22 (CONT.)

The Port and City should investigate the feasibility of keeping and reusing the building (or portions thereof). A Specific Plan for the entire District should be initiated prior to development. (See Policy Oak 5)

Encourage the mooring of vessels adjacent to the Ninth Avenue Terminal. Along the southern boundary of the Ninth Avenue Terminal, a limited amount of vessel mooring is encouraged to complement the recreational and cultural uses of the area.

Landmark Status

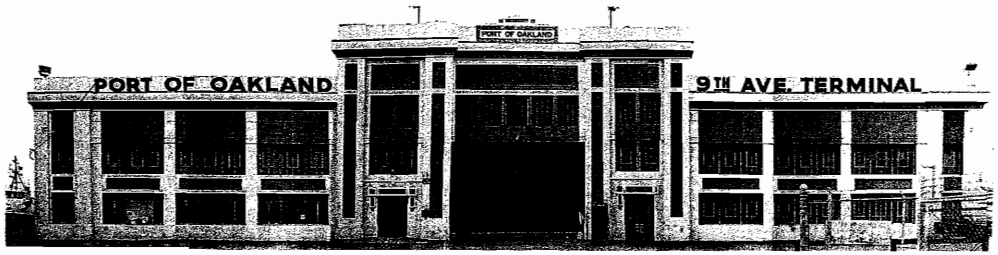
- The City of Oakland's Landmarks Preservation Advisory Board on March 8, 2004 reviewed and unanimously adopted the resolution recommending landmark designation of this unique waterfront landmark.
- The preservation and adaptive reuse of the Terminal as a centerpiece of Oak to Ninth would foster the public link with the City's distinctive waterfront, past and future.

Y-23

Proposal to Preserve Ninth Avenue Terminal

Develop the facility to take advantage of its waterfront location, restricting 80% of the uses to nonprofit water-oriented businesses, organizations and events, such as: Y-24

- Boat racing headquarters
- Maritime Museum
- Sailing School
- Junior Yacht club

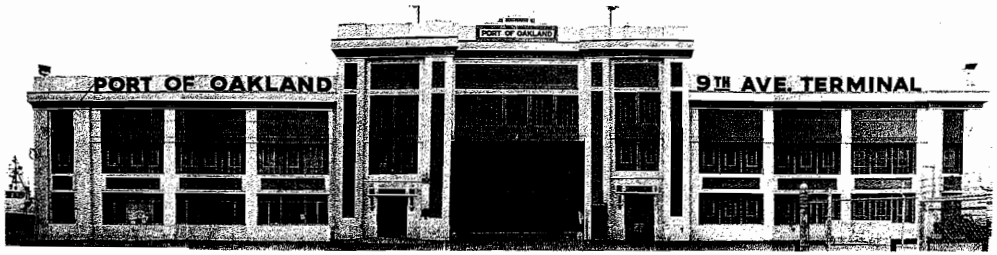


Proposal to Preserve Ninth Avenue Terminal

Facilities

- Festival Pavilion
- Theater
- Conference Center
- Exhibition Hall
- Meeting spaces
- Gallery
- Resident spaces for non-profit organizations

Y-24, (CONT.)



Model for Development – Fort Mason (San Francisco)

- Landmarked facility on 13 acres of San Francisco Waterfront
- Fort Mason Foundation created in 1976 to establish cultural center
- Opened to the public in 1977
- Facilities include Herbst Pavilion, a festival pavilion, Cowell Theater, a conference center, meeting and activity facilities and spaces rented to 35 resident non-profit organizations
- 1.6 million visitors per year
- 15,000 meetings or events per year

Y-25

COMMENT LETTER Y

Financial Model – Fort Mason (San Francisco)
2004 Income

Facility	Area	Rental Income
Pavilion	30,000 sq ft	463,323
Theater	437 seats	407,048
Festival Pavilion	50,000 sq ft	1,292,498
Conference Center	10,000 sq ft	331,900
Separate Building	1,188 sq ft	180,990
Meetings/Activities		418,001
Resident Rents		1,184,688 *
Total		4,278,448

* $300,000 income from restaurant

Y-25 (CONT.)

Fort Mason Events

- Zinfandel Advocates and Producers holds an annual wine-and-food tasting event at Fort Mason. 9,000 people attend the two-day event. Tickets are $50.

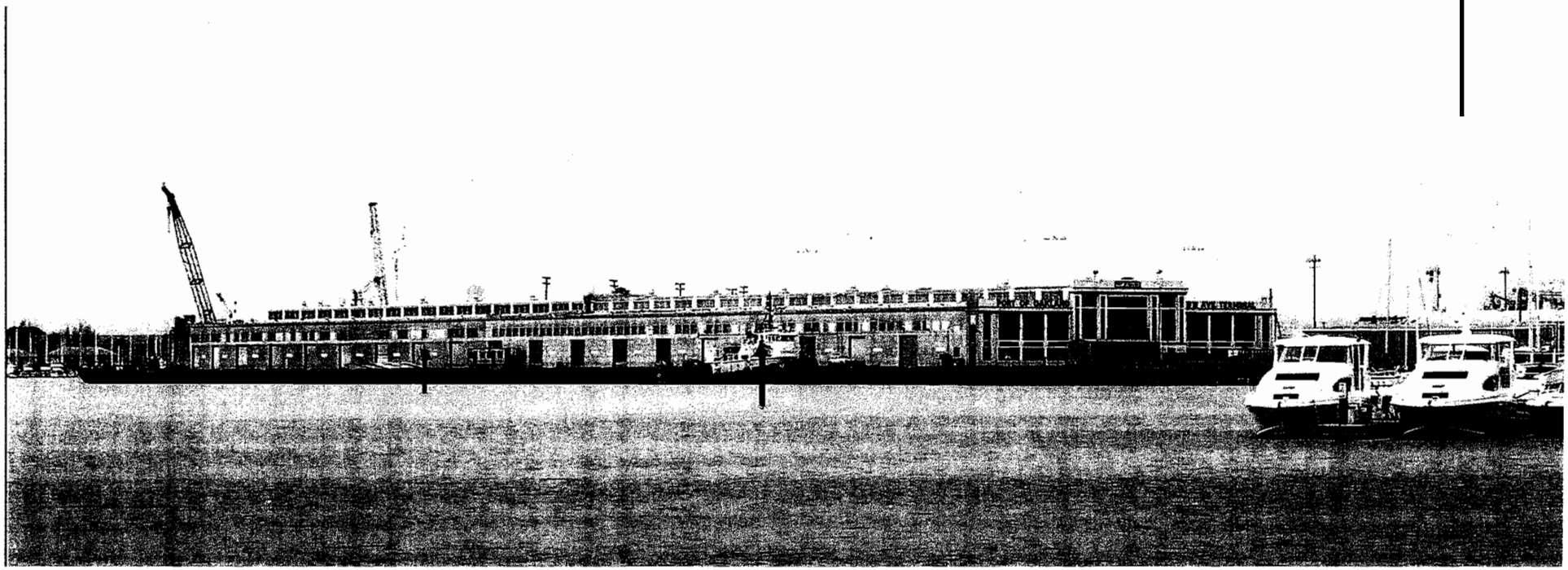
- The Friends of the Public Library hold a book fair at Fort Mason every year and in 2004 raised $238,000 for San Francisco public libraries.

- Corporate meetings: A Japanese car company rented the exhibition hall for 10 days in 2004.

Y-25 (CONT.)

Proposal to Preserve Ninth Avenue Terminal

Y-26



Proposal to Preserve Ninth Avenue Terminal

Financing

- Central City East Redevelopment Incremental Funds
- Measure DD funds
- Grants from federal government and other non-profit foundations
- Financable leases
- Memberships
    - Corporate
    - Individual

Y-26
(CONT.)

Recommendation

Y-27

Landmark the Ninth Avenue Terminal to ensure its permanency on the Oakland Waterfront.

Fifth Avenue Institute
#3 Fifth Avenue
Oakland, CA 94606

10/17/05

PORT OF OAKLAND
NINTH AVE. TERMINAL

Letter Y– Fifth Avenue Institute

Y-1 As required by Section 21092.3 of the CEQA Guidelines, the City of Oakland mailed a Notice of Preparation (NOP) of an Environment Impact Report for the project to the Alameda County Clerk's Office prior to May 28, 2004 (date of the NOP) for a minimum 30-day posting.

Y-2 The CEQA Guidelines (Section 15082) require the lead agency to provide the Notice of Preparation to federal agencies "involved in approving or funding the project." No federal agencies will either approve or fund the project. Certain aspects of the planned shoreline improvements and dredging may require a permit from the Army Corp of Engineers, but this permit does not constitute approval of the project. As part of the review of the Corps permit, the U. S. Fish and Wildlife Service may review these activities for impacts to species protected under the Federal Endangered Species Act but will not be approving the project. Thus, it was not necessary to provide these federal agencies with the NOP. The Notice of Available (NOA) of the DEIR was mailed to the Army Corps of Engineers and the US Coast Guard. No comments were received from either agency.

Y-3 A joint EIRs/EIR has not been prepared for the project for several reasons. First no federal agency has determined that the project requires an EIS. Under NEPA an EIS is prepared only for "major federal actions significantly affecting the quality of the human environment." The Corps permit that may be required for certain shoreline improvements and dredging proposed in connection with the project are unlikely to qualify as either (1) a major federal action or (2) an action that will significantly affect the environment. Thus, it is unlikely that an EIS would be required for any federal permits that may be necessary for these shoreline improvements. Second, there is no requirement under CEQA that joint federal and state documents must be prepared, even in cases that involve the likelihood of some federal environmental review. The CEQA and CEQA Guidelines sections cited by the comment do not mandate preparation of joint documents.

Y-4 See Master Response A regarding preparation of a specific plan.

Y-5 The commenter's concern, given the best available information and the professional judgment of City staff and the EIR consultants, is adequately addressed in the DEIR.

Y-6 The commenter's concern, given the best available information and the professional judgment of City staff and the EIR consultants, is adequately addressed in the DEIR. See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures.

Y-7 The proposed project would neither change the physical characteristics of the I-880 freeway ramps, nor generate traffic that is incompatible with existing traffic patterns, and there is no reason to believe entering or exiting the freeway would be made dangerous by

the project. The I-880 seismic retrofit project is described on DEIR pp. IV.B-16 and IV.B-69. As a reviewing agency, Caltrans staff has reviewed and commented on the DEIR traffic analysis. See Response to Comment D-13 regarding interactions the project applicant and their representatives have had with Caltrans staff.

Y-8 The comment claims that, with the proposed project, the Oakland Estuary Plan (Estuary Policy Plan) has been "substantially disregarded." The DEIR acknowledges the Estuary Policy Plan in a number of ways. Primarily, the alternatives analysis provided in Chapter V of the DEIR describes and analyzes a No Project / Estuary Policy Plan scenario (Alternative 1B) that considers development depicted in the Estuary Policy Plan (DEIR p. V-10 through V-19). As discussed in Response to Comment U-2, this alternative allows the impacts of the proposed project to be compared with that of future possible development under the Estuary Policy Plan. Additionally, the DEIR presents an extensive discussion of the project's compliance or conflict with applicable policies in the Estuary Policy Plan and specifically those that address the Oak to Ninth Avenue District. The City will also consider this policy analysis as it deliberates the project and balances the many policies pertinent to the project.

Y-9 See Responses to Comments B-8 through B-11.

Y-10 Given the proposed substantial demolition of an historic resource (Ninth Avenue Terminal, CEQA requires an analysis of preservation alternatives(s) in order to ascertain whether there are feasible options to the project that would lessen the significant unavoidable impacts to less than significant. A series of preservation alternatives to the project are included in Chapter V of the EIR, including an alternative that would preserve part of all of the Terminal building and its associated wharf structure. These include Alternative 2 (Enhanced Open Space / Partial Ninth Avenue Terminal Preservation and Adaptive Reuses) depicted in Figure V-2 on DEIR p. V-23); Alternative 3 (Enhanced Open space/Partial Ninth Avenue Terminal Preservation and Adaptive Reuse) depicted in Figure V-3 on DEIR p. V-22); and a Sub-Alternative (Full Ninth Avenue Terminal Preservation and Adaptive Reuse) depicted in Figure V-3 on DEIR p. V-23).

See Master Response B regarding further analysis of reuse alternatives for the Ninth Avenue Terminal.

Y-11 See Master Response A regarding preparation of a specific plan.

Y-12 The comment states "marine related uses should be studied." Without additional context, the response assumes that the comment suggests that additional project alternatives or Ninth Avenue reuse alternatives be considered in the DEIR. The range of project alternatives covered in the DEIR addresses various scenarios primarily for open space, density, site and street layout, and various levels of preservation of the Ninth Avenue Terminal. Consistent with CEQA, the City selected the alternatives (including Terminal reuse alternatives) for analysis in the DEIR based on the significant impacts resulting from the project (as identified in the DEIR analysis) and the project objectives, with

consideration given to information provided by the public during the EIR scoping process, public hearings on the DEIR, and other public input opportunities not related to the environmental review process. As such, the range of project alternatives are considered to meet the goal of promoting informed public participation and decision making by the City. See also Master Response B.

Y-13 See Response to Comment GG-18. In addition, the comment implies that a complete analysis of Tidelands Trust issues should be completely analyzed as part of the EIR process. Tidelands Trust issues are not an environmental impact. Rather such issues arise from the nature of the land title held by the Port as the manager of the lands granted by the state or acquired by the Port or its predecessors.

Y-14 See Master Response A regarding preparation of a specific plan and Response to Comment U-2 for clarification of the purposes of the designation of the Estuary Policy Plan scenario as "no project."

Y-15 See Master Response G regarding the phasing of open space and trail improvements.

Y-16 See Response to Comment GG-18.

Y-17 See Response to Comment S-13.

Y-18 The DEIR contains a detailed discussion and analysis on several environmental topics (and policies) throughout Chapter IV (Setting and Impacts). The comment cites a number of summary statements found in the discussion of Land Use, Plans and Policies (Section IV.A) and the summary of the view impacts (Section IV.K, Impact K.2). The out-of-context summary statements reflect the culmination of a wealth of detailed discussion in the DEIR. For example, the discussion of the project's relationship to *City Plans, Policies, and Regulations* and *Other Applicable Plans and Policies* is discussed on DEIR pp. IV.A-5 through IV.A-39, and then summarized under Impact A.2 on pp. IV.A-36 through IV.A-38. Similarly, the DEIR impact analysis of Views and Scenic Vistas is detailed on pp. IV.K-10 through IV.K-38, and then summarized on p. IV.K-39. Summary statements in the DEIR are not "false" or intended to be "misleading." They are intended to support the DEIR's purpose of objectively presenting information to the public and decisionmakers regarding the potential impacts of the project, and presenting that information in a way that is easily readable and digestible.

Regarding the comments specific examples cited by the comment (shown bolded below):

- Page IV.A-10 of the DEIR states "Proposed as a new neighborhood on a grid of new public streets intersecting with the Embarcadero, **the project would encourage public access** through the area and toward the waterfront where major new public open spaces would exist. Continuous sidewalks and pedestrian and bicycle linkages from the Embarcadero and throughout the site would also lead to the water and open space areas.

- The introductory statement provided on DEIR p. IV.A-13 that "**the project would be consistent with most Estuary Plan policies"** is, in fact, conservative since the impact analysis does not conclude that the project would conflict with any Estuary Plan Policies (as discussed on DEIR pp. IV.A-13 through IV.A-17).

- As discussed under Impact A.2 (DEIR p. IV.A-36), "The **project would be consistent with most of the applicable General Plan policies**. However, the project would potentially conflict with Historic Preservation Element (HPE) Policy 3.1 …. Also, the project would potentially conflict with Noise Element Policy 1…." Both issues are discussed in detail in Section IV.E (Cultural Resources) and Section IV.G (Noise) of the DEIR.

- **"Therefore, the project's effect on scenic vistas would less than significant,"** is a culminating statement of a detailed summary (on DEIR p. IV.K-39) of a lengthy analysis that starts on DEIR p. IV.K-12.

Y-19 See Responses to Comments II-6 and GG-41. The discussion for the potential impact as a result of liquefaction is discussed on DEIR p. IV.F-15. Mitigation Measure F.2 on DEIR p. IV.F-16 presents comprehensive measures for mitigating this potential significant impact to a less than significant level. Included in Mitigation Measure F.2 is a list of various engineering methods that are recommended by the California Geological Survey to mitigate the effects of liquefaction.

Y-20 The comment includes a "Proposal for Preservation of the Ninth Avenue Terminal, Oakland, California," prepared by the Fifth Avenue Institute, October 2005. The remaining comments address the information presented in the proposal.

Y-21 The history and statistics provided are consistent with the discussion of the *Ninth Avenue Terminal and Wharf* (starting on DEIR p. IV.E-15), as well as under Impact E.3 and Impact E.4 (starting on DEIR p. IV.E-25). Additionally, the proposal is consistent with information provided in the Historic Resources Evaluation of the Ninth Avenue Terminal included as Appendix G to the DEIR. No statements in the DEIR are contradictory to the proposal information.

Y-22 The proposal cites Estuary Policy Plan policies and related plan discussions regarding the Ninth Avenue Terminal. The DEIR identifies all of the relevant Estuary Policy Plan objectives starting on DEIR p. IV.A-11 (and in DEIR Appendix F) and discusses at length the project's relationship to Estuary Plan policies that most directly pertain to the project starting on DEIR p. IV.A-13.

Y-23 The proposal correctly cites information regarding the landmark status of the Ninth Avenue Terminal.

Y-24 The proposal suggests a scenario of reuses for the fully-retained Ninth Avenue Terminal. See Master Response B regarding further analysis of reuse alternatives for the Ninth Avenue Terminal.

Y-25 The proposal provides historical, economic, and operational information regarding the Fort Mason facility in San Francisco as a "model for development." The comment is noted and does not address issues pertinent to environmental issues of the adequacy of the analysis in the DEIR.

Y-26 The proposal outlines financing options for preservation of the Terminal and is noted, but the comment does not address environmental issues pertinent to the DEIR analysis. If the City approves an alternative that retains the Ninth Avenue Terminal, the City and project sponsor could consider viable mechanisms to finance preservation of the facility.

Y-27 The Landmark's Preservation Advisory Board (LPAB) has previously recommended landmark designation of the Ninth Avenue Terminal, and the City Planning Commission will consider the LPAB's recommendation as it considers its action on the proposed project.

COMMENT LETTER Z

PANIL

PIEDMONT AVENUE NEIGHBORHOOD IMPROVEMENT LEAGUE

Please reply to:
Valerie Winemiller
PANIL
P.O. Box 20375
Oakland, CA 94620
(510)653-4552 or 387-9609

October 17, 2005

Landmarks Board
250 Frank Ogawa Plaza
Oakland, CA 94612-2031

Re: Case File No. ER04-0009
Oak to 9th project
Applicant: Cingular Wireless

Members of the Landmarks Board,

PANIL wishes to express its support for both:

1) the preservation of the 9th Street Terminal and any related historic resources, and

2) the inclusion of more public open space in the plan for this project, as well as open sight lines connecting the entry roads to the waterfront.

PANIL supports the thoughtful and detailed comments of Oakland Heritage Alliance on preservation issues. Z-1

PANIL endorsed Measure DD with the understanding that some monies would go to implementing the Waterfont Plan for this area. We do not consider a patch of grass on top of a pier to be in the spirit or the letter of open space plans for an area of the city seriously under-served in open space and for one of the last large parcels of undeveloped land suitable for a park on the waterfront. We watched the controversy regarding Festival at the Lake and the conflicts it generated being so close to a heavily populated neighborhood. The Waterfront Plan designated this as the prime location for such large outdoor festivals with potential noise and traffic impacts. We wish to see much more respect for the public open space use of the waterfront area. Z-2

Very truly yours,

PANIL
Valerie Winemiller
by Valerie Winemiller, Steering Committee

Letter Z – Piedmont Avenue Neighborhood Improvement League

Z-1 Comment is noted and states the commenting organization's support for the preservation of historic resources, more public open space, open sight lines to the waterfront, and the comments of Oakland Heritage Alliance (Comment Letter O).

Z-2 Comment is noted and does not addressed the adequacy of the analysis in the Draft EIR. In response to the comments suggestion that the site would no longer be a location for large outdoor festivals, while the project sponsor is not proposing to hold events (such as concerts or festivals) at the project site (as discussed on DEIR p. III-18), the project would not preclude the use of existing or new open spaces for festivals or any public special event by other entities or community groups that may apply for the appropriate City permits and approvals to conduct these types of community events at the open space in the project site.

COMMENT LETTER AA

Coalition of Advocates for Lake Merritt

C/O 446 17TH ST. #301, OAKLAND, CA 94612 • 510-763-9218

28 September 2005

To: Oakland City Planning Commission

Subject: **Statement of the Coalition of Advocates for Lake Merritt (CALM)**
Draft Environmental Impact Report for the
Oak-to-Ninth Mixed Use development Project

The Coalition of Advocates for Lake Merritt (CALM) is a multi-alliance of groups and individuals who hold an endearing interest in the general betterment of the "jewel" of Oakland -- Lake Merritt and its environs. Four years ago, CALM developed the 12th Street re-design plan, development strategy, and cost estimates, which was adopted essentially in its entirety by the City Council, and which plan became the basis for reconstructing 12th Street at the south terminus of the lake -- soon to be "Lake Merritt Blvd." AA-1

CALM is an active member of the Measure DD Community Coalition, a broadly representative coalition, sanctioned and charged by the City Council to provide monitoring and fiscal oversight of projects under the $198 million ballot referendum, approved in 2002 by 80% of Oakland voters. $22 million of Measure DD funds are earmarked toward developing the Oak-to-Ninth area as a major recreation designation. The Coalition is committed to being an active participant in how these funds are spent.

As a diligent member of the DD coalition, CALM strongly endorses the Coalition's position statement (below) on the proposed Oak-to-Ninth development, a statement that was adopted, without opposition, after an extended period of dialogue and consideration at the Coalition's meeting of July 28.

In particular, CALM urges the Planning Commission -- and the City Council -- to assure, throughout the various processes, hearings, and considerations, that development of the precious, priceless, and irreplaceable Oak-to-Ninth parcel will:

(a) provide the maximum of open space – a minimum of 30 acres -- with major development focused perhaps in strategically-sited point towers;
(b) assure maximum vistas directly through and to the Estuary from the Embarcadero and from accessible bicycle, pedestrian, and vehicle ways adjacent to the development – in fact, CALM strongly encourages that the vistas defined in the Estuary Policy Plan be mandated provisions of any Oak-to-Ninth project design; AA-2
(c) require that site amenities, furnishings, and appurtenances of the development must be "world class" in quality, adequately befitting the beauty and irreplaceableness of Oakland's rare and last possibility to salvage its long-neglected waterfront for the use and enjoyment of Oaklanders for generations to come;
(d) incorporate major demands of the 'Community Benefits Agreement," namely, significant affordable housing and local hiring obligations: and
(e) require adherence to Oakland Heritage Alliance's noble insistence that at least the original portion of the historic Ninth Avenue Terminal be preserved and incorporated into the development.

The Position Statement of the Measure DD Community Coalition follows:

Statement of The Measure DD Community Coalition

The Measure DD Community Coalition is a broadly representative body of 150 concerned citizens, organizations, and dedicated staff. In 2004, the Coalition was sanctioned by the City Council to monitor the progress of activity and oversee the financial integrity of the myriad of parks, open space, and waterways developments authorized under the Measure DD bond referendum, overwhelmingly adopted in 2002 by the Oakland electorate.

The Coalition has a special interest in the impending development of the Oak Street to 9th Avenue area (Oak-to-Ninth), not only its projected magnitude, but particularly it's potential impact on open space, Estuary access, visibility, and intensity of development appropriate to the largest undeveloped waterfront area remaining in the city.

The Coalition also recognizes a variety of successfully built waterfront developments in urban areas of the U.S. and that, in large measure, these successes result from viable partnerships of public interests together with private developers. In appreciation of this fact, and that significant public resources are provided by Measure DD to develop usable, attractive open space, the Coalition strongly urges that public policy must insist on development that augments and encourages access for the many to the Estuary, and which assures that the "public interest" is paramount in decisions affecting the development of Oak-to-Ninth. AA-3

The development proposed by the Port of Oakland's selected developer for the Oak-to-Ninth area differs greatly from the Estuary Policy Plan (EPP). After a lengthy public process, the EPP was unanimously adopted in 1999 by the City Council, and was incorporated in the General Plan. As expressed and illustrated in the Plan, the EPP envisioned that:

> *"Shoreline access and public space policies are intended to establish this area of the Estuary as the major recreational destination in the city. The Plan recommends a series of large open spaces, intended to provide for a wide variety of recreational experiences. Developing a series of well-defined open spaces would change the entire nature of the waterfront in this area, transforming it from an industrial backwater into a recreational centerpiece of the city. In total, these sites would represent one of the most significant additions of urban parkland within the entire Bay Area. They would create both a regional and local asset of major proportions."*

Given the current financial landscape of the city, achieving these goals makes public-private partnership all the more important. Similarly, it is important to not allow development that will squander open space, nor implement designs that fail to serve the interests of all of Oakland. Innovative development adjacent to the Estuary has the potential to enhance the long-term vitality of Oakland's waterfront. It is equally essential, however, that the public must not lose in the process.

Under the developer's proposal, 42% of the open space called for in the EPP (approximately 12-14 acres) is eliminated (excluding Estuary Park, an existing City park). The EPP "envisioned" opening up Estuary Park (now a "stealth" park) to public view from the Embarcadero, by demolishing a large warehouse and replacing it with 5 acres of open space. The developer's plan would build a large residential complex at the warehouse site, thereby forever closing Estuary Park from public view. AA-4

The Measure DD Coalition strongly urges close adherence to primary EPP objectives for any development plan considered for adoption, namely:

1. *Assure maximum physical and visual access for the public to the Estuary and the surrounding parks from the Embarcadero and from interior streets.*

   Visual access is a major organizing feature of the EPP, in which all roadways and view corridors provide direct vistas to the water. In the developer's plan, visibility of the water is blocked from the Embarcadero, and from practically all streets within the development. Visibility, of course, is vital for parks, and encourages their use. Lake Merritt's parks are heavily used because they are so visible. At minimum, the developer should work with the City, the Coalition, and other interested parties to assure that the Estuary – to the greatest extent possible – will be "opened up" in similar ways. AA-5

2. *Maximize "open space" in the proposed development consistent with the Estuary Policy Plan.*

   The EPP calls for a beautifully designed and sited 11-acre park landward of the 9th Avenue Terminal. In the developer's plan, the 11-acre park is replaced by an approximate 4-acre pier by demolishing the 9th Avenue Terminal, thus losing both a major proposed park, and an historic building. Also, the present General Plan policy to demolish the warehouse at Oak Street and replace it with 5 acres of open space should be enforced. Development of Oak-to-Ninth should invite, not exclude, the public from Oakland's waterfront. It should benefit all Oakland residents, not just those sufficiently privileged to live there. AA-6

3. *Foster innovative approaches (in signage, street design, landscaping, pedestrian and bicycle access, transit stops, exterior furnishings, related amenities) to ensure maximum quality and enjoyment of the Estuary, including attractive gateways and pathways to and within the development.*

   The redevelopment of our waterfront is currently the most important land use decision before the city. As Oakland's last massive parcel for a long, long time, the City must ensure that the development of Oak-to-Ninth is nothing less than the best it can be. The new development should have the look and feel of an open waterfront park, perhaps with point towers set apart in large open spaces. Generous vistas should be available from all vantages. The re-newed area should provide attractive amenities, and should be inviting for walking, biking, jogging, sitting, and enjoying new experiences. AA-7

Oakland is a waterfront city, but many are hardly aware of that fact because, for so long, much of our waterfront has been off limits to the public. With thanks to Measure DD and the availability of the Oak-to-Ninth area, Oakland is provided the unusual opportunity to open the waterfront to its people: an historic opportunity to leave – or not leave – a legacy to our children and grandchildren. Oakland lost its waterfront to rapacious politicians in the 1850s; it took 60 years of litigation to get it back. The City should not now lose it again. Oakland should work cooperatively with the Port's chosen developer to assure that our Estuary is an Oakland jewel for generations to come. Moreover, Oakland must ensure that "the public good" is a guiding principle in collective decisions of how best to balance the beauty of the Estuary with public access and private investment. AA-8

Submitted by:
James E Vann, on behalf of
The Measure DD Community Coalition & The Coalition of Advocates for Lake Merritt (CALM)

Letter AA – Coalition of Advocates for Lake Merritt

AA-1 Comment is noted and introduces the commenting organization and purpose.

AA-2 The comment identifies five goals for development of the Oak to Ninth Avenue project site. This response focuses on those that pertain to issues addressed in the DEIR pursuant to CEQA.

a) *Provide minimum 30 acres of open space / focus development in strategically sited point towers:* The project will provide 20.7 acres (not including the 7.7-acre Estuary Park and Jack London Aquatic Center) of permanent open space that does not currently exist. The City decisionmakers will consider the adequacy of the proposed acreage, as well as the appropriateness of the proposed site layout and building forms, including the location of the five proposed towers, as it deliberates the project prior to action.

b) *Assure maximum vistas directly through and to the Estuary from the Embarcadero …mandate vistas defined in the Estuary Policy Plan:* The comment likely refers to the Illustrative Shoreline Access & Public Space Plan (Figure II-3 in the Estuary Policy Plan), which indicates "view corridors" that project along existing streets to the waterfront. Projections are shown along Fallon Street, the west edge from Lake Merritt Channel, streets including and between 5th Avenue and both sides of Clinton Basin. Additional view corridors are shown along and intersecting a new curvilinear street that would create the boundary of Crescent Park (where the Ninth Avenue Terminal current exists) and that do not align with existing street rights-of-way. The Estuary Policy Plan also anticipated that the possible configuration of new streets that might meet key objectives for internal circulation and site design might not necessary follow the existing street grid. In fact, only a view corridors extending along a virtual extension of 6th Avenue (as shown in Estuary Policy Plan Figure II-3) would not occur with the project due to proposed building development of Parcels K and L. The project would not obstruct view corridors to the Estuary down Fallon Street, the west shore of Lake Merritt Channel, 5th Avenue, either side of Clinton Basin, or from new streets bordering or intersecting the new large open space on the site of the Terminal.

Consistent with Objective SA-3 (Shoreline Access & Public Space) on Estuary Policy Plan page 39, the project would "enhance the connection between inland areas and the water" by virtue of the transformation of the waterfront site to a publicly-accessible area that would accessed by a new, clearly marked systems of trails, open spaces, and new public streets. Also, the series of open spaces proposed along the waterfront would create viewing opportunities that currently do not exist and would, consistent with Objective SA, "extend outward to the Estuary itself, to provide viewing experiences that are unique to the Estuary."

c) *Require quality site amenities, furnishings, and appurtenances:* The comment does not address an environmental impact of the project or the adequacy of the DEIR. The comment is noted.

d) *Community Benefits Agreement…affordable housing and local hiring obligations*: See Master Response H.

e) *At least original portion of Terminal preserved and incorporated*: See Response to Comment K-3.

AA-3 The comment is noted and does not address the adequacy of the analysis in the DEIR or issues under CEQA. The comment speaks to the public policy matters before the City related to the "public interest" nature of the decisions about the project site development.

AA-4 See Response to Comment W-5.

AA-5 See Response to Comment U-17.

AA-6 See Response to Comment W-5.

AA-7 See Response to Comment V-3.

AA-8 The comment is noted and does not address the adequacy of the analysis in the DEIR or issues under CEQA.

COMMENT LETTER BB

RECEIVED
OCT 26 2005
City of Oakland
Planning & Zoning Division

October 24, 2005

Margaret Stanzione, Project Planner
City of Oakland
Community and Economic Development Agency
250 Frank Ogawa Plaza, Suite 3315
Oakland, CA 94612

Subject: Oak to Ninth Avenue Development Project

Dear Ms. Stanzione:

California Dog Owner's Group (CalDOG) has reviewed your agency's Draft Environmental Impact Report (DEIR) for the Oak to Ninth Avenue Project (project) and would like to provide some comments about the parks and open space section of this project. The project consists of an approximately 3,100 residential units (or households), 200,000 square feet of commercial uses, as well as approximately 28.4 acres of new and improved parks and open space. We recommend that a portion of the project's open space and park area be dedicated as a dog park and that the City allow dogs off-leash in the other park and open space areas whenever feasible.

Off-leash recreation offers exercise for people and their dogs. The daily dog walk gives people a chance exercise, to be out in nature, to meet with others and to create a community. Dog walkers find friends at off-leash parks; they also monitor each other and spread the word about courtesy, clean-up, and control. A strong argument in favor of creating off-leash spaces is that availability of legal off-leash areas cuts down on illegal off-leash use, making dog-averse people more comfortable in public spaces because they there is less chance of encountering off-leash dogs in unauthorized places. It would also promote pet behavioral socialization, making dogs safer around other dogs and people. BB-1

CalDOG recommends that the project explicitly include a fenced dog park at least one acre in size as part of this project (or 3.5 percent of the total area dedicated to parks and open space). Many project residents may ultimately own dogs, which would contribute to a more active lifestyle and a higher quality of life for residents in general. The American Veterinary Medical Association estimates that the average dog ownership rate in the United States is 0.58 dogs per household, which means that the project could have as many as 1,798 dogs. Further, existing Oakland residents who own or care for dogs have relatively few places to take them in that part of Oakland since Oakland has only one dedicated dog park (Hardy Park in District 1) and most other parks either prohibit dogs being off-leash or prohibit dogs altogether. We believe it is vital to include dedicated space for dogs as part of this project to enhance livability in Oakland and to increase the project's appeal to future residents.

The dog park can be located close to the freeway to buffer residents from any barking originating from the park. The park should also include trash receptacles, benches, lighting and water faucets for both people and dogs. Ideally, this dog park would include two fenced areas – one for all dogs and one just for small dogs. Furthermore, we recommend that the City allow dog owners to let their dogs off-leash in other appropriate

open space and park areas so long as those dogs are licensed and obey voice command. If this is not included as

BB-1 (CONT.)

We would like the Final Environmental Impact Report (FEIR) to include this option as part of the project's conditions of approval. If this option is found to be infeasible, we would like the FEIR to provide a qualitative and quantitative (as applicable) analysis that justifies this conclusion.

If you have any questions about these comments, please feel free to contact me at 1-800-466-8446.

Sincerely,

for:

Karin Mac Donald
President, CalDOG

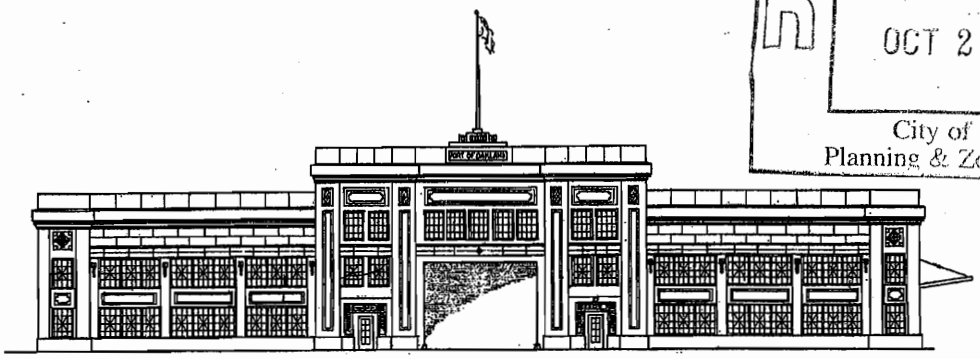
cc. Councilmember Nancy Nadel
Oakland Dog Owner's Group (ODOG)
Oakland Animal Welfare Group (OAWG)

Letter BB – California Dog Owners Group

BB-1 The comment is noted and does not address the adequacy of the analysis in the DEIR or issues under CEQA. The comment does call for area of the project's open space and park areas to be dedicated as a dog park. The City would consider this as it collaborates with the project sponsor and other pertinent agencies (e.g., EBRPD, BCDC) on the specific programming of the new parks space.

COMMENT LETTER CC

RECEIVED
OCT 26 2005
City of Oakland
Planning & Zoning Division



EAST ELEVATION.
Scale 1"=20'

FRIENDS OF NINTH AVENUE TERMINAL

October 18, 2005

Marge Stanzione, Project Planner
City of Oakland
Community & Economic Development Agency
Planning Division
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, California 94612

RE: Oak to 9th Avenue Project

The letter is in response to the Draft Environmental Impact Report for the project, and specifically on the treatment and use of the Ninth Avenue Terminal.

CONDITION OF BUILDING First, lets be clear, this building is in good shape. It is still rented out by the Port of Oakland for storage. It is not condemned. CC-1

NO DEMOLITION OPTION – *It is the official policy of Friends of Ninth Avenue Terminal that <u>no demolition is done to the building.</u> Slight modifications may be made, but the building is to remain 100% intact. Any modifications to this building must follow National Park Guidelines for Historic Preservation such that the historical integrity of this building is maintained, no matter what reuse may come. After all, any 'reuse' is only temporal by its very nature. Through time, other needs and uses may come to be more important or desired. In that case, having 'lost' some of the building one particular tenants needs or desires is completely unacceptable.* CC-2

DEMOLITION OF BUILDING SUPERSTRUCTURE - We strenuously object to the demolition of most of the superstructure (the building shell above the structural floor slag) building, while the proposed project intends to keep the structural slab and 'landscape' it to be used as a 'park'.

CONDITION FOR ISSUING A DEMOLITION CONTRACT – If there for some reason, demolition of any or part of this building is approved by the any public agency, we insist that the following conditions be met prior to the issuance of a demolition permit. (Too often in the past in Oakland, a developer has demolished a building in order to 'make way' for his project, only to have the project stopped [for various reasons] and not continue, leaving the community with a loss resource of a historic building and no project.) CC-3

1. **Certificate of Occupancy** – No demolition permit for any portion or all of the building is to be issued until the project is 75% completed; and by completion we mean that a certificate of occupancy has been issued for 75% of the total units of the entire project area; and
2. **Buildings Occupied** - No demolition permit for any portion or all of the building is to be issued until there is 90% occupancy of the finished units that have a certificate of occupancy. By occupied we mean that tenants have rented or buyer have purchased the units, and the tenants and buyers have moved in completely and taken up residence.
3. **Partial bailout not allowed** – No demolition permit for any portion or all of this building shall be issued when only a partial stage of the project is completed.
4. **Project Description** – The percentages noted are to be for the entire project that covers the entire area, regardless of ownership. For example, if the project developer were to sell off half of all of the project area to other developers, that portion no longer under his control would still be counted as part of the entire project. The 75% completion would have to include all the approved build out, not just his 50% portion. The 75% of his 50% portion would only be 38% of the entire project, and thus a demolition permit would not be permitted.

INCOME STREAM FROM BUILDING –We need to point out that any reuse of most if not all of the building would provide an income stream that would be used to offset annual maintenance of the building, including its structural floor slab and underlying piling support.

The use of the floor slab as a 'park' would be problematic as it will incur annual costs of repair and upkeep, but without an income stream to offset this cost. The simple logic of the matter is any project for this area needs to include the reuse of the entire building so as to have that income stream to maintain the building structure.

All potential reuses must include a valid professionally prepared income stream analysis.

PROFESSIONALLY DEVELOPED ALTERNATIVE USES – The enclosed submittal was prepared by students and as such should not be considered a substitute for a professional evaluation of this building for alternative uses. These suggested uses promulgated by the students are not an endorsement by us of any particular use. This document does show that many alternative uses may be analyzed.

We expect there be several rational and economically viable and evaluated proposals for this building in any analysis or planning for the Oak-to-Ninth Avenue District. Any use of the Ninth Avenue Terminal, building of more than 180,000, requires numerous support such as parking, additional open space (adjacent to the building, etc.) etc.

NEIGHBORHOOD TIE-IN – Any alternate proposals must include the uses of the adjacent neighborhood. One cannot simply 'save' the building out of context with the uses of the adjoining parcels. These must be treated as an integrated whole. It is completely inappropriate and inadequate to just suggest that the terminal 'not be demolished.'

All project analysis that is encompassed by an environmental impact report must include reasonable uses of not only this building, but adjacent uses. For example, it is unreasonable to suggest that this building not be demolished and yet towering condominiums would be built adjacent to this building with no parking for users of this building.

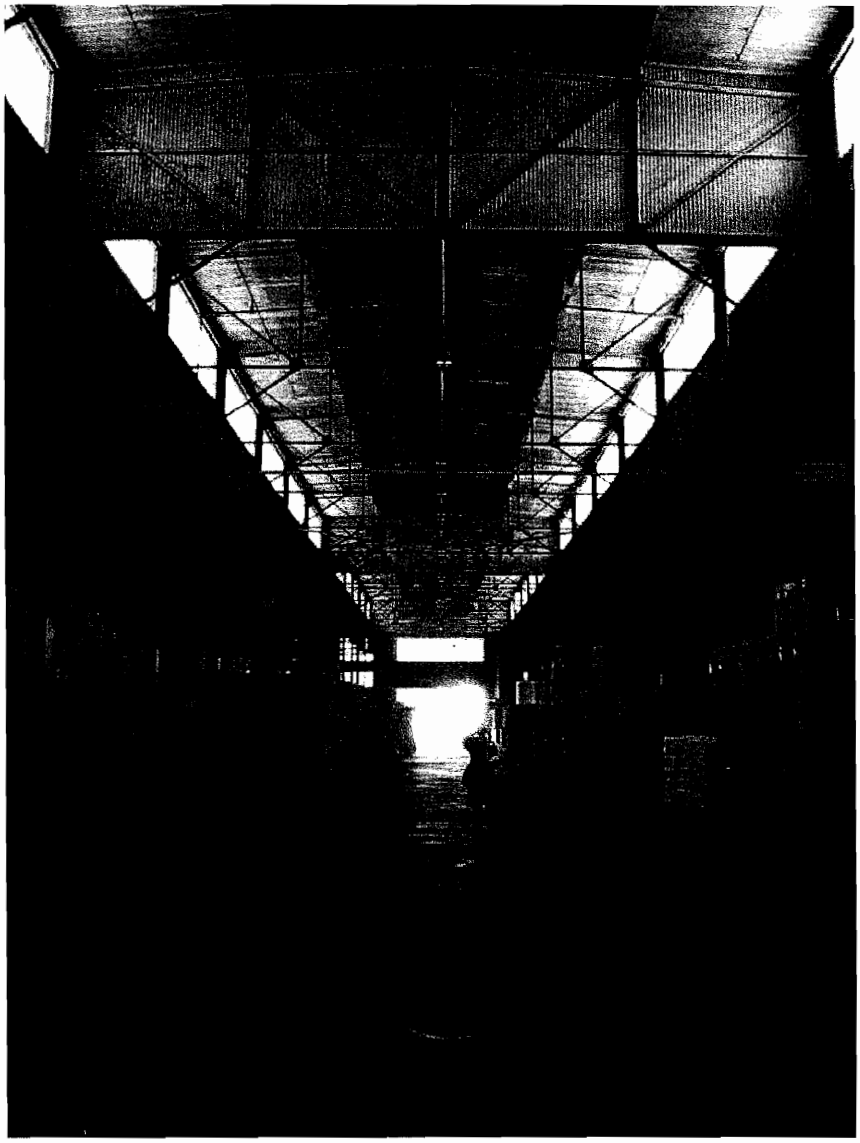
Sincerely,

Leal Charonnat
Secretary,
Friends of Ninth Avenue Terminal

Enclosure – ***The Ninth Avenue Terminal*** – A Feasibility Study for Adaptive Reuse, prepared by: Nick Perry, Marie Sorensen, Hillary Strobel, City Planning 290E, University of California, Berkeley, CA, 2004

The Ninth Avenue Terminal

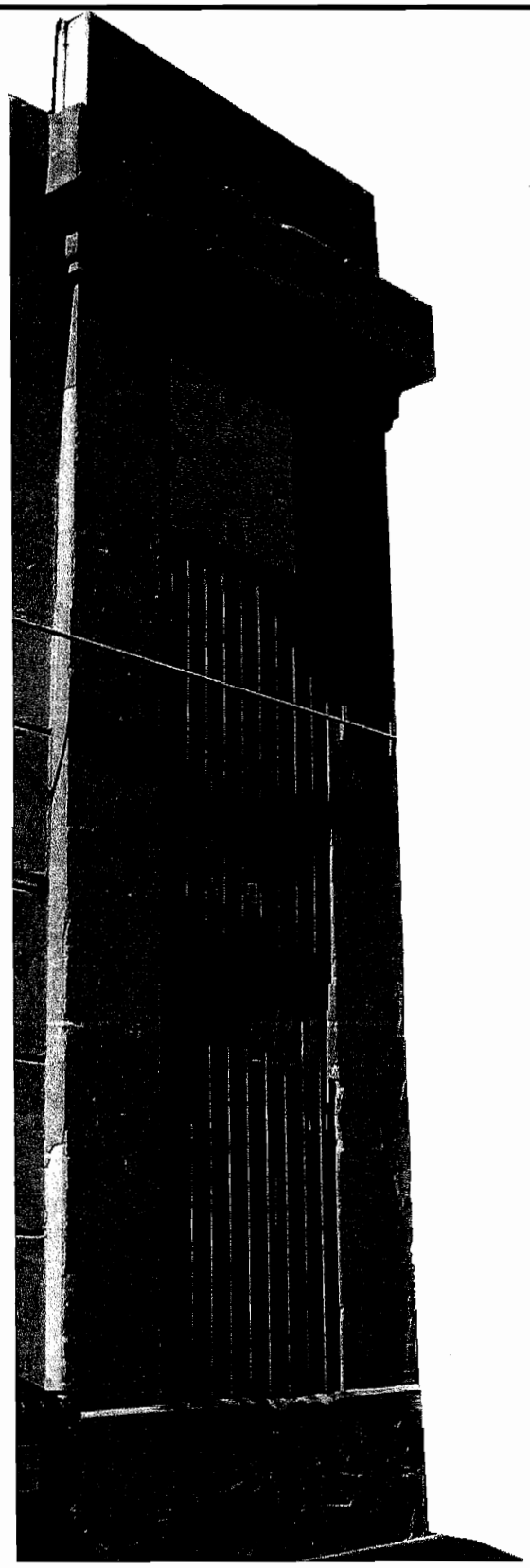
A FEASIBILITY STUDY FOR ADAPTIVE REUSE



Prepared by:
Nick Perry,
Marie Sorensen,
Hillary Strobel

City Planning 290E
Historic Preservation in California
Helaine Kaplan Prentice, ASLA

Contents



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PROPOSED PLANS	22
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Introduction

Historic 1929 bulkhead of Ninth Avenue Terminal

Few buildings along Oakland's waterfront remain standing that capture the spirit of the Port of Oakland's early history. As shipping methods have changed and modernization has occurred, the last vestiges of the historic working waterfront have been wiped away by new construction. Today, one of the last landmarks from this earlier era to survive is the Ninth Avenue Terminal. In fact, the Ninth Avenue Terminal is the last of the break-bulk terminals constructed as a part of the Port of Oakland's massive modernization and improvement program during the later half of the 1920s.

The Ninth Avenue Terminal is unparalleled in its importance to the built-heritage of the Oakland Waterfront. This massive structure, constructed between 1929 and 1952, offers the community a variety of opportunities to create a lasting landmark and civic resource right alongside the San Francisco Bay. The pages of this report contain an analysis of the potential that lies within the preservation and creative reuse of this significant landmark.

Scope of Study

The scope of this study is to define and describe conditions under which a historically significant portion of the Ninth Avenue Terminal can be maintained while emphasizing its importance to both the history and future of the Port of Oakland. Specifically, this study sets up a rationale for the preservation of more of the Terminal than the alternative proposed by Harbor Partners, Inc. in their area plan for the Oak-to-Ninth District of May 2005.

The Estuary Policy Plan (EPP) is a key agenda-setting document for the proposals presented in this report. The EPP states in Objective LU-5: "...provide for the orderly transformation of land uses, while acknowledging and respecting cultural and historical resources."[1]

This stated agenda for preservation is consistent with EPP "Shoreline Access and Public Spaces" objectives for the "Ninth Avenue Terminal (OAK-2.4)," which states: "Recognize that the Ninth Avenue Terminal shed, or portions thereof, may be suitable for rehabilitation and adaptive reuse."[2]

It should be noted, however, that the Estuary Policy Plan is inconsistent about its position on the preservation and adaptive reuse of the Ninth Avenue Terminal. Area plans for the Terminal area recommend a flat open space in the current location of the Terminal.

A major element of the proposals presented here is to address the EPP's programming objectives for the proposed Ninth Avenue Park ("...establish a large park in the area of the existing Ninth Avenue Terminal..."[3]), but within the preserved space of the Ninth Avenue Terminals. These programming objectives are:

a. "create a significant place for Oaklanders to gather for events,"[4] accommodating large numbers of people, special events, cultural activities, and city festivals;

b. yet "at the same time, be designed to be attractive to individuals or to small groups of people on a regular basis."[5]

A second document informing this proposal is the Oakland General Plan's Historic Preservation Element. According to this document, Class 1 structures, including the Ninth Avenue Terminal, cannot be demolished if economic feasibility can be demonstrated for the structure, or if a "reasonable use" can be determined. *This study outlines both economically feasible and reasonable uses for the Ninth Avenue Terminal.*

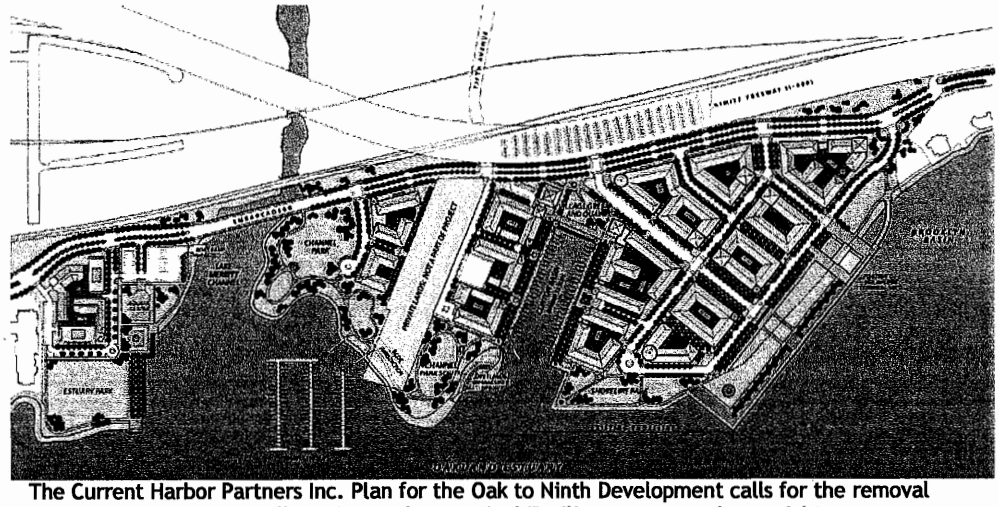
This proposal seeks to analyze ways to integrate public open space with the reuse of the Ninth Avenue Terminal, rather than presenting the two uses as oppositional. The study suggests five alternatives, three of which propose reuse of the entirety of the Ninth Avenue Terminal shed; and two of which call for maintaining the 1930 portion of the terminal (approx 504' in length), and removing the 1951 addition, either in whole or in part, to create open space.

Beyond the scope of this study is a detailed economic feasibility study for the proposals. However, each proposal is based on economically successful precedents for adaptive reuse of historic waterfront buildings in other cities in the United States.

---

[1] Estuary Policy Plan, Land Use Reforms, page 30
[2] Ibid, OAK-2.4, page 91
[3] Ibid, OAK-2.4, page 91
[4] Ibid, Executive Summary, page viii
[5] Ibid, OAK-2.4, page 90

The intent of this feasibility study is to provide ideas and concepts, and to inspire people to think about the opportunities to turn the Ninth Avenue Terminal into a vital piece of Oakland's community fabric. Each proposal envisions the terminal becoming a community gathering space on the waterfront - a unique and versatile facility that can become a point of pride for the citizens of Oakland.



The Current Harbor Partners Inc. Plan for the Oak to Ninth Development calls for the removal of all but a small portion of the Terminal Facility, as seen on lower right.

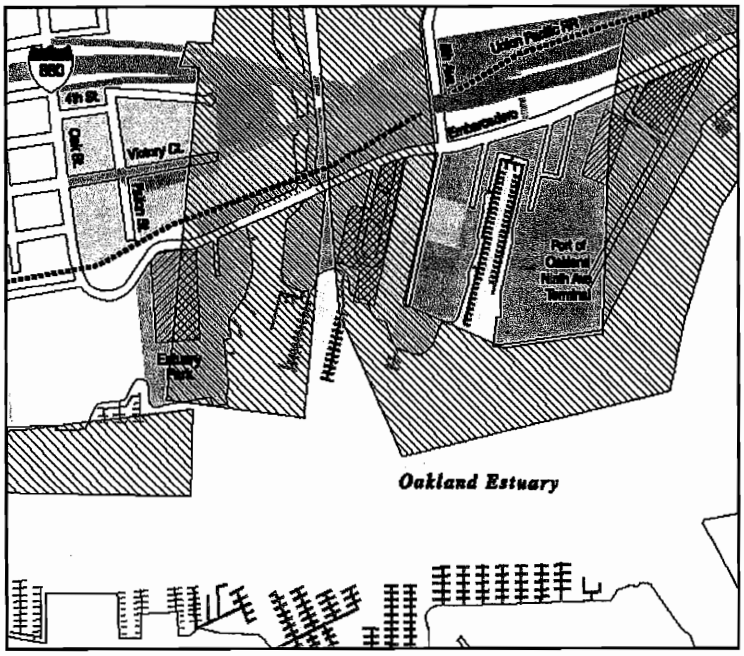
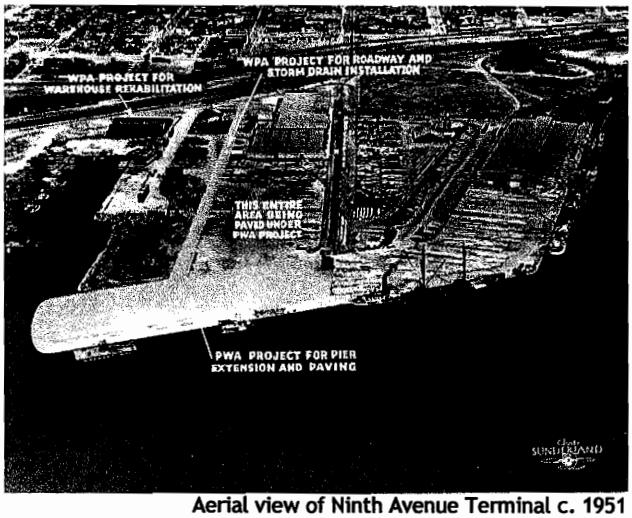


FIGURE III-8: **Oak to 9th District Current Ownership**

Port of Oakland
City of Oakland
Alameda County
Public/Quasi Public Utilities
Port Leases Beyond 2000
Private
Railroad
Tidelands Trust

The Ninth Avenue Terminal is owned by the Port of Oakland; portions are under the jurisdiction of the Tidelands Trust. *Graphic from Oakland Estuary Policy Plan*

History of the Site



Aerial view of Ninth Avenue Terminal c. 1951

Construction of the Ninth Avenue Terminal was completed in 1930 by the Port of Oakland under a bond initiative that funded the improvement of port facilities between the years 1925 and 1930. The building is of Beaux Arts derivative style, designed by architect Arthur H. Abel, the Port's first Assistant Chief Engineer and Assistant Port Manager. The building has simple paneled pilasters and symmetrical detailing. It was designed to be a "break-bulk" terminal and inter-modal transportation complex.

The same bond legislation that funded the Ninth Avenue Terminal also created an autonomous Board of Port Commissioners of the Port of Oakland. The Ninth Avenue Terminal is also the last break-bulk terminal in Oakland that has remained in continuous use. The significance of the Ninth Avenue Terminal is augmented by the fact that the other break-bulk terminals built during this period, the Inland Waterways Terminal and the Outer Harbor Terminal, have since been demolished.

Significant Dates:

Nov. 1925: bond approved for the creation of both the Port of Oakland and the construction of the Ninth Avenue Terminal.

Aug. 5, 1925: bids due for Ninth Avenue Pier.

Oct. 1930: Pier and Terminal construction completed, original building is 504' long.

June 1936: land purchase and WPA wharf extension.

May 1943: Pacific Naval Air Bases Command controls the Terminal.

1951: Addition to terminal completed, bringing the total length of building to 1004'.

Jan. 1952: Addition opened.

Feb. 1956: Encinal Terminals, located in Alameda, manages the terminal.

1998: Break-bulk operations moved from Ninth Avenue to Burma Road Terminal.

2003: Seaport Plan Amendment process completed to delete Port Authority Use "Marine Terminal" designation.

Dec. 8, 2003: Landmarks Preservation Advisory Board agrees to proceed with landmark nomination[6].

Significance: period - 1906-1945. Also post-1945

Areas of Significance: Architecture and Commerce

Other: Maritime Commerce and Harbor terminal

Period of Significance: Nov. 1925-Jan. 2004

Pacific Gateway, a history of the Port of Oakland, describes the important maritime function of pier buildings like the Ninth Avenue Terminal:

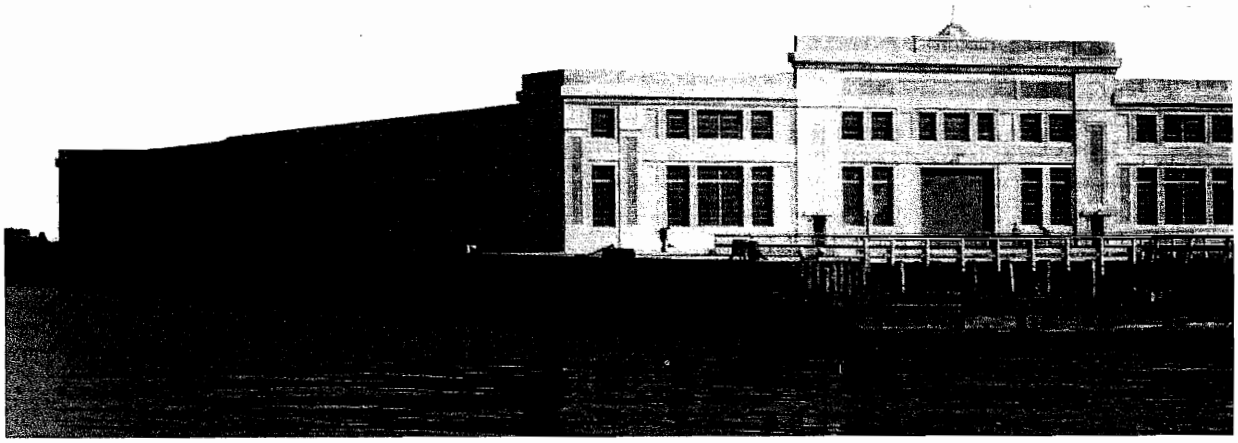
> Functionally the terminals were designed to expedite the movement of cargo and to avoid congestion in the harbor. When the site was of sufficient size, quay wharves, running parallel to the shore, were utilized to permit easy docking and departure. Berths accommodated vessels up to 500' in length, with wide aprons for ship-side trackage, trucks, and other vehicles. Rail spurs and paved roads linked the terminals to main lines and highways. Large transit sheds enabled goods to be stored with little or no stacking, and to be moved quickly between ship and rail, car, via doorways on the dock and land sides. The sheds were designed

[6] Shartzer, 2004. Oakland Landmark and S-7 Preservation Combining Zone Application Form

expressly for the circulation of trucks, which could enter at one end and exit at the other without having to turn around."

The architecture of the Port of Oakland's terminal was not, however, solely defined by function. Like its rival across the bay, Oakland wanted to make its waterfront an attractive and marketable space. The 'Report on Port of Oakland,' an historic document cited in Pacific Gateway: An Illustrated History of the Port of Oakland, recommended, "...for aesthetic and advertising value, the shore and pier-head ends of sheds should be finished with some regard for architecture."[7] Each of the new transit sheds had a beaux art bulkhead with neoclassical piers, cornices, ornamental panels, and decorative tile work. According to Pacific Gateway, "This aesthetic approach to utilitarian structures was one facet of the City Beautiful Movement, which promoted civic order with the careful design and siting of buildings and other civic features. Oakland participated in this national movement in various ways, as exemplified by its city hall, schools, parks, and municipal port buildings."[8]

Demolished Terminals



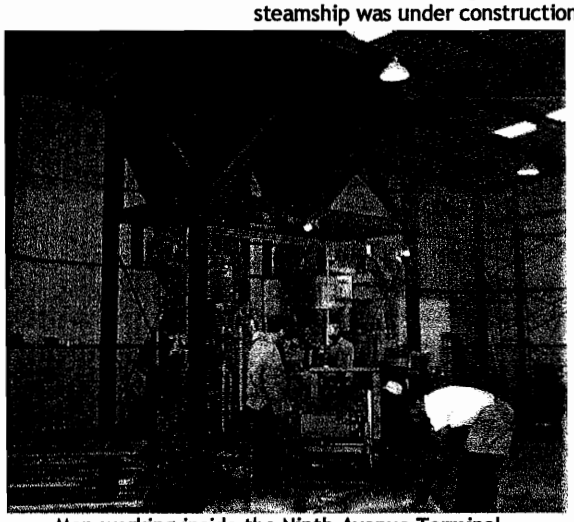
Outer Harbor Terminal - Demolished (Courtesy Oakland History Room)

Inland Waterways Terminal - Demolished (Port of Oakland Archives)

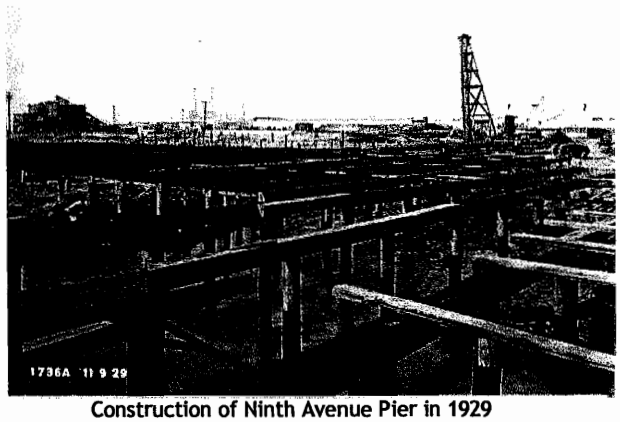
[7] Pacific Gateway: An Illustrated History of the Port of Oakland, page 35
[8] Pacific Gateway: An Illustrated History of the Port of Oakland, page 35

Historic Photos of Ninth Avenue Site

Circa 1930 View of Ninth Avenue Terminal showing transit shed on far right, and steamship docked in front. Quay wall, left of steamship was under construction. (Courtesy Port of Oakland Archives)



Men working inside the Ninth Avenue Terminal, date unknown

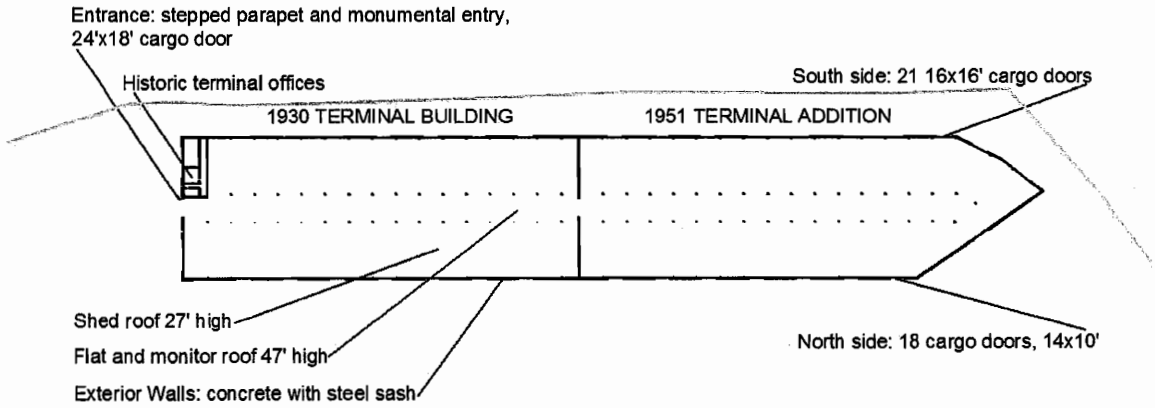


Construction of Ninth Avenue Pier in 1929

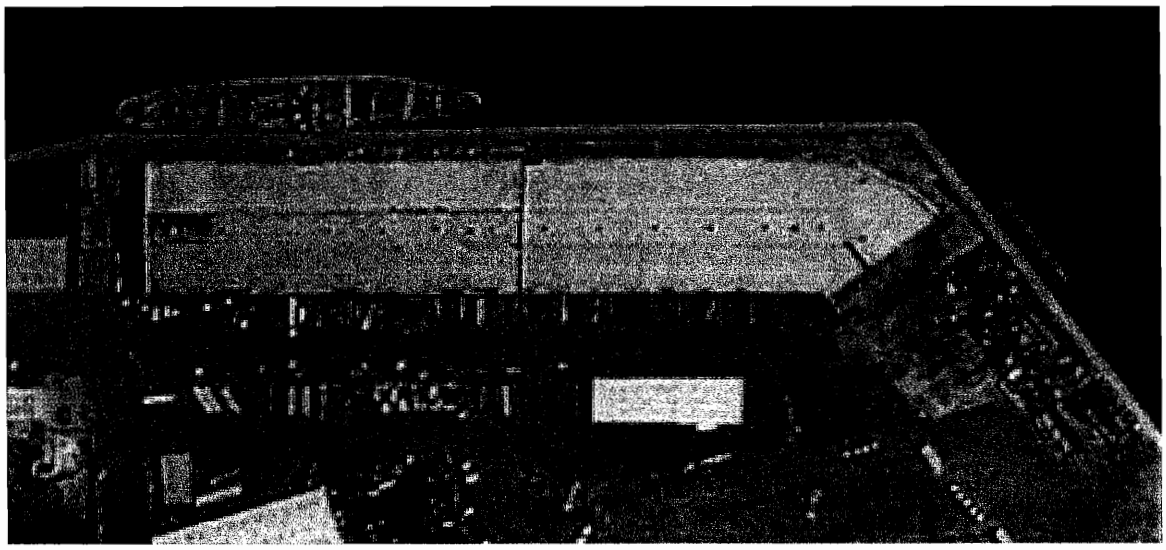
Current Status of Building

The present-day terminal is slightly over 1000' long, and approximately 180' wide. There is an extensive open platform space along the northern side. The transit shed has a "flat and monitor roof," which is 47' feet high in the middle clerestory section, and 27' high on the sides. The head-house at the inland (northeast) end has a stepped and peaked parapet and a monumental entry with paneled concrete pilasters and massive plain cornice. The form of the building reflects the form of a public arcade. The structural details of the building include exterior walls of reinforced concrete and steel sash, a composition roof, and steel trusses. Visible alterations since 1951 include windows covered with plywood, although the building is in otherwise good condition. According to the *Oakland Landmark and S-7 Preservation Combining Zone Application Form*, "Its integrity is excellent."[9]

Current plans developed Oakland Harbor Partners called for the preservation of only the bulkhead and approximately the first four bays of the transit bay in order to give an impression of the height and scale of the Ninth Avenue Terminal. The remaining structure would be demolished in order to make room for a four-acre waterfront park as described in the Estuary Policy Plan.



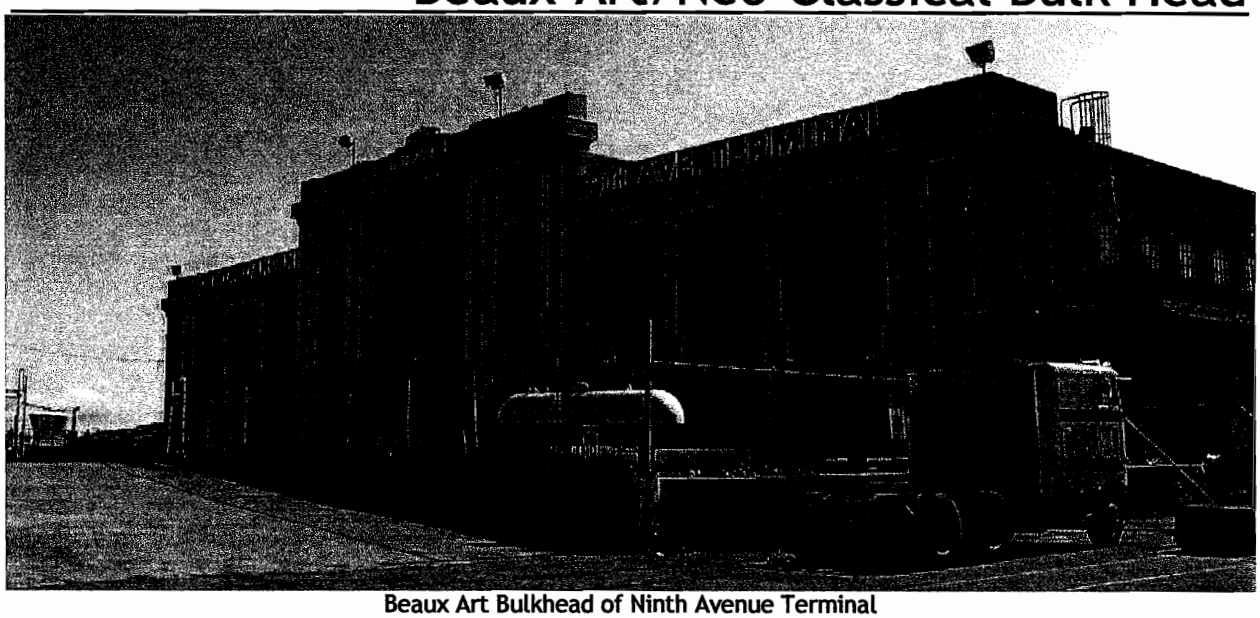
Plan of Existing Ninth Avenue Terminal building



Aerial Photo of Ninth Avenue Terminal Site

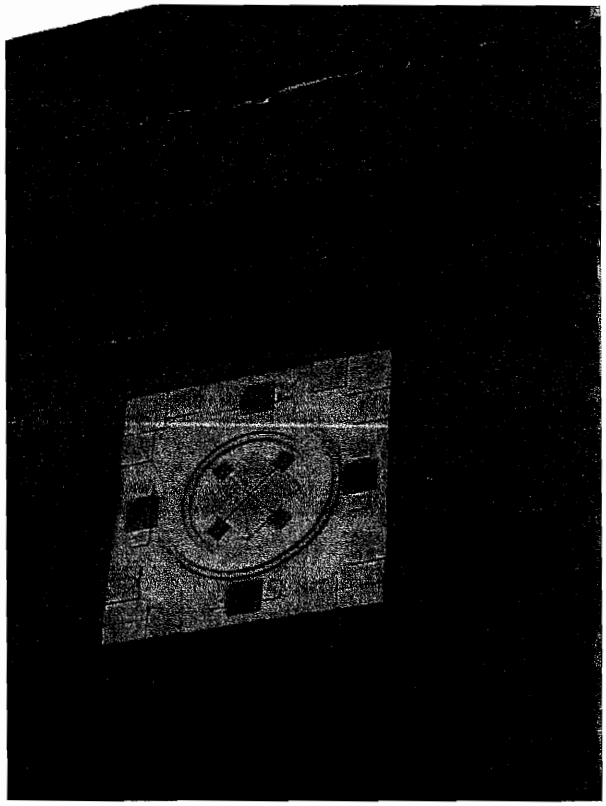
[9] Shartzer, 2004. Oakland Landmark and S-7 Preservation Combining Zone Application Form

Beaux-Art/Neo-Classical Bulk Head



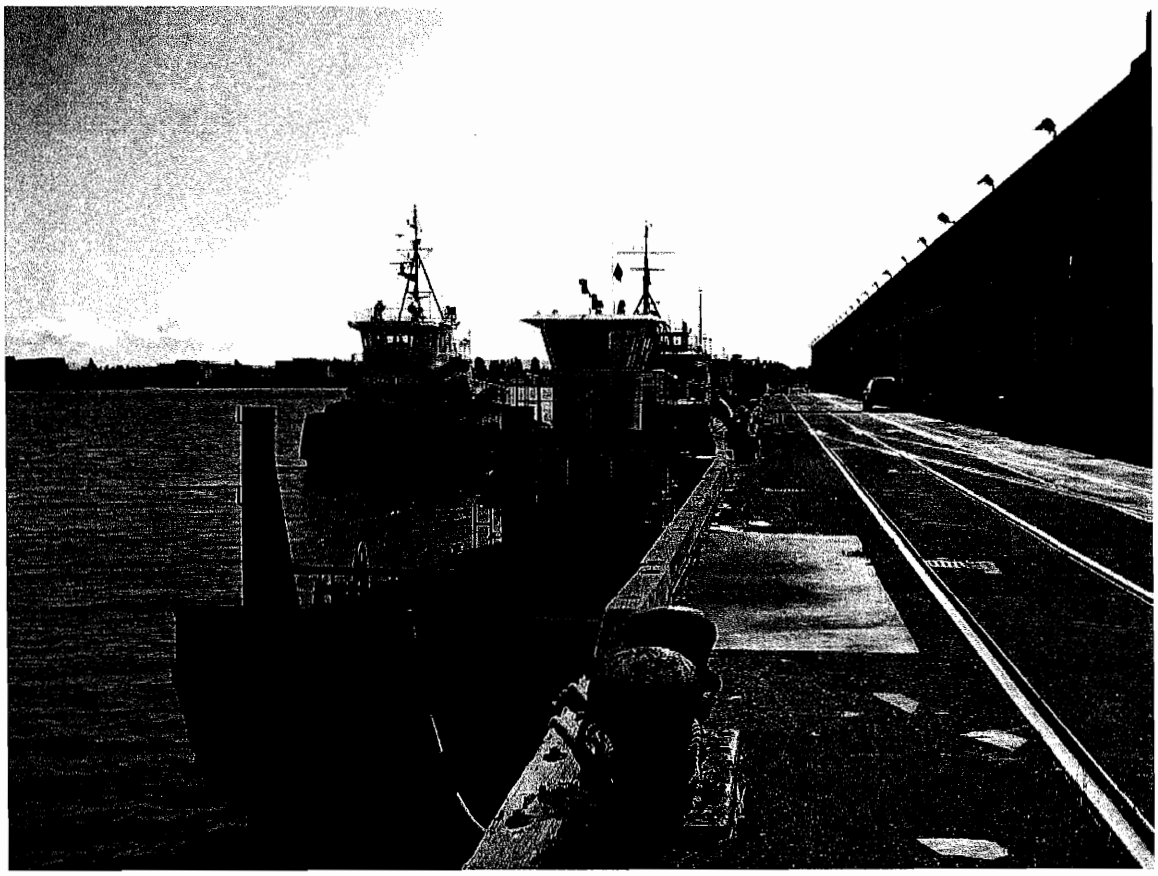
Beaux Art Bulkhead of Ninth Avenue Terminal

Painted-over tile work at entry

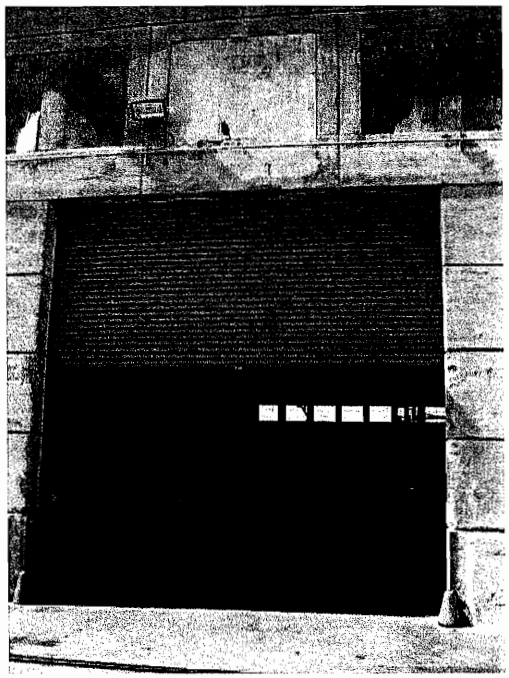


Tile Mosaic on Corner of Bulk Head

Waterfront/Southern Frontage of Terminal



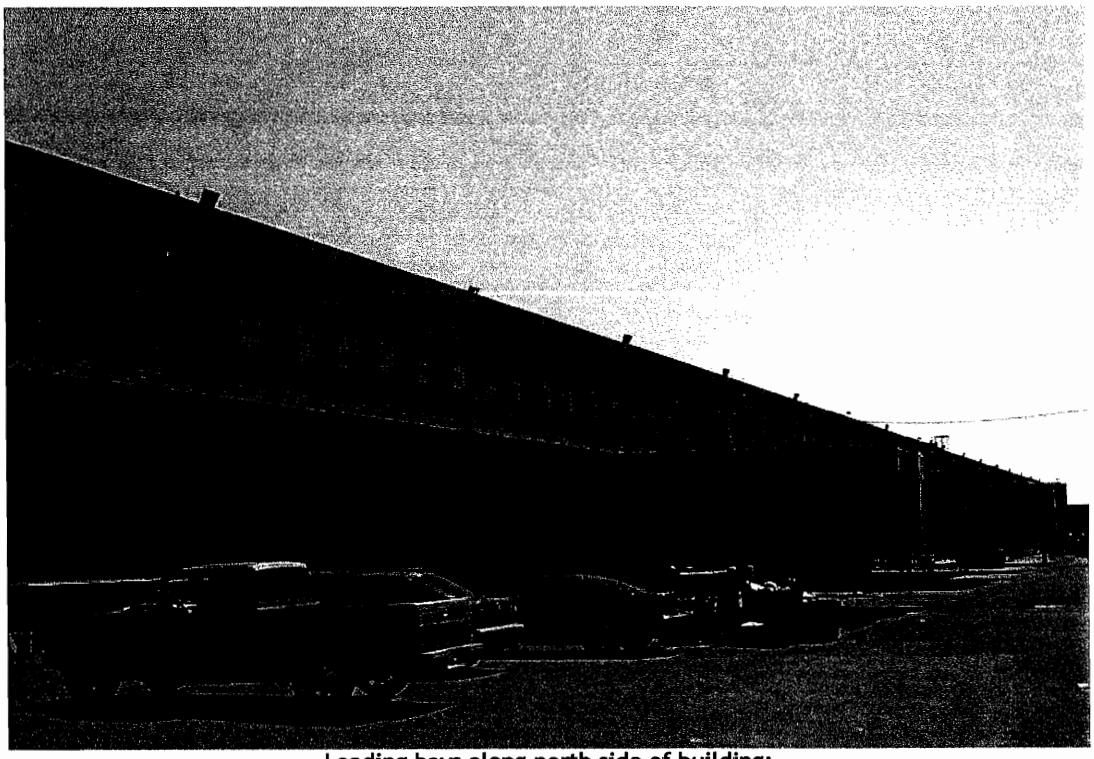
Southern/Waterfront frontage of Ninth Avenue Terminal looking East; Possible location of Bay Trail access for pedestrians, cyclists, and joggers; Possible access point for small boat storage and docks



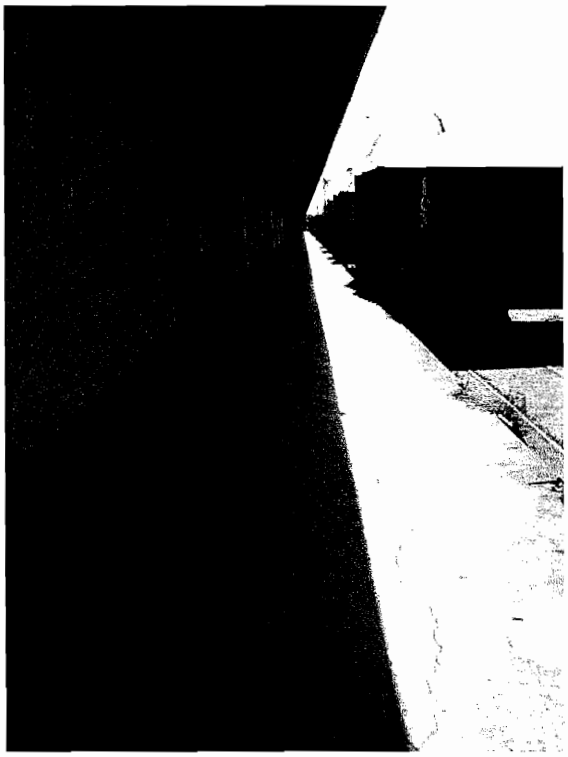
Removing plywood from the clerestory windows on the c. 1930 segment of the Waterfront Frontage of the building could provide ample light into the Terminal's interior.

Northern Frontages of Terminal

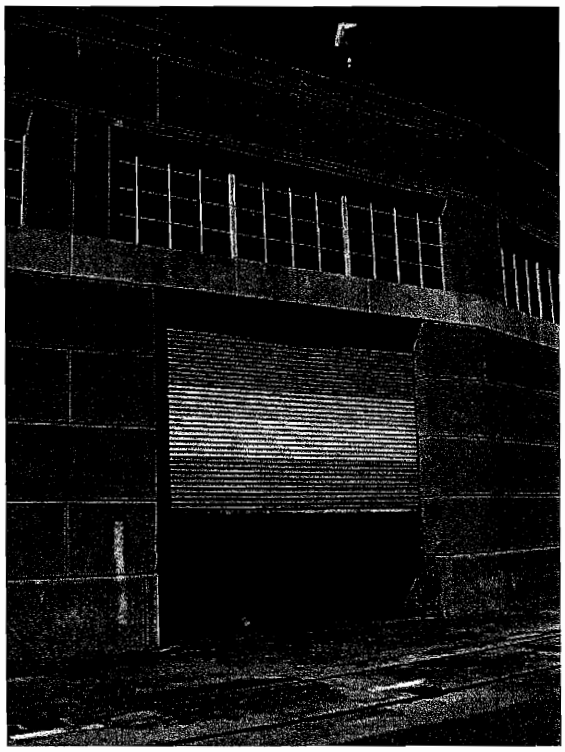
Northern exterior of c. 1951 section



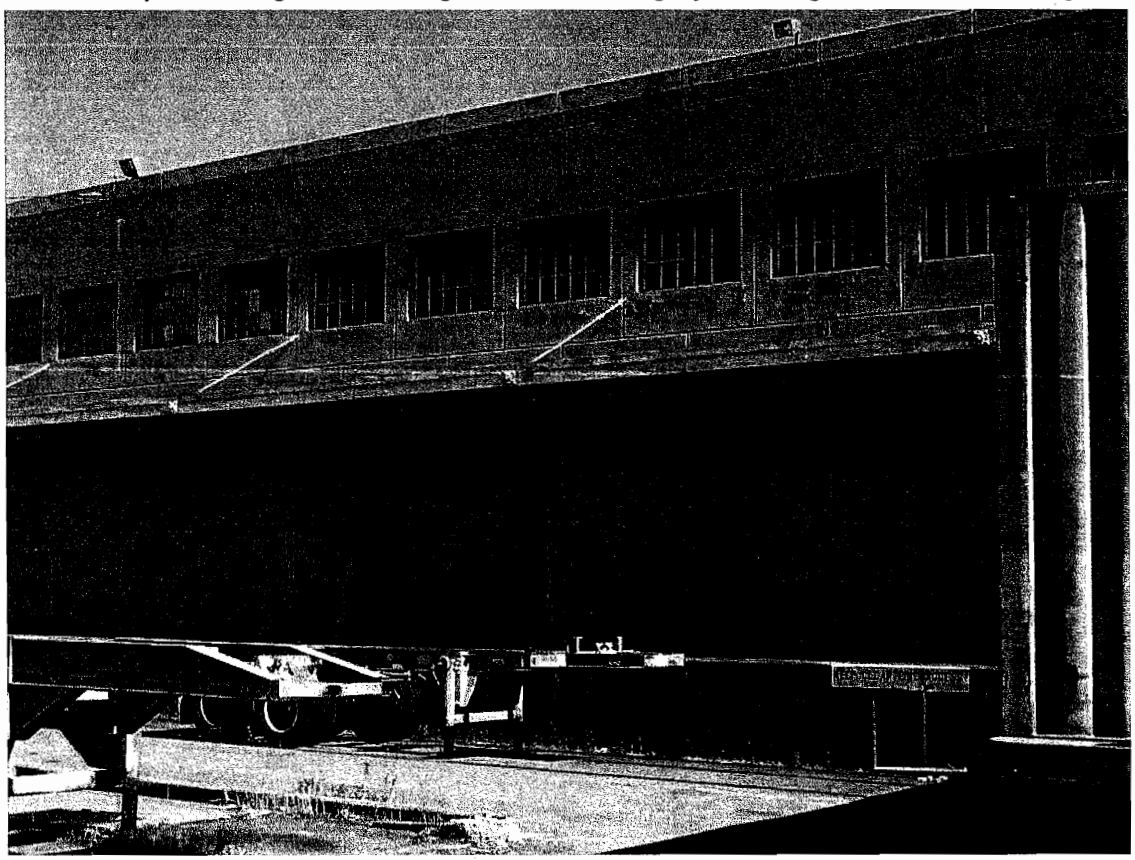
Loading bays along north side of building;
possible access point for retail and community organizations along tree-lined promenade



Elevated platform along northern frontage



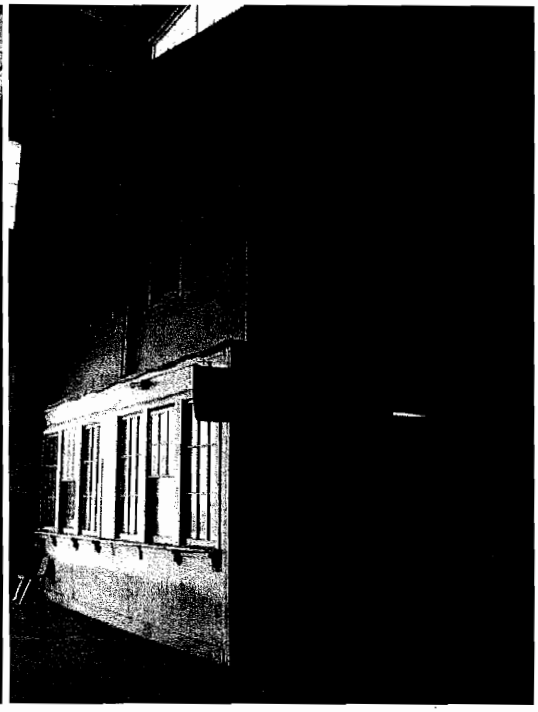
Loading bay with rolling doors on southern frontage



Detail of loading bay along northern frontage of 1930 segment of Terminal;
overhang and clerestory windows give this entrance the potential to be comfortable and transparent

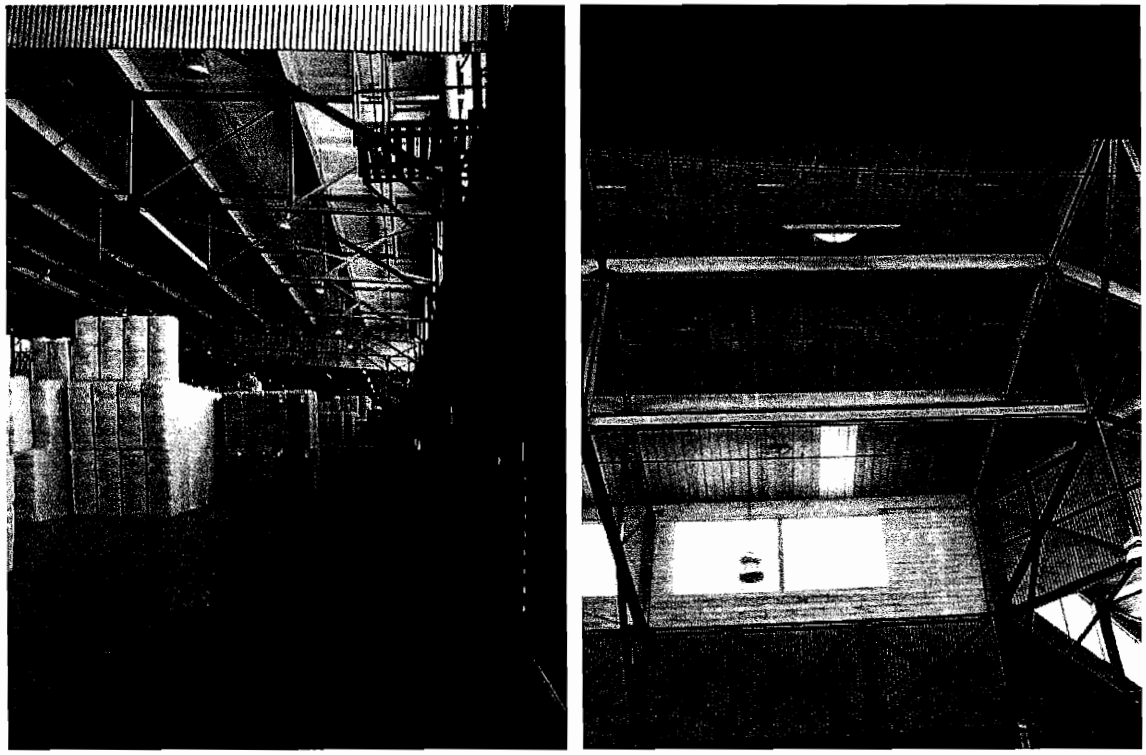
Interior of Terminal

View of c. 1930 transit shed



c. 1930 Terminal offices near bulkhead

1951 portion of the transit shed



View of shed roof in c.1930 segment of Terminal (left) and in the c. 1950 segment (right)

Light pours in through the clerestory windows of the Terminal.

Precedents for Adaptive Reuse of Waterfront Industrial Buildings

The current proposal to destroy the majority of the Ninth Avenue Terminal fails to see the opportunities that lie within the adaptive reuse of the structure. Throughout the country, cities have successfully turned old waterfront industrial buildings into thriving centers of arts, culture, and commerce. These complexes help build a new and existing sense of place and history. Following is a look at successful adaptive reuse projects of waterfront industrial structures.

Torpedo Factory ART CENTER

The Torpedo Factory Art Center building was originally built in 1918 by the United States Navy as the U.S. Naval Torpedo Station on the waterfront in Alexandria, Virginia. Torpedoes were manufactured at the site until the end of World War II in 1945. At that point, the U.S. government began using the site as a storage facility.

In 1969 the City of Alexandria purchased the property from the Federal Government. Over the next few years a plan was developed to transform the building into working studio spaces for artists. Work began on the Art Center in May of 1974. By July, the vast interior structure had been remade as a complex of studio spaces.

Today, more than 165 artists can be found working in the Torpedo Factory's 84 artist studios, 8 group studios and 6 galleries, spread across three vast floors. According to its website, the artists, "invite visitors to join them in their studios, observe their creative processes. You may ask questions and learn about each of their art forms. Visiting the TFAC is an informal educational and fun experience."

The building also contains historic exhibits on the site's history as a torpedo factory, the Alexandria Archeological Museum, and the Art League School where visitors can enroll in art education classes for both children and adults. The Torpedo Factory Arts Center shows how an industrial waterfront building once seen as only fit for storage can become a thriving center of arts and history.

1920s view of Torpedo Factory

Historic Exhibit in Torpedo Factory

Interior of Torpedo Factory

(Photos from www.torpedofactory.org)

PIKE PLACE MARKET

The Pike Place Market was started in 1907 as a reaction to outrageous produce prices in the City of Seattle. The first 'market,' proposed as a solution by City Councilman Thomas Reville, consisted of eight produce sellers whose wares were depleted in a matter of hours by thousands of eager citizens of Seattle. Later that year, the first market building was built at First and Pike St., with all of its stalls filled. Like the 9th Avenue Terminal, Pike Place Market, deteriorating in the late 1960s due to its gradual abandonment after World War II, was described as an ideal development site for some other public amenity. In this case, members of the City Council envisioned "a new hotel, a 32-story apartment buildings, four 28-story office buildings, a hockey arena, and a 4,000-car parking garage" called the Pike Plaza Project, according to pikeplacemarket.org.

At the time, it was difficult to see the benefit of revitalizing the old Market buildings. Yet, a citizen ballot initiative led by a group called Friends of the Market was able to save the Market building in 1971. What was seen as a blighted area has now been revitalized into one of the most successful tourist attractions in Seattle. Virtual visitors to a tourist website called "tripadvisor.com" during April 2005 call the Pike Place market "simply interesting and must see/must-do in Seattle," "A most awesome place," "Gritty and real," and "The best in Seattle." From what it seems, "Gritty" is a compliment for a hip urban place.

The 9th Avenue Terminal can learn two lessons from this precedent: (1) What may look 'blighted' might just be an outside appearance. If the right architect is put on the job, a functional building like a warehouse or market can be brought back into the community. (2) West-coast cities like Seattle and San Francisco have capitalized on people's love of waterfront history. Both cities have kept important historic buildings at the waterfront - though they seem to be 'utilitarian' industrial-type buildings - the Pike Place Market and the Bulkhead Buildings in San Francisco. These resources keep people invested in the history of the City and build civic pride.

Views of Pike Place Market, by Stéphane Gauthier
(www.acoustics.washington.edu/~gauthier/Photography/Seattle/Seattle.htm)

FORT MASON CENTER
SAN FRANCISCO

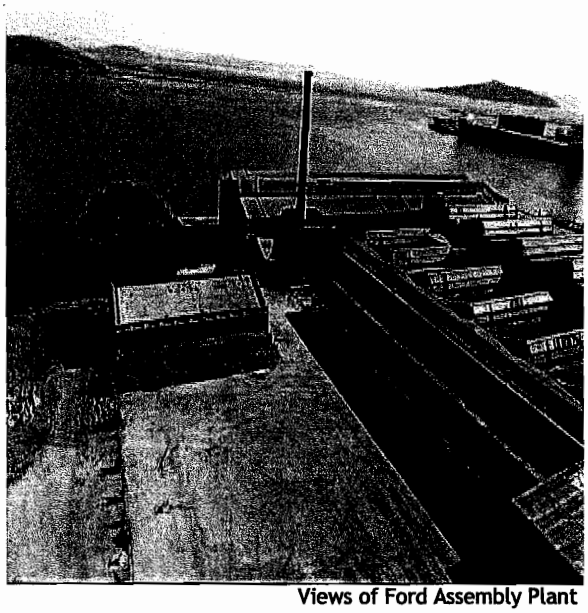
Fort Mason Center, a thirteen-acre urban 'campus' for recreation, museums, the arts, nonprofit organizations, conferences, trade shows, and theater, is a paradigmatic example of the adaptive re-use of wharf buildings on the San Francisco Bay. Its programmatic mix and managerial structure can both be used as models for the successful adaptive reuse of the 9th Avenue Terminal.

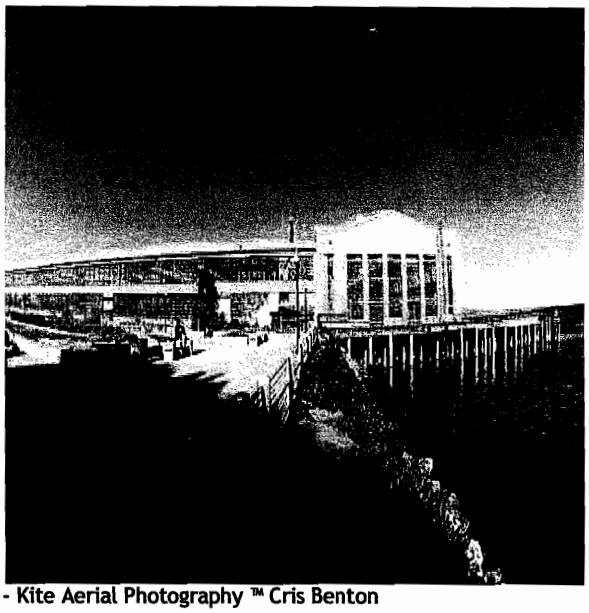
The Center is located on the waterfront in San Francisco in the historic pier buildings of the U.S. Army's Fort Mason, which became a part of the National Park Service's Golden Gate National Recreation Area (GGNRA) in the 1970s. Fort Mason Center is managed by the Fort Mason Foundation, which has overseen the vision, leasing, and rehabilitation of the National Historic Landmark since 1976. The Center, located adjacent to the Fisherman's Wharf and Marina districts of San Francisco, includes three large wharf buildings, five mid-sized three-story office-type buildings, and various outbuildings. These buildings are leased by over 35 nonprofit resident organizations and four museums, and are rented as meeting, conference, theater, and trade show space.

The success of the Fort Mason Center model lies in its appeal to San Francisco's diverse talents and interests across the arts, nonprofit advocacy, and recreation. The pier buildings have been successfully adaptively re-used as the Herbst Pavilion and Festival Pavilion, two state-of-the art conference/trade show/event spaces. These two spaces can accommodate 1,750 and 3,500 people reception-style, respectively, according to brochures published by Fort Mason Center in 2005. More than 15,000 events are held here each year, representing a client list of over 700 organizations and individuals that include BMW, Macy's Passport, San Francisco International Art Expo, OctoberFest, and the San Francisco Public Library Annual Book Sale. This mixture of public and for-profit clients contributes to the Center's financial success.

View of Fort Mason Center, Robert Campbell, Chamois Moon

Ford Assembly Plant





Views of Ford Assembly Plant - Kite Aerial Photography ™ Cris Benton

Designed and built in 1930 by Albert Kahn, the well-known industrial architect of the Ford Motor Company, the Ford Assembly Plant in Richmond, California is currently being restored and adapted to new use as a mixed-use facility to include light industrial manufacturing, office space, live-work units, a visitor center for the Rosie-the-Riveter National Park, and an open-air outdoor market to be located in the old craneway of the building.

Like the 9th Avenue Terminal, the Ford Assembly Plant building was constructed on bay fill and has a unique vantage point over the Bay, with views of San Francisco. Another point in common is that both buildings are located in industrial areas that are being converted into more livable residential zones. Richmond residents recognized the uniqueness of the warehouse space by supporting its designation to the National Register of Historic Places in 1988. This designation is making it possible for Emeryville-based Orton Development to utilize a 20% historic preservation tax credit deduction on all rehabilitation expenses incurred during the development process.

Ford used the Ford Assembly Plant until 1955, and subsequently for book storage by the University of California and as a research laboratory. The building's significance, for preservation purposes, is based on Kahn's reputation as a well-known architect of industrial forms, on the use of the plant to outfit jeeps during World War II, and on the fact that the structure is "one of two plants designed by Kahn before 1935 that is still standing," according to the National Register of Historic Places Registration Form.

Orton Development will be accommodating the Bay Trail through orienting signage and a public access easement along the waterfront portion of the crane building's wharf. A similar model could be employed at the 9th Avenue Terminal, allowing joggers, cyclists, and walkers to walk along the Oakland Estuary.

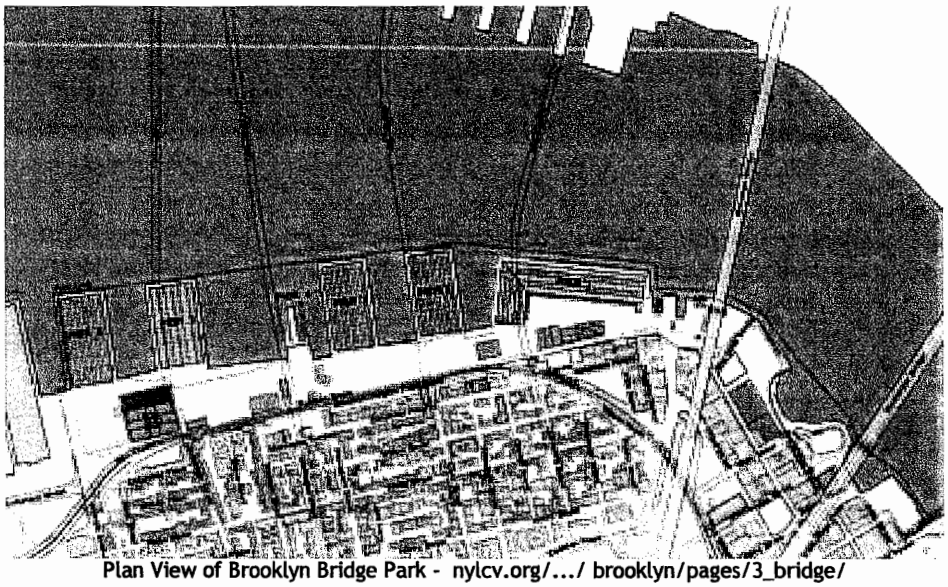
BROOKLYN BRIDGE PARK CONSERVANCY

Image of Pier - www.nylcv.org/.../ brooklyn/pages/3_bridge/

Although at a much larger scale than the Ninth Avenue Terminal, the Master Plan for the Brooklyn Bridge Park offers a variety of interesting precedents. The Brooklyn Bridge Park extends 1.3 miles along the East River. Some of the program activities include ball courts, boardwalks, and open lawns. It reclaims an area that once was covered with aluminum sheds and parking lots.

The site provides dramatic views of the New York Harbor and the Lower Manhattan Skyline. The major program spaces of the site will be built on five piers. The stretches of waterfront between the piers will become a linear park. Like the Ninth Avenue Terminal, the site is currently cut off from the rest of Brooklyn by a freeway. The plan for the park seeks to create spaces that will reconnect people with their waterfront.

One of the pier sheds (Pier 5) is being reused as an indoor recreational sports facility, similar to what is proposed in Option 2 of this Feasibility Study for the Ninth Avenue Terminal. Two of the piers contain shade pavilions and one contains a restaurant. In addition, in one of the inlets between piers is a kayak course within a chain of "habitat islands."



Plan View of Brooklyn Bridge Park - nylcv.org/.../ brooklyn/pages/3_bridge/

LONG WHARF THEATRE

The Long Wharf Theatre, opened in 1965 in New Haven, Connecticut, was built in a vacant warehouse space in a busy food terminal. The theatre takes its name from the surrounding Long Wharf Port, recognizing the significance of the port to the history of the New Haven area.

According to its website, the theatre is "recognized as a leader in American Theatre, producing fresh and imaginative revivals of classics and modern plays, rediscoveries of neglected works and a variety of world and American premieres."

The theatre started with a budget of $294,000 and played to over 30,000 patrons. Since then its budget has grown to $6.5 million with audiences exceeding 100,000 patrons annually. Many of its productions have transferred virtually intact to Broadway or off-Broadway.

The theatre has transformed a once neglected industrial space into a community center that "is dedicated to cultivating audiences that reflect the State of Connecticut and the diversity of its cities as well as its rural and suburban areas, and serving as a forum for the examination of historical and current issues through humanities programming."

A similar theatre is proposed as one of the program elements of Options 1 and Option 3 for reuse of the Ninth Avenue Terminal

View of Theatre Entry

Information and images from: www.longwharf.org/about_history1.html

Suggested Adaptive Reuse Plans

The following proposals combine various elements from the previously discussed precedents while taking into account the unique circumstances of the Ninth Avenue Terminal site. Each of these proposals is a schematic vision for the site, not a definite plan. Each proposal address the programmatic requirements called for in the Estuary Policy Plan, but changes the form of the "public space" from outdoor public space to enclosed, and partially enclosed, public recreation space utilizing the Ninth Avenue Terminal structure. These proposals are meant to offer a variety of ideas and concepts for the reuse of the Ninth Avenue Terminal, either in whole, or with the removal of the c. 1951 portion for open space. Elements of these five proposals can be mixed, combined, or altered after further public input and review. Some general design guidelines pertinent to each proposal are addressed below:

DESIGN CONCERNS:

Relation to Waterfront:
In general, these proposals seek to include community uses along the waterfront that can take advantage of its unique aesthetic setting and relation to the water. Potential alterations to the waterfront frontage could include turning loading bays into large window bays to provide visual access to the water.

Relation to Streetscape:
The northern frontage of the terminal should be an active space that presents a welcome façade to the future development that will occur in the Oak to Ninth District. Each proposal includes commercial space or other active uses along the northern side of the Terminal to present an inviting and vibrant façade. Commercial uses such as cafes and restaurants should spill out on to an expanded loading dock platform facing a tree-lined boulevard.

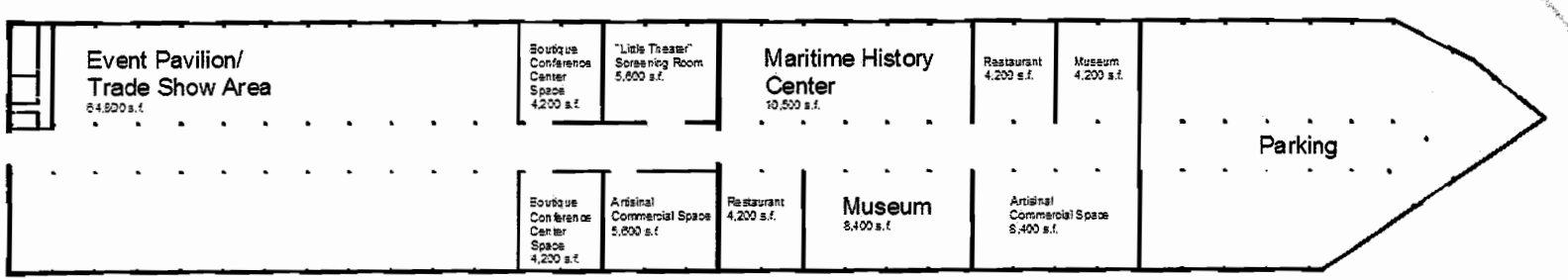
Parking and Loading:
Parking and access is a major issue for the entire Oak to Ninth District plan. Some of the proposals include using portions of the 1950s section of the Terminal for covered parking. Cars would enter via the northern main entry. However, if the site is to be utilized to its full potential, access to public transit will be key to reducing congestion. Where loading access for trucks is necessary (i.e.; for a super market), the plan includes the reuse of a portion of the existing elevated loading platform.

Relation to Outdoor Public Spaces:
Each proposal should include ample outdoor public space around the terminal building. Opportunities for outdoor open space include:

> **Entry Plaza**
> An inviting public entry plaza in front of the Bulkhead could be the site of community events that would compliment the uses inside.
>
> **Bay Trail/Waterfront Promenade**
> Ample room exists between the Terminal and the waterfront for the creation of a promenade and segment of the Bay Trail along the Terminal's southern frontage.
>
> **Shoreline Park Interface**
> The areas to the north of the site should be well integrated with the proposed Shoreline Park.

Alterations to 1951 Segment:
In certain proposals, the provision of column free spaces is either necessary or desirable. In these cases we propose be located in the c. 1951 segment of the terminal building as this adjustment would interfere less with concerns over the historical integrity of the structure. The spanning could be achieved via augmentation of existing trusses by trusses with greater spanning capacity over the floor area for rich that require column free spaces (i.e.; indoor soccer fields).

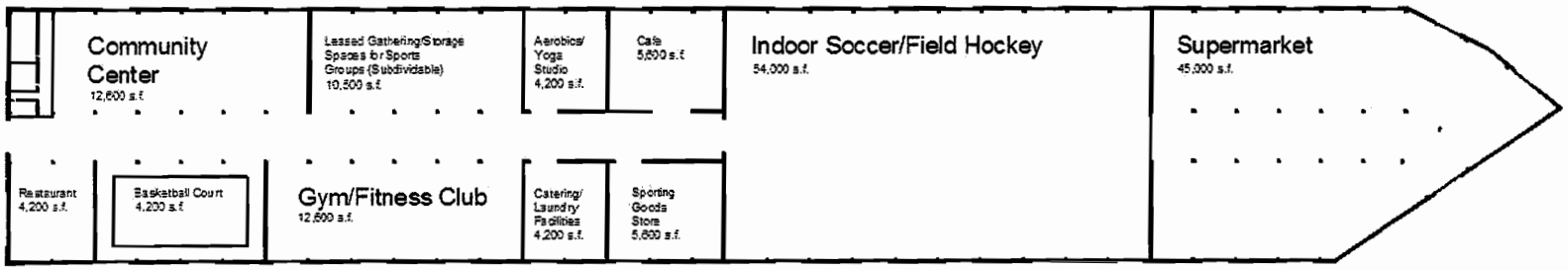
Option 1: Fort Mason Center Model (Full Preservation)		
Activity Venue for Major Public Events, Cultural Activities, City Festivals (EPP Suggestion)	***Attraction for small groups for use on a more regular basis that "take advantage of the unique setting" (EPP Suggestion)***	***Commercial Space***
Event Pavilion/Trade Show Area (Precedent: Fort Mason Center Herbst Pavilion) Big open space great any kind of public event, conference, or trade show.	Visitor Center/Museum Maritime History Center "Little Theatre"/Screening Room Boutique Conference Center Spaces	Restaurants Artisan Commercial Space



Option 1 envisions turning the Ninth Avenue Terminal into a community focal point by attracting a variety of unique uses to the site. The majority of the building's 1930 section would be outfitted to be fully equipped for major civic events, conferences, and trade shows. The space would be kept largely open to allow for flexibility and versatility.

The remainder of the building would be oriented along a promenade or indoor "Main Street" that takes advantage of the preexisting 47' high arcaded roof that runs through the center of the Terminal. Lined along this promenade and also oriented to either the waterfront or city-side frontages of the building would be commercial spaces, restaurants, a Maritime History Center and spaces for Museums. The far northern section of the building would offer on-site parking to serve the facility.

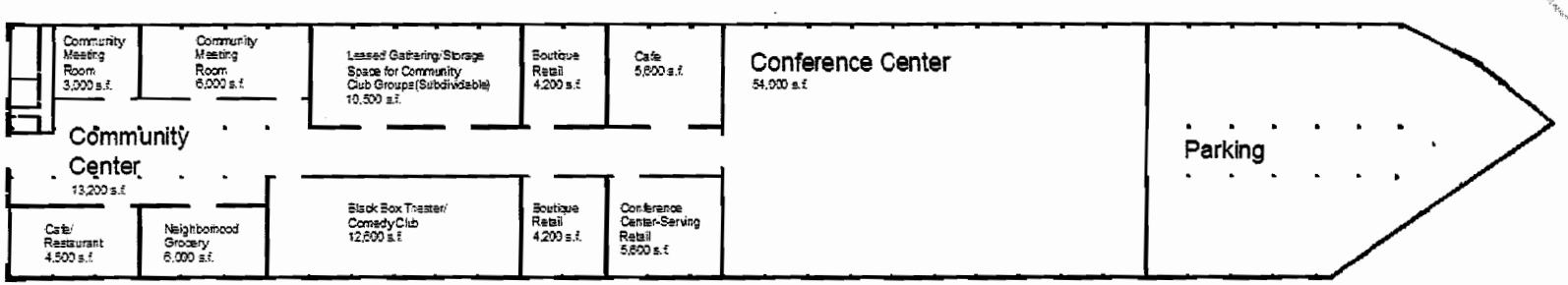
Option 2: Regional Recreation Center (Full Preservation)		
Activity Venue for Major Public Events, Cultural Activities, City Festivals (EPP Suggestion)	***Attraction for small groups for use on a more regular basis that "take advantage of the unique setting" (EPP Suggestion)***	***Commercial Space***
Recreation Center: A recreation asset of regional significance "Programming of larger recreational areas should be undertaken in conjunction with the EBRPD, neighborhood organizations and other interested parties to ensure that the recreational activities provided help to meet identified needs." (EPP, Objectives, p. 39)	Leased gathering space for club groups: Boating, Rec. Soccer, Crew Community Center with café and reading area for enjoyment of the Estuary	Healthy restaurants/cafes Supermarket Private aerobics/ yoga studios Fitness supply store



Option 2 seeks to concentrate a variety of complementary uses that will create a regional recreation center along the Oakland Waterfront. Uses in this plan include space for a Gym/Fitness Club, Community Center, Basketball Court, and leasable space for sports studios and recreation clubs. About half of the circa 1951 portion of the building would be devoted to a large indoor sports field for soccer or field hockey. To create this space, the columns along the promenade would need to be removed. Spanning could then be achieved via augmentation of existing trusses by trusses with greater spanning capacity.

The northern end of the 1951 section is proposed as the site of a large supermarket that could serve the future development in the Oak to Ninth Area and to those visiting the Recreation Center. Other retail components that would compliment the use of the site include spaces for cafes, a restaurant, and a sporting goods store.

Option 3: Conference Facility (Full Preservation)		
Activity Venue for Major Public Events, Cultural Activities, City Festivals (EPP Suggestion)	***Attraction for small groups for use on a more regular basis that "take advantage of the unique setting" (EPP Suggestion)***	***Commercial Space***
Terminal functions as conference facility for burgeoning Oakland high-tech industry, healthcare, etc. Major Street/Plaza in Front of Terminal to be closed off for special events with Terminal as backdrop, possibility of extending events into the Terminal building. Multi-purpose event/ recreation space.	Community Group 'Clubhouses' facing waterfront Community meeting space and boat storage space for outdoor recreation groups.	Conference- and Recreation-serving Restaurants, Cafes, and Retail. Black box theater/comedy club



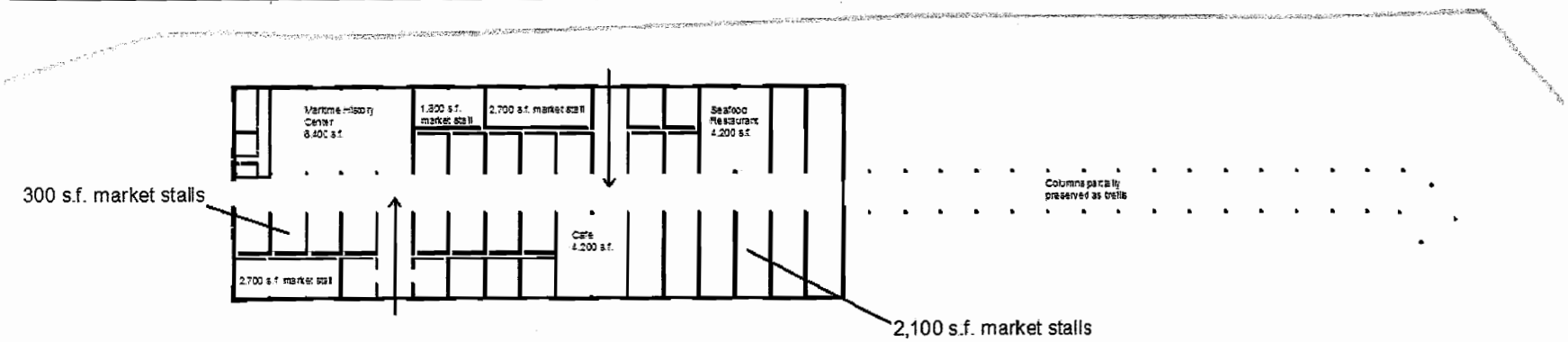
Option 3 proposes a 54,000 square foot Conference Center as its anchor in the c. 1951 segment of the terminal. Leading up to the Conference Center is a promenade lined with spaces that can be used by both the community center and people attending conventions, trade shows, and events at the Conference Center.

Nearest the southern Beaux Art bulkhead is a versatile Community Center space flanked by meeting rooms, neighborhood serving retail, and a café/restaurant. The layout of the Community Center space would allow for informal gathering and a variety of uses including performances. Leasable space for community groups and clubs is located along the waterfront. Other uses along the promenade include a Black Box Theatre/Comedy Club, retail spaces, and additional breakaway meeting rooms for the community or Conference Center patrons.

COMMENT LETTER CC

Option 4:
Market Hall (1951 Segment Partially Removed for Open Space)

Activity Venue for Major Public Events, Cultural Activities, City Festivals (EPP Suggestion)	*Attraction for small groups for use on a more regular basis that "take advantage of the unique setting" (EPP Suggestion)*	*Commercial Space*
Community Market/ multiple vendors *(precedent: Portobello Road, London - antiques, veggies, flea market)*	Maritime History Center	Restaurants

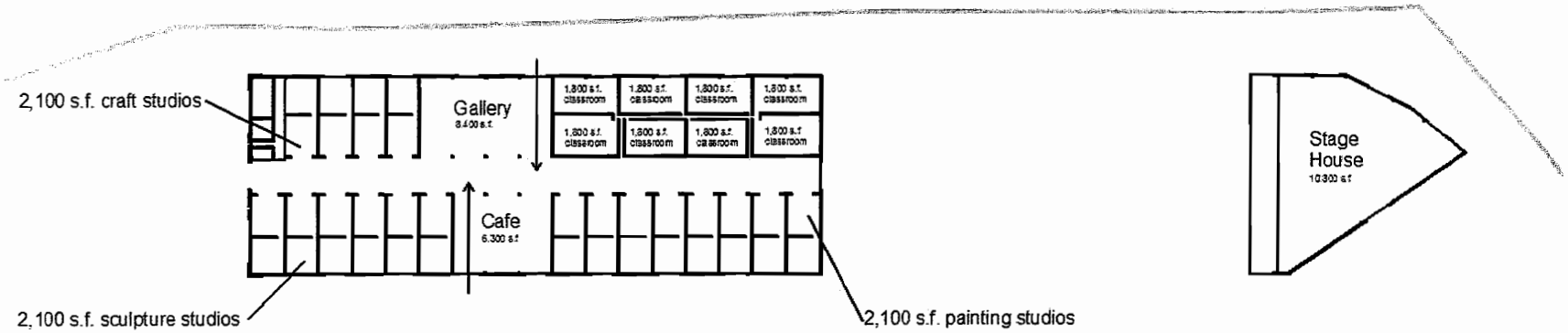


Option 4, Market Hall, calls for the retention of only the c. 1930 segment of the Ninth Avenue Terminal, to be converted into a large public market. The proposal includes a trellis that is composed of a portion of the column grid located in the c. 1951 segment of the terminal. The remainder of the c. 1951 segment of the terminal will be transformed into an outdoor open space area that could be used for recreation and events.

The Market Hall space would be divided into an interior promenade with access points through the building. The market would be distributed in segments, with different portions of the hall devoted to different goods, such as meats, vegetables, fruits, flowers, handiworks, antiques, etc. Included in the schematic design are auxiliary promenades for shopkeepers to have back-of-house access to their stalls. Additional uses in the building include a Maritime History Center along the waterfront side of the building and restaurant and café spaces.

COMMENT LETTER CC

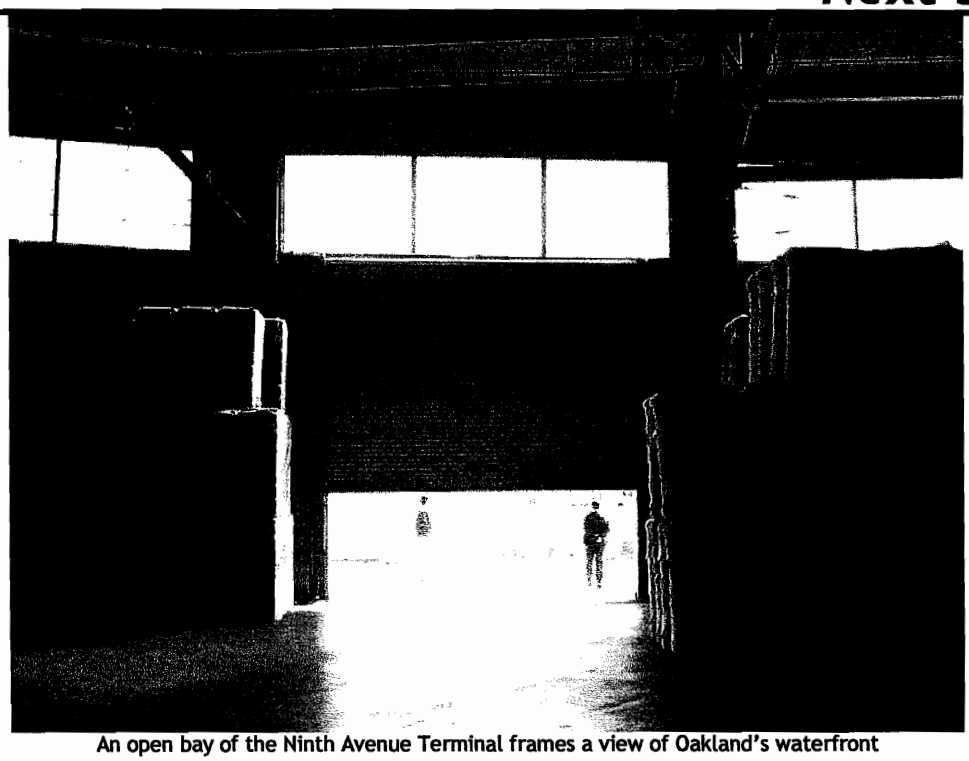
Option 5: **Regional Arts & Education Center (1951 Segment Partially Removed)**		
Activity Venue for Major Public Events, Cultural Activities, City Festivals (EPP Suggestion)	***Attraction for small groups for use on a more regular basis that "take advantage of the unique setting" (EPP Suggestion)***	***Commercial Space***
Major open spaces to be used for display of contemporary art; outdoor theater utilizing portion of the c. 1951 segment of the terminal doubles as community space, along with exterior of Terminal.	Artist lofts and workshops Classroom space for community art classes.	Café/Restaurant Artist production space and open studios/gallery



Option 5 also proposes the retention of only the c. 1930 portion of the building. However, the far northern end of the c. 1951 segment, including its exterior wall with the large "Port of Oakland" sign painted on its surface, would be reutilized as an the stage house for a large semi-outdoor theatre. Temporary seating for the outdoor theatre would be located between the c. 1930 portion of the building and the remaining c. 1951 segment, creating a major community gathering space. A partial shade structure could be located over this space that mimics are reuses the skeletal frame of the removed segment of the terminal.

The preserved section of the terminal would then be subdivided into a series of artists' studios and workshops that are open to the public (similar to Alexandria's Torpedo Factory). Complimentary uses such as classroom space for community art classes, display areas, and a café/restaurant are also proposed.

Next Steps



An open bay of the Ninth Avenue Terminal frames a view of Oakland's waterfront

The proposals envisioned by this feasibility study are meant to provide the leaders of Oakland with meaningful alternatives to the demolition of the Ninth Avenue Terminal. Although the proposals offer options for both partial preservation and full preservation of the structure, it should be noted that full preservation provides for a more versatile and dynamic community gathering space along the Oakland waterfront.

Two significant points that this study addresses are the aesthetic merit of the Terminal, and its ability to meet the desire for 'open space' at the waterfront. (1) Although the Terminal area in general has been deemed 'blighted,' in fact, the Terminal building offers great architectural potential. Its design is classic and representative of the Beaux Arts style that personified the City Beautiful movement around the turn of the century. The size and scale of the Terminal building suggest incredible possibility, as has been demonstrated here. (2) Recreation and preservation on the waterfront need not be seen as opposing objectives. The ability to provide open space within the interior of the terminal has been shown by this study.

The management of the reused terminal building is an opportunity for the Port of Oakland to generate revenues for the City through tourism and public use. This goal is in line with the Estuary Policy Plan's requirements that open space be provided for public enjoyment along San Francisco Bay. Casual visitors can marvel at the views of Alameda and San Francisco, as well as the Oakland Hills. Attending conventions, art shows, eating, and promenading along the Bay may also be accommodated. Reuse or partial reuse is also in line with the Oakland General Plan's Historic Preservation Element, in that the terminal building would become economically viable through new use, rather than removal.

As demonstrated by the precedent studies, historic waterfront warehouse and market buildings have the potential to become major community assets. Regionally, San Francisco, and now Richmond, as well, have recognized the importance of reusing, rather than demolishing, significant pier buildings that form a vital part of their history. Oakland now has the great opportunity to create such a landmark along its own waterfront by preserving and reutilizing the Ninth Avenue Terminal.

Appendix

Sampling of Community Group Responses:

Asian Health Services - 4/22/05

"In terms of the big picture, our organization is particularly concerned more around traffic and pedestrian safety impacts, specifically in Chinatown. Specifically since there will be more than 3100 housing units built, we are concerned about access points and traffic generated. Here in Chinatown we have one of the highest concentrations of pedestrian accidents in the city. Given the number of developments occurring within the Oakland area and where they are located, Chinatown is the epicenter of these developments and has the potential of being cumulatively impacted."

"If it is a community space that will result in significant traffic impacts in Chinatown, there needs to be some real, viable mitigations and alternatives looked at - whether public transportation, shuttle options, or other alternatives. Let's be cognizant and cautious of impacts in pedestrian safety terms."

-Julia Liou - Exec. Analyst, Asian Health Services

Policy Link (Member of Oak to Ninth Community Benefits Coalition) 4/22/05

"I wouldn't say that as an organization we've taken a position...The coalition has not to my knowledge given it a huge amount of attention yet. The priorities of the Coalition are affordable housing and jobs. If a project is to be built on the site, the Coalition hasn't taken any position about the retention of the building or the uses of the building.

Nobody wants open space that will be just the front lawns of expensive apartment housing. The community should be involved. That should apply to any venue. I don't think we'll support any project if it will not have demonstrable community benefits. I don't know that anyone's specifically talked about it, but I do know that that's kind of the next order of business, to see what common cause we might have.

The choice between those two options [open space and preserving the building] is not the cutting edge issue for the Coalition. Principles of community use are the high priority for us - and not privatizing it, making it into a private marina, for example - not making it something relatively exclusive."

-Victor Ruben - Director of Research, Policy Link

South of Nimitz Improvement Council - 4/20/05

"That is not exactly the geographical area we are concerned with. We would look with great favor on the adaptive re-use of that facility. Our area ends at Oak St. We're all in favor of finding a re-use for the building."

-Gary Kanecht, President

Lakeshore Homes Association - 4/29/05

"We have no comment."

Greenbelt Alliance - 4/29/05

" Greenbelt Alliance does not have a position on the Oak to Ninth Development. If you know anything about our organization, we very much support infill development, in using our existing cities and towns to accommodate the growth that comes to our region. We also think it's important that that happen in a way that meets community needs, in particular provides affordable housing to address the region's affordable housing crisis and is done in an environmentally sensitive manner, and that robust community participation processes are uses so that what the community needs is what ends up getting done. Although that doesn't say very much about Oak-to-Ninth, that is our general position and our general process."

-Jeremy Madsen, Greenbelt Alliance

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www.fortmason.org

Longwharf Theatre - New Haven, CT
www.longwharf.org

Pike Place Market - Seattle, WA
www.pikeplacemarket.org

Torpedo Factory - Alexandria, VA
www.torpedofactory.org

Brooklyn Bridge Park Conservancy - Brooklyn, NY
www.nylcv.org

Site Visit:

Wednesday April 13, 2005

Oak to 9th Informational Open House and Public Meeting:

Wednesday March 30, 2005

Letter CC – Friends of the Ninth Avenue Terminal (second letter)

CC-1 Similar to the Response to Comment S-3, the comment makes conclusion about the condition of the buildings without support of site-specific structural and geotechnical investigation information prepared by licensed, professional engineers. Also, under the project alternatives that would retain all or a portion of the Ninth Avenue Terminal, future reuses would be public uses that would require building upgrades to satisfy governing building code standards for public use occupancies (versus the existing storage shed use).

CC-2 The alternatives analysis provided in DEIR Chapter V provides the environmental analysis of a range of alternatives to the project, including partial and full preservation of the Ninth Avenue Terminal. As stated in the discussion of the Full Ninth Avenue Terminal Preservation and Adaptive Reuse (DEIR p. V-38), "adaptive reuse of (as well as any physical alterations to) the remaining parts of the structure would be done consistent with the Secretary of Interior Standards for the Treatment of Historic Properties and City approvals." City decisionmakers will ultimately decide on a preferred alternative or reject the alternatives and approve the project.

CC-3 The comment recommends conditions of approval that the City would adopt related to issuance of a demolition permit for any portion of the Ninth Avenue Terminal. The comment does not address an environmental impact of the project or the adequacy of the DEIR analysis. Prior to its action on the proposed project, the City will consider appropriate conditions of approval for all aspects of the project, including subsequent development permits (and other agreements via a Development Agreement between the City and the project sponsor).

The comment puts forward requirements for an economic analysis that should be prepared for the evaluation of possible reuses of the Ninth Avenue Terminal. Since publication of the DEIR, the project sponsor has prepared an economic feasibility and constraints report (capital and operational) on for each of the project alternatives, including the consideration of retaining all or parts of the Ninth Avenue Terminal (as proposed in Alternatives 2 and 3 and the Full Preservation Sub-Alternative described in Chapter V, Alternatives, of the DEIR). This report is provided to City decisionmakers separate from this environmental report for its consideration of the project and the alternatives evaluated in the DEIR. The City will determine the adequacy of the report for its purposes. See Master Response B regarding further analysis of reuse alternatives for the Terminal.

COMMENT LETTER DD

Golden Gate Audubon Society

2530 San Pablo Avenue, Suite G • Berkeley, California 94702
Phone: (510) 843-2222 • Fax: (510) 843-5351 • Email: ggas@compuserve.com

Americans Committed to Conservation • A Chapter of the National Audubon Society

October 24, 2005

RECEIVED
OCT 26 2005
City of Oakland
Planning & Zoning Division

Margaret Stanzione, Project Planner
Planning Division
Oakland Community and Economic Development Agency
250 Frank Ogawa Pl., Ste. 3315
Oakland, CA 94612

Re: Draft Environmental Impact Report (DEIR) (Oak-to-Ninth Development Project)

Dear Ms. Stanzione:

The comments of the Golden Gate Audubon Society (GGAS) on the above-referenced DEIR are as follows:

As noted on p. IV.A-14 of the DEIR, the project as proposed (and as generally depicted in Fig. III-3) "would create or restore shoreline marsh and revegetate the length of shoreline from…Clinton Basin and along Lake Merritt Channel where it fronts the project site." As the DEIR notes, inclusion of these elements in the subject project make it possible for the project to be found consistent with applicable requirements of the Estuary Policy Plan, a finding that in the absence of such elements could not be made. (*Id.*) DD-1

Mitigation Measure I.2e states that "compensatory mitigation" in the form of "onsite wetland creation or enhancement" will occur only "as required by regulatory permits issued by the Corps, RWQCB, and BCDC." Through textual revision, footnoting, or otherwise, the DEIR should make it clear that wetland creation and restoration as depicted in Fig. III-3, as further described on pp. IV.A-14 and IV.I-24-5, and as supported by a mitigation and monitoring plan as described on p. IV.I-25, will be carried out regardless of whether such elements are required by regulatory agencies, subject to the ability of project sponsors to seek to receive mitigation credit for such elements if one or more regulatory agencies impose a requirement for compensatory mitigation. DD-2

On p. III-19, consistent with the reference to "creation and improvement of marsh habitats," the DEIR should add "nature appreciation and wildlife observation" to the list of recreational activities for which the project will provide enhanced opportunities. DD-3

The Barrow's goldeneye is a migratory waterbird that is both a specie of special concern under the California ESA[1] and that inhabits the Lake Merritt Channel in close DD-4

[1] See Open Space, Conservation, and Recreation (OSCAR) Element, Table 6 ("Special Status Animal Species in Oakland.").

DD

proximity to the project site. It should be added to Appendix H and given appropriate consideration in Section IV.I of the DEIR. DD-4 (CONT.)

Thank you for your consideration of these comments.

Sincerely,

John Bowers

John Bowers
Member, Conservation Committee

Letter DD – Golden Gate Park Audubon Society

DD-1 Comment is noted and acknowledges that the project proposes to restore and revegetate portions of the shoreline, from Clinton Basin and along Lake Merritt Channel.

DD-2 The project description contains wetland and shoreline enhancements as part of the project. These improvements are described in detail on DEIR pp. III-19 and IV.D-20 through IV.D-29. Mitigation Measure I.2e (DEIR p. IV.I-24) is intended to provide compensatory mitigation above and beyond the shoreline and marsh enhancements and restoration that are proposed as part of the project. The measure is intended to provide compensatory mitigation if additional mitigation is identified as required during the regulatory permitting process.

DD-3 The Project Description in the DEIR (Chapter III) is intended to describe all aspect of the project analyzed in the document. The comment suggests additional text to the discussion of how the proposed improvements would "enhance water-oriented activities in this area by facilitating greater and improved public access to the Estuary with enhanced parks, open spaces, trails along the waterfront. There would especially be improved public opportunities for recreational sailing, rowing, canoeing, and kayaking." The suggested text does not clarify or correct information pertinent to the CEQA analysis. Further, the existing text does not preclude "nature appreciation and wildlife observation" or any other many possible waterfront activities that could occur.

DD-4 The California Natural Diversity Data Base (CNDDB) does not list Barrow's goldeneye as occurring within the vicinity of the project area and this species was not observed during reconnaissance-level site visits. The CNDDB does not list this species as occurring within Alameda County or within the other 7.5 minute USGS quadrangles queried. There is therefore very low potential for this species to occur within the project area and no impacts to this species are anticipated.

COMMENT LETTER EE

Alameda County League of Conservation Voters
1904 Franklin Street, Suite 609
Oakland, CA 94612
www.ecovote.org/alameda
Phone: 510.444-4710 ◆ Fax: 510.444-4743

ACLCV Board Resolution Regarding Oakland's Oak to Ninth Street Project

The Port of Oakland's selected developer for the Oak Street to 9th Avenue area (near Jack London Square) proposes development radically different from the Estuary Policy Plan (EPP). That plan was adopted by the City Council and incorporated in the General Plan in 1999 after a lengthy public process. Its vision:

> "Shoreline access and public space policies are intended to establish this area of the Estuary as the major recreational destination in the city. The Plan recommends a series of large open spaces, intended to provide for a wide variety of recreational experiences. Developing a series of well-defined open spaces would change the entire nature of the waterfront in this area, transforming it from an industrial backwater into a recreational centerpiece of the city. In total, these sites would represent one of the most significant additions of urban parkland within the entire Bay Area. They would create both a regional and local asset of major proportions."

EE-1

The EPP called for an 11-acre park landward of the 9th Avenue Terminal. That vanishes in the developer's plan, replaced with an approximate 4-acre pier resulting from the demolition of the 9th Avenue Terminal. Thus a major proposed park, as well as a historic building, is lost.

The building and street design tends to wall off this area from the public. The towers and bulky six story buildings – all greatly exceeding the densities of the EPP - will block views of the water. Any project should be designed to invite, not exclude, the public from Oakland's waterfront. It should benefit <u>all Oakland residents</u>, not just those who live there.

EE-2

There is no land use decision more important than the redevelopment of our waterfront. We are a waterfront city, but many are hardly aware of that fact because so much of our waterfront has been off limits to the public for so long. This area re-use gives us the opportunity to open the waterfront to people. It is an historic opportunity about the legacy we will leave – or not leave – to our children and grandchildren.

EE-3

Therefore, we urge that the City adhere to the EPP vision and create "the major recreational destination in the City." In particular, the Coalition urges that (1) the public open space in the development be no less than that called for by the EPP, and (2) that streets should be designed to provide maximum visibility of the Estuary.

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Planning & Zoning Division

Letter EE – Alameda County League of Conservation Voters

EE-1: See Response to Comment W-5.

EE-2 See Responses to Comments B-8 and U-17.

EE-3 The comment calls for public open space that is at least that called for in the Estuary Policy Plan. See Response to Comment P-3. The comment also states that street design should provide maximum visibility of the Estuary. See Response to Comment U-17, which addresses this topic. As it deliberates on the project prior to action, City decisionmakers will ultimately consider the proposed acreage of new parks and open space pursuant to all General Plan policies, and will consider the appropriateness of the level of visibility to the Estuary created by the project.

COMMENT LETTER FF

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OCT 1 0 2005
City of Oakland
Planning & Zoning Division

LEAL ROYCE CHARONNAT
ARCHITECT+ENGINEERING

October 6, 2005

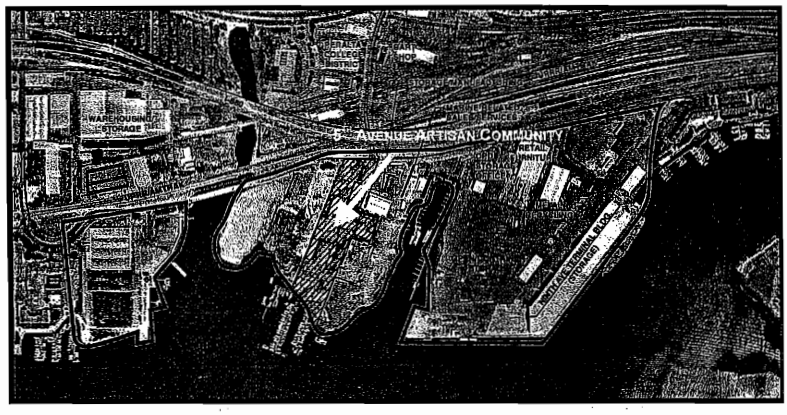
To Whom It May Concern in Oakland from Leal Charonnat:

A Specific Plan for the Oak-to-Ninth District must be done prior to development.

It was called for. It was asked for. It was proposed. It was anticipated.

It hasn't been done. It's being ignored. It's not in the works.

But the transformation of this publicly owned waterfront property deserves it.



MAP OF THE OAK-TO-NINTH DISTRICT

"The plan proposes the large-scale transformation of the area from the Lake Merritt Channel to the Ninth Avenue Terminal into a mix of artisan work/live lofts, hotel, cultural and commercial-recreational uses that will complement the planned open spaces and parks along the water."

— Estuary Policy Plan, 1999

Specific Plans? We ain't got no Specific Plans. We don't need no Specific Plans. I don't have to show you no stinking Specific Plans.

This is all about 60 acres of waterfront still owned by the citizens of Oakland.

As written in the Estuary Policy Plan [EPP] (1999); as annotated and demanded of respondents to the Port of Oakland's "Request for Development Proposals" for the Oak-to-Ninth District (2000); and as declared a major method they would use to develop their plans for this area by Oakland Harbor Partners, LLC (2001), now the developer of this area; all stated that a Specific Plan should and would be done.

Promises, promises.

Well, we have a humongous project before us, created in a vacuum by the developer with NO public input in its preparation as mandated by state law when a Specific Plan is done, that bears little relationship to the goals and dreams as set forth in the original Estuary Policy Plan.

FF-1

Oakland Office: 1 - 5th Avenue #1-9 • 94606 • (510) 436-3466 FAX (510) 315-2715
gabbro@well.com

The Estuary Policy Plan was created with thousands of hours of public input, hundreds of meetings and at a cost of over a million dollars. It recognized the unique opportunities for developing the Oak-to-Ninth District for all of Oakland, not just for a local developer. FF-2

The EPP especially called out for open spaces that would work for large civic gatherings. What mention of housing was essentially on the backburner. It also recognized the dynamic local artisan community and called for more of the same.

A complex document, the EPP in one breath called for the demolition of the Ninth Avenue terminal for 'views', but in its next breath called for some or all retention of the historic structure. The developer's original response called for "the possible preservation and re-use of some or all of the Ninth Avenue Terminal for a mixture of commercial and community-oriented uses that maintain the historic character of the Oak to Ninth area." — Oakland Harbor Partners submittal, 2000. This is the last remnant of Oakland's working waterfront and deserves to be reused as both a cultural and a financial resource. FF-3

Well, the developer that got the gig when he said he would be preparing a Specific Plan has completely ignore all of this, and is presenting a development project that is more housing on one spot that has been done in Oakland in many a year. FF-4

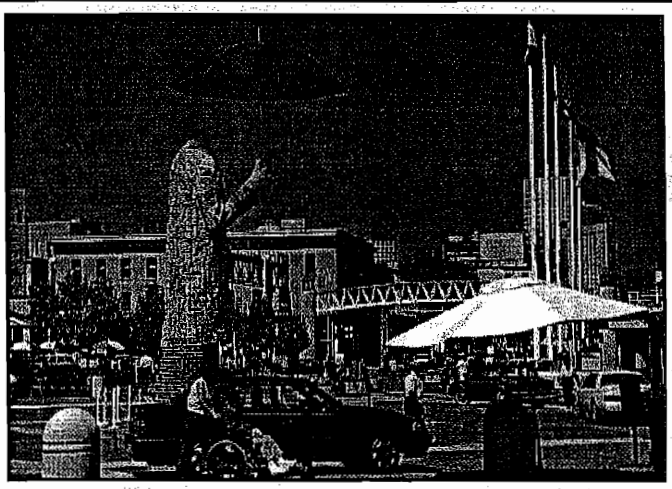


IMAGE FROM ESTUARY POLICY PLAN

The Jack London waterfront is becoming a significant regional destination. The Cirque Du Soleil attracted hundreds of thousands of visitors in 1997.

— Estuary Policy Plan, 1999

In 1997 the Cirque Du Soleil lost its site in San Francisco. Desperate, they held a press conference to ask the public to find them a place in the 'city.' Well, they got calls, dozens of calls, and they were all telling them that over here in Oakland they would be welcomed. At the time, there was a large empty lot (now just a bunch of apartments) near Jack London Square. They came, and the people came. Afterwards, they said that here in Oakland they had the greatest attendance of any venue outside of their home in Canada. There is no such site now in the Jack London Square area.

The Estuary Policy Plan for the Oak-to-Ninth District wanted to create large public spaces for concerts or festivals – activities completely excluded by the developer's scheme now advocated by the city. If approved, there will be no place in Oakland where an activity like Cirque Du Soleil will be welcomed, again.

Some like it not.

The city and port have reneged on their fiduciary responsibilities by declaring that with the developers project before them, and an EIR analysis, and some public testimony on the EIR, we're getting the 'functional equivalent' of a public-input Specific Plan. Not.

The head honcho of the Oakland Planning Department does a dance that would make the Cirque Du Soleil proud by announcing the same at the Planning Commission public hearing. Ignoring the fact of course that all the things they say they are doing – the developers plan, the EIR and taking public testimony on the EIR – would have been done ANYWAY when a Specific Plan is developed. FF-4 (CONT).

The city's position that it is doing more than what a Specific Plan would do is an outright misrepresentation of the truth – in other words a lie. Doing a Specific Plan would NOT preclude what they say they are doing now, but would be in addition, allowing the public to have vital input at the beginning of the planning process.

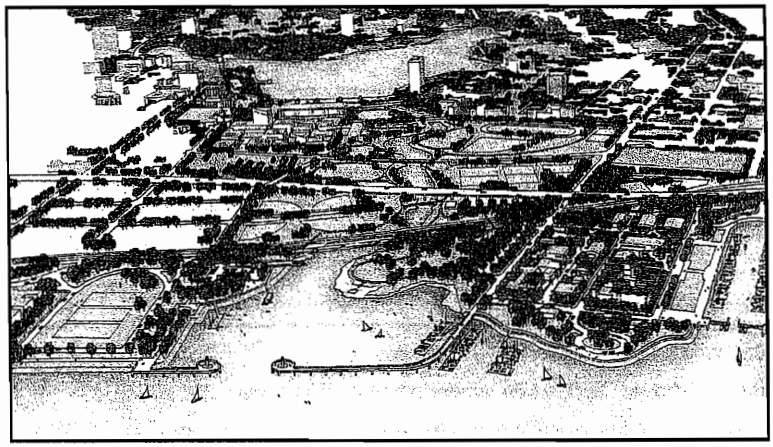


Illustration from developer's original response to RFQ

"ROMA worked with a 27-member advisory committee and the City of Oakland and the Port of Oakland in a collaborative effort to prepare a waterfront plan for the four mile reach of shoreline bracketed on the one side by the Oakland Airport and the other by the Port of Oakland. The purpose of this planning effort was to knit these waterfront lands back into the city, reclaim them as an integral part of the city fabric and create new opportunities for development to occur. The plan calls for a system of open spaces and parks to be developed comprising more than 55 acres, and proposes a variety of mixed uses and transformations, which will strengthen Oakland's position as an urban center and accommodate growth and development that complements the downtown and adjacent neighborhoods."

— From Oakland Harbor Partners, LLC submittal to Port in response to RFQ, 2001

You don't understand! I coulda had class. I coulda had a Specific Plan. I could've had something, instead of a bum design, which is what I got.

To add more insult to injury, the developer has been tramping around the city meeting with people and showing off pictures and models of what his project would look like. The trouble is, he shows dozens of photographs of 4-story buildings when what he wants to build are 6 and 8-story buildings with sprinklings of half a dozen 24-story towers. FF-5

The developer is just lying when he shows an unwitting public pretty pictures of something that is not to be built. The scale for the model he selected is miniscule. 24-story buildings are barely 4-inches high in his model; 8-story buildings are about an inch high. An ant crawling on his model is as about as big as a semi-truck! FF-5 (CONT.)

No one gets a sense of scale from such a tiny sized model. He might as well hand out decoder rings with a model on top – it would give people the same sense of what his project will be like.

You've got to ask yourself one question. Do I feel lucky? Well, do ya, city.

The city has been no help in all of this. They assisted in holding public 'input' meetings to get feedback from the public. Not only was the public misinformed by having the developer's same misinformation put out, but the city never did show or clearly explain to the public what the Estuary Policy Plan called for, and how the developer's project was in conflict. FF-6

All that came of these 'public input' meetings was a checklist of complaints that the writers of the DEIR used as a way to counter any public criticism. The DEIR is essentially a cheering squad for the developer's project.

While the EPP called for spaces for large public gatherings, the DEIR states that not only does the developer NOT intend to put on anything like concerts or festivals, the EIR brags that if anyone in the future did, they would have to prove to the Oakland Police Department that the promoter of such an event could find parking somewhere. FF-7

The DEIR points out clearly that the developer has no intention of providing parking for anything like that needed for a festival or a concert.

The stuff that dreams are made of.

How did we get here? The answer is easy.

Through the classic Oakland developer process of bait, wait and switch.

The developer baited everyone by declaring they had commissioned ROMA Design [the very professional planning and design firm that helped the city create the EPP] to help develop a Specific Plan. They stated this in writing.

This bait was so tasty that the developer even showed everyone the schedule for the vast public meetings he was going to hold and a chart showing a yearlong schedule of these meetings – all to develop the Specific Plan for all 120 acres of the Oak-to-Ninth District. FF-8

The public took this bait and testified before the Oakland board of Port Commissioners that this developer was most superior and should get the gig.

Well he got the gig. But then he did the big wait – after just a few preliminary meetings, he disappeared for almost two years. When inquiries were made on the progress of the Specific Plan, the developer was mute, and the city staff would only say 'we don't have a project before us so we have nothing to comment on..."

Then the switch came, albeit in a few steps. In 2003 a leading business newspaper reported that the developer was adding another thousand units, for a total of maybe 3000 units, to the 2000 residential units he was already scheming for –all far more than originally anticipated in the EPP and with no public input.

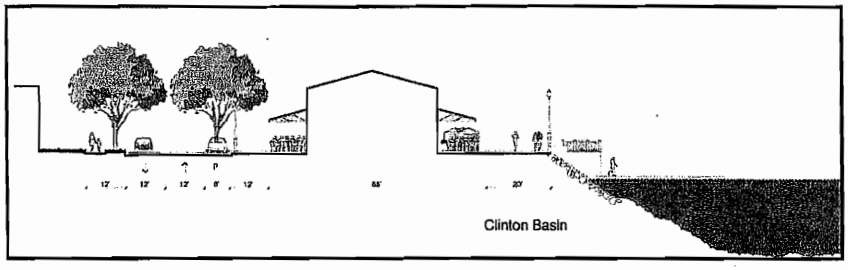


FIGURE III-12: Clinton Basin Illustrative Cross Section

- Illustration from Estuary Policy Plan, 1999

For the last year and a half he has been showboating this concoction of his around the community. Not to say that some don't like it. Some do. But this is not the process to use to plan on how to transform this public land. Proponents, like the developer, will dismiss critics with a waive of the hand with no option for discourse.

With no regard to any of the original vision the EPP has for the waterfront – making it a series of large public parks in addition to a vibrant commercial and artisan community for all of Oakland – housing advocates' only mantra is housing for all. Well that is fine, except where will the rest of Oakland have a chance to get together? FF-9

With this plan, they won't.

The vision of the Estuary Policy Plan is lost without a Specific Plan. At this point in time, with the short 54-day comment period of the DEIR coming to a close, the city staff is set on ramroding this project through, full speed ahead, with no public input in its PREPARATION.

Round up the usual suspects.

"Artist's live/work" – illustration from developer's original response to the Port of Oakland's RFQ.

- Oakland Harbor Partners, LLC, 2001

The city staff has decided that the citizens of Oakland can only be reactive, not proactive. You wonder whom they work for, who pays their salaries? With coy 'public input' meetings done to circumvent public participation in the preparation of the project plans, the staff have definitely taken sides.

Even the report given to the planning Commission unfortunately misrepresented the project. From the public's point of view wanting to have some say in the planning stages is important. As it is now, this is land still owned by the citizens of Oakland, but not for long

The planning Commission at their lone hearing on the DEIR showed their lack of knowledge of the EPP and its vision. As guardians of city policy, they should have taken the time to become familiar with the EPP – they weren't.

Which only leaves the City Council as a possible bulwark against this travesty. With developer's dollars spread amongst the council, even this body might be suspect. Words such as 'cost of development' or 'we can't pay for all the parks' or 'it can't be all parks' (of course no where in the EPP does it say 'all parks' – but such statements only bolster support for the developer's charge)

FF-9 (CONT.)

should give pause to anyone who might hope the council may only working for the 'citizens' of Oakland. It's all sounding like the Woody Allen line: 'We need the eggs.'

Meanwhile, the citizens of Oakland magnanimously passed Measure DD - a bond measure that will provide millions of dollars for Estuary Park development; and up at the state capital a two billion dollar state bond measure is in the works. But will Oakland have any of this? Time will tell.

We may not have much in Oakland, but we will always have Paris

If Oakland were serious about becoming the world-class city it could be instead of just another bedroom community for San Francisco, it would be looking into these sources of support for the EPP vision.

FF-10

An intact Ninth Avenue terminal, with its rollup doors turned into windows, some of its walls removed to create the largest outdoor pavilion in the East Bay, all revenue generating, is something to consider. As it is, the developer is planning to scrape off 93% of the building and paint the remaining floor a grass green.

A park suspended over the water [the idea of turning the Ninth Avenue Terminal's floor into 'green space'] creates a park that not only has to be maintained about the ground, but its very foundation will have to be repaired on a yearly basis. Talk about Fantasy Island!

FF-11

Don't be fooled.

The developer is no fool. All that housing is kept back from the shore for more than just a shoreline park. The Bay Area Conservation and Development Corporation – the BCDC, the keeper of our bay – only has jurisdiction 100-feet inland.

FF-12

Bravo! It's those shoreline parks that will prevent the BCDC from having much of a say at all on this project.

With a timeframe that will stretch out in decades, not years, any thought that this project will quickly provide Oakland with waterfront parks, skinny as they are, is dreaming. It would be much more efficient to go back to square one, plan the parks as everyone can agree, and go for the gold – funding from sources other than just Oakland taxpayers.

FF-13

Totally ignored in all the current discussions is what is to happen to the 5th Avenue artisan community – recognized and highly praised in the EPP. The developer plans of 8-story buildings surrounding this neighborhood are a joke on the EPP request to have more neighborhoods in the vein of this creative and vibrant community. Notice he will never talk about its expansion.

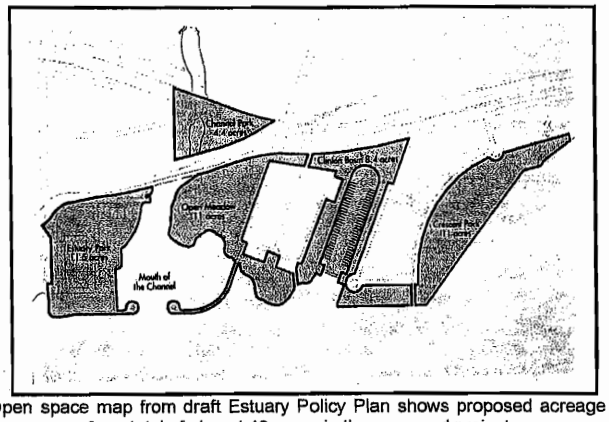
FF-14

I'm going to make him an offer he can't refuse.

It was not long after the EPP was adopted by the city that newspaper accounts told of a most logical way to develop this area: a non-profit development corporation would oversee both the Specific plan process, and then development.

If the area were divided up into bite-sized parcels, just like the rest of Oakland, small local developers could ante up and many as opposed to just one developer could participate in the creation of a vibrant waterfront for all of Oakland.

FF-15



Open space map from draft Estuary Policy Plan shows proposed acreage of open space for a total of almost 42 acres in the proposed project area.

- Estuary Policy Plan draft, 1998

This type of scenario is playing out on Coney Island in New York City as well as in dozens of other cities. Oakland government and the city staff seem to prefer forgoing true public input and just go for the developer's glitter. FF-15 (CONT.)

The Plan! The Plan!

Oaklanders may not have a choice in the matter. The short fuse of the DEIR is about to run out. Then it's going to be another long quiet wait. Finally the Final EIR will come out. Once again this will come before the Planning Commission and then the City Council. FF-16

There may be a wringing of hands but the rational of 'we need this development to pay for the parks – there is just no other way' with the developer's chorus of 'no other development scheme will pencil out' – the deal will be sealed. Oakland will once again sell off its waterfront.

# # #

To comment on the Draft Environmental Impact Report, which contains a copy of the Estuary Policy plan, send them by 4:00 p.m. October 24, 2005 or to get a copy of the DEIR, contact: FF-17

Marge Stanzione, Project Planner
City of Oakland
Community & Economic Development Agency
Planning Division, Suite 3315
250 Frank H. Ogawa Plaza
Oakland, California 94612
(510) 238-4932
mstanzione@oaklandnet.com

FF-19

COMMENT LETTER FF

FF-20

EPILOGUE

As to how we got to where we got, let's review a few key statements from the original Estuary Policy Plan policy for this area, the developer's response to the Port's Request for Development Proposals, and the Draft EIR statement on why no Specific Plan was prepared for the Oak-to-Ninth District:

"POLICY OAK-5: INITIATE MORE SPECIFIC PLANNING OF THE ENTIRE OAK-TO NINTH DISTRICT.

The Oak-to-Ninth district is large and diverse, with several unique, complicated issues that dominate its real development potential. It should be planned in sufficient detail to identify all potential issues, and to understand the options available to address these issues in a timely manner.

A Specific Plan should be prepared prior to development. Planning should be based on a strategy which analyzes the area comprehensively and which accounts for the constraints imposed by subsoil environmental conditions. Transformation of the district will require that several outstanding issues be resolved simultaneously. Development feasibilities should be analyzed, phasing of improvements should be identified, and a funding strategy to finance and implement recommended open space should be addressed. These require that a realistic development."

- Estuary Policy Plan [EPP], 1999

We are looking forward to the opportunity of working creatively with the Port, City and community at large during the Specific Plan process. The development concept presented in this proposal has not been refined to plan level detail, as it is the belief of Oakland Harbor Partners that the next step must be preceded by an outreach program to develop input from the City, the Port and the community-at-large...

FF-17

For the Oak to Ninth area, the Specific Plan will include the entire 120 acre planning area on both sides of the Embarcadero. This will be important in establishing the context for planned waterfront development, and in ensuring future activity linkages between the city and the estuary. Oakland Harbor Partners has commissioned ROMA Design Group, an internationally recognized design firm specializing in waterfront redevelopment to lead the Specific Plan process...

The Specific Plan process affords us the opportunity to create a meaningful dialogue with the Oakland community regarding the future of this key waterfront asset. Community outreach will be an important aspect of our Specific Plan process. At the outset of the planning process, we will undertake a community-wide symposium with key individuals and groups who have a stake in the future of the area, including community and business representatives, property owners, tenants, members of the 5th Avenue Point community, policy makers, etc.

- RESPONSE TO REQUEST FOR QUALIFICATIONS
SUBMITTED BY OAKLAND HARBOR PARTNERS, LLC, 2001

"**Specific Planning.** The City and Port of Oakland have not elected to prepare a Specific Plan for the Oak-to-Ninth District as called for in the Estuary Plan. Both agencies determined that 1) the Oak to Ninth Project application (with the modifications proposed in this EIR), 2) the analysis provided in this EIR, and 3) the public review process required pursuant to CEQA and the City of Oakland, fulfill, and may in certain cases exceed, the objectives of detailed planning and analysis envisioned in the Estuary Plan (Policy OAK-5). Thus together, these elements (project application, environmental analysis, and public review process) are considered functionally equivalent to the preparation and review of a Specific Plan."

- Page IV.A-16, Draft Environmental Impact Report [DEIR],
- Issued by the City of Oakland, September 1, 2005

Sometime between 1999 when the Estuary Policy Plan was adopted and the Draft Environmental Impact Report was issued on September 1, 2005, the city and port of Oakland made the conscious decision – with no public input or discussion – to not do a Specific Plan for the Oak to Ninth District. The reader needs to decide who gained and who lost when no Specific Plan was done for the Oak-to-Ninth District.

– Leal Charonnat

LEAL ROYCE CHARONNAT
ARCHITECT+ENGINEERING

RECEIVED
OCT 2 0 2005
City of Oakland
Planning & Zoning Division

COMMENTS ON DEIR - OAK TO NINTH AVENUE PROJECT

October 17, 2005

TO: Marge Stanzione, Project Planner
City of Oakland
Community & Economic Development Agency - Planning Division
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, California 94612

FROM: Leal Charonnat
CC: Oakland Landmarks Preservation Advisory Board, Oakland Planning Commission
RE: Oak to 9th Avenue Project
SUBJECT: **Comments and documents on Draft Environmental Impact Report [DEIR]**

Enclosed are my comments on the Draft Environmental Impact Report prepared by the city of Oakland, dated September 1, 2005 [on the CD-ROM disk provided.] The process the city has used to review this project is flawed, incorrect and must be corrected prior to proceeding with finalizing the Environmental Impact Report [EIR] for this project.

The proposed project reviewed in the DEIR has so many inconsistencies with the Oakland General Plan for this area – the adopted Estuary Policy Plan, 1999 [EPP], that was prepared over a period of more than two years, in an open process that included public participation in its preparation, and reviewed and adopted by the Oakland Planning Commission and the Oakland City Council – that the proposed project is a major revision of the city's General Plan done with no public participation in its preparation as required for General Plan amendments per **Planning and Zoning Law – State of California [PZL-SC] §65351.** *"During the preparation or amendment of the general plan, the planning agency shall provide opportunities for the involvement of citizens, public agencies, public utility companies, and civic, education, and other community groups, through public hearings..."*

The DEIR cites a decision made by the port and city of Oakland to not prepare a Specific Plan for this project because of three items as noted in the DEIR: "***Specific Planning.*** *The City and Port of Oakland have not elected to prepare a Specific Plan for the Oak-to-Ninth District as called for in the Estuary Plan. Both agencies determined that 1) the Oak to Ninth Project application (with the modifications proposed in this EIR), 2) the analysis provided in this EIR, and 3) the public review process required pursuant to CEQA and the City of Oakland, fulfill, and may in certain cases exceed, the objectives of detailed planning and analysis envisioned in the Estuary Plan (Policy OAK-5). Thus together, these elements (project application, environmental analysis, and public review process) are considered functionally equivalent to the preparation and review of a Specific Plan."* FF-18

The city has no basis comparing a project itself [created with no public participation in its preparation as would happen if a Specific Plan were prepared], an EIR analysis and the respective public comments on the EIR as being the equal of the Specific Plan process. What is ignored by this decision is that these three elements would have to be done even with the preparation of a Specific Plan – so they are not the 'functional equivalent to the preparation and review of a Specific Plan" as the statement in the DEIR would lead the reader to believe.

Mere public review of a draft EIR does not comply with this section of the California planning code that clearly states that the public is to have 'opportunities' in the 'preparation' of the general plan [or amendments.] This has not been done. The developer has only held 'show-and-tell' meetings of the project, but these have never involved the public in the preparation process. A Specific Plan was also called for the entire 120 acres of the Oak to Ninth District as originally stated in the Port of Oakland Request for Developers Qualifications, 2000 [RFQ] and echoed in the developers response [see enclosed documents on CD-ROM.]. The DEIR is also inadequate because it only incorporates the projects 60* acres, but not the entire district, which such major changes in the General Plan for this area should require.

This decision also ignores **PLZ-SC §65453** *"a specific plan must be "prepared, adopted, and amended in the same manner as general plans... "* It is a serious error on the city's part to not require the preparation of a Specific Plan in the same manner as Oakland's General Plan is prepared, with public participation in its preparation.

As noted in the October 23, 2003 **San Francisco Business Times** [copy enclosed on CD-ROM], the developer was making the decision then to expand his project from 2000 to over 3000 units. Obviously, this amount of housing – a use not anticipated by the EPP for this area in such vast numbers – was going to preclude many of the other uses anticipated for this area in the EPP. FF-19

The proposed project provides 40% less open space than called for in the EPP, and further, the use of this open space is specifically not to include concerts and festivals, uses anticipated in the EPP for this area. This proposed use is in violation of **PLZ-SC §65561:** *"The Legislature finds and declares as follows: (a) That the preservation of open-space land, as defined in this article, is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation and for the use of natural resources. That discouraging premature and unnecessary conversion of open-space land to urban uses is a matter of* FF-20

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gabbro@well.com

public interest and will be of benefit to urban dwellers because it will discourage non-contiguous development patterns which unnecessarily increase the costs of community services to community residents.

(c) That the anticipated increase in the population of the state demands that cities, counties, and the state at the earliest possible date make definite plans for the preservation of valuable open-space land and take positive action to carry out such plans by the adoption and strict administration of laws, ordinances, rules and regulations as authorized by this chapter or by other appropriate methods. FF-20 (CONT.)

(d) That in order to assure that the interests of all its people are met in the orderly growth and development of the state and the preservation and conservation of its resources, it is necessary to provide for the development by the state, regional agencies, counties and cities, including charter cities, of statewide coordinated plans for the conservation and preservation of open-space lands.

(e) That for these reasons this article is necessary for the promotion of the general welfare and for the protection of the public interest in open-space land."

The open space as proposed does not meet the policies as outlined in the EPP: no large activities are planned for according to the DEIR. The DEIR further states that is in the future some party wished to have such activity, they would have to prove to the Oakland Police department that they could find the necessary parking, etc. in order to hold an orderly event. Such burden on a potential organizer is not what the EPP would anticipate, but rather that the area would be designed for such large civic-like events. FF-21

The decision to undo such a basic use of this area as proposed in the EPP needs to be made with public participation, as found when a Specific Plan is prepared. By not preparing a Specific Plan, the port and city have excluded the public from participating in the preparation of the plan, in other words, contributing to the decision making process prior to deciding the project's goals and configuration. FF-22

In regards to the DEIR statement on the impact of the 5th Avenue artisan community: *"Impacts on 5th Avenue Community – Use setbacks, landscaping to reduce impacts to less than significant."* There is no basis for this conclusion. The neighborhood is completely overshadowed by the adjacent high-rise project; the residential uses of the adjacent high-rise buildings will hinder the existence of this community and is the antithesis of the proposed uses outline in the EPP for those adjacent to this community. FF-23

The 5th Avenue community is a historic as well as a community resource. The EPP recognized this and asked that there be more of this as stated in **EPP Policy OAK-4.1** *"Preserve and expand the existing Fifth Avenue Point community as a neighborhood of artists and artisan studios, small businesses, and water-dependent activities."* The proposed project does none of this. Again, there was no public input in any of the decisions of whether to expand this community or not; to retain or reuse the 9th Avenue Terminal, or not.[copy enclosed]

The proposed project only anticipates 8% retention of the 9th Avenue Terminal in contrast to the EPP policy: *"The Port and City should investigate the feasibility of keeping and reusing the building (or portions thereof). A Specific Plan for the entire District should be initiated prior to development. (See Policy Oak 5)"* This is such a major departure from the EPP that was again done with no public participation in the preparation of this plan. As an acknowledged historic resource owned by the citizens of Oakland – as is all of the project area land - the city must provide public participation in the planning of its reuse. FF-24

Such wholesale amendments to what in effect is the city's General Plan requires the same public participation as would be appropriate in the preparation of the General Plan. Further, the proposed project contains approximately 3100 living units, in stark contrast to the EPP that did not having housing in this area except for expansion of the 5th Avenue artisan community [5AC]. The proposed project, with height limits of over 80-feet adjacent to the 5AC, not only ignores the directive of the EPP to 'expand' this use, but actually inhibits its livability due to extreme shadows, and incongruent adjacent uses [i.e., residential uses next to quasi-industrial uses found in the 5AC.] FF-25

The EPP also states: "*"The plan proposes the large-scale transformation of the area from the Lake Merritt Channel to the Ninth Avenue Terminal into a mix of artisan work/live lofts, hotel, cultural and commercial-recreational uses that will complement the planned open spaces and parks along the water."*

The proposed project as reviewed in the DEIR does not have an artisan work/live loft district – an expansion of the 5th Avenue artisan community as called for in the EPP, no proposed hotel, no cultural or commercial uses – only some local serving commercial space; no cultural uses – the little remaining portion of the 9th Avenue Terminal is not appropriate for a city-wide cultural uses as evidenced by the project proponents specifically planning on not providing for large events such as concerts or festivals – events specifically cited in the EPP as to be designed into the use of the Oak to 9th Avenue project area. FF-26

Therefore, on behalf of all of the citizens of Oakland who have not had a chance to participate in the preparation of a Specific Plan for the project area, I request that the city initiate the preparation of a Specific Plan for the entire Oak-to-Ninth District as originally outlined in both the port's original RFQ and the developer's response [copies enclosed.] Until such Specific Plan is prepared – with proper public participation – this project review process, including but not limited to, the environmental review process and other hearings need to be held in abeyance. FF-27

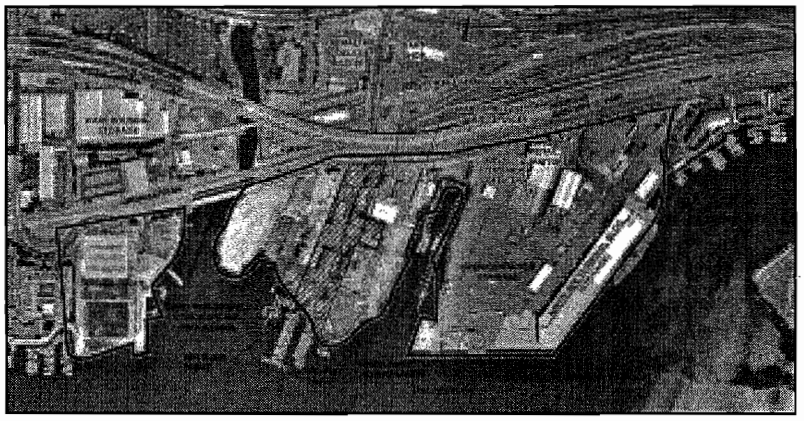
OAK-TO-NINTH - NEWS & VIEWS

THE LAST OPEN SPACE ON THE OAKLAND ESTUARY

VOLUME ONE SEPTEMBER 2005

THIS LAND IS YOUR LAND, THIS LAND IS MY LAND, THIS LAND IS MADE FOR ~~YOU AND ME~~ THE DEVELOPERS.

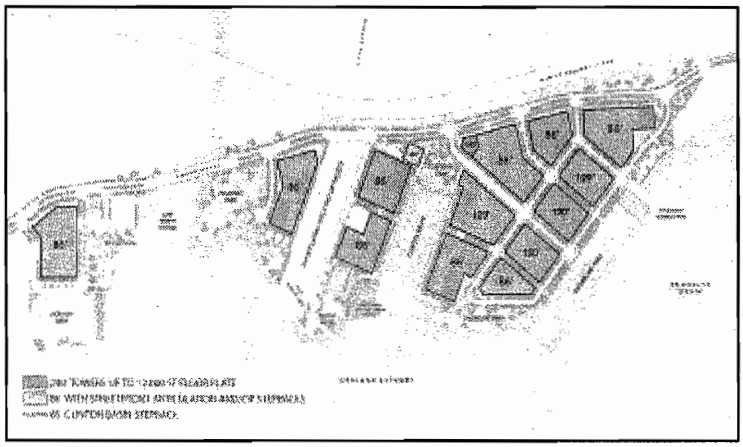
Some 60+ acres of prime waterfront land owned by the citizens of Oakland just south of Jack London Square known as the ":Oak-to-Ninth" district are about to become a private enclave. Originally part of the very working Oakland waterfront, where the fishing fleet from Alaska would winter anchor, this part of Oakland's Estuary coast is on the chopping block for development.



The Ninth Avenue Terminal was the first major project undertaken by the young Port of Oakland. Built in 1928-29, it was doubled to its present size of over four acres in the early 1950s. It is not only a proud historic resource but is still working hard today as storage for heavy crops.

The district is also home to the 5th Avenue artisan and business community. Most of this community resides on private property which is excluded from the developers project (and the local redevelopment district) and is under separate private ownership.

In 1999 the Oakland Planning Commission and the Oakland City Council approved the Estuary Policy Plan (EPP.) Divided into three parts, the Oak-to-Ninth area has extensive policies. The EPP calls for the creation of a Specific Plan prior to development.



After the EPP was approved, the Port of Oakland put out a Request For Qualifications (RFQ) for this area. In the Port's RFQ they mention the words 'Specific Plan' no less than 71 times! Obviously any possible developer knew that to get the gig, they had to be prepared to show they could do a bang-up job on a Specific Plan for this area. Not lost on the developer who got the gig, they hired the original EPP architectural/planning firm - Roma Design - to create a Specific Plan for the project area - the 120 acres of waterfront known as the Oak-to-Ninth District. The developer's response to the RFQ mentioned 'Specific Plan' 17 times. Seems they got the message, and ultimately, the gig to be the sole developer for this area.

Now on September 1, 2005, the city issued an Environmental Impact Report (EIR) on the developer's proposed project. Amazingly, there never was a Specific Plan made for this area. The Port and city somehow decided they didn't need one. What the Port and city officials seem to miss is that the reason for doing a Specific Plan is so the public may be involved! Now, all the public is allowed to do is complain about points in the EIR. Hardly a constructive way to do things.

Just doesn't seem fair, that after almost a century of industrial use the city takes two-years and spends a million-dollars to develop a policy plan with the participation of hundreds of Oaklanders, this land is about to be sold off to a developer who is doing his own thing.

Not to mention that the developer is skipping out on the essentials of the EPP and turning this area into a high-price high-towered gated-like-community with privately-maintained lawns all around the waters edge [EIR pg III-18]. (Not one street on the developer's plans from the Embarcadero has a water front view.)

The developers only tip of the hat to the public is to allow a small path along the water's edge. But don't linger for too long there. Looking down from the eight and twenty-four story towering buildings are the residents who paid handsomely for their water-view condo and the upkeep of that lawn your looking at [EIR pg III-18.] You can be sure they certainly won't want just anyone lingering under their windows on those lawns! <u>They're</u> paying for them, not you!

But to be fair, the developer is quite clear - as mentioned in the EIR - that they have no intentions of holding any events such as concerts or festivals [EIR pg III-18.] So Oakland, you had your chance owning waterfront property, so just bike off.

graphics from draft EIR prepared by the city of Oakland analyzing proposed project by developer

OAK-TO-NINTH - THE OL' BAIT, WAIT AND SWITCH!

First they lied.

To get the gig of being sole developers of Oakland's unique waterfront district, the developers wrote the vision they wanted us to see - a vision you will never see:

"We are looking forward to the opportunity of working creatively with the Port, City and community at large during the Specific Plan process. The development concept presented in this proposal has not been refined to plan level detail, as it is the belief of Oakland Harbor Partners that ***the next step*** must be preceded by an outreach program to develop input from the City, the Port and ***the community-at-large***. [emphasis added] However, we have formulated we have formulated some preliminary ideas on the basis of our own experience in, and commitment to, infill development and the recycling of underutilized urban land. More specifically, our goals include:

- The creation of a series of open spaces and promenades along the estuary shoreline, with linkages to Estuary Park and Jack London Square, Lake Merritt and Lakeside Park;
- The activation of the area's diverse water spaces with a range of appropriate recreational and maritime activities, including revitalized marinas, guest slips, provisions for water-borne transit and taxis, and open water for boating, rowing and other aquatic sports;
- The introduction of waterfront-oriented retail and marine services that have a strong local and regional character, including a major market-place that features California produce and local products;
- Uses that complement and enhance the existing artisan community at 5th Avenue Point, with complementary uses including studio and workshop space, galleries, live-work lofts, and the potential for a related educational and cultural institution;
- A new neighborhood to provide a full range of living opportunities including apartments, condominiums, live-work lofts, townhouses and studios; and
- The possible preservation and re-use of some or all of the Ninth Avenue Terminal for a mixture of commercial and community-oriented uses that maintain the historic character of the Oak to Ninth area.

Views to the waterfront from upland areas and I-880 will be essential in creating value and preserving the character of the Oak to Ninth area. The scale and pattern of new development will need to maintain and create new view corridors to the estuary, while establishing a "fabric" of buildings that form an interactive urban environment. We envision low and mid-rise buildings that frame views and reinforce and define open spaces, promenades and streetscapes within the plan area.

We envision buildings that are respectful of the site's maritime heritage, and that employ forms and materials that recall the bold warehouse sheds and industrial structures of the working waterfront. Rather than a series of individual development projects, we envision a cohesive new district that draws its identity and sense of place from the synergy of public-spirited activities. We envision a unique district that draws on the qualities of the site and the region–a district that combines the home grown commercial vitality of Pike Place Market in Seattle or Granville Island in Vancouver, with the mixed-use/residential qualities of River Place in Portland or the South Beach neighborhood in San Francisco. We envision a district with a diversity of open space experiences including parklands with open vistas to the estuary, performance and gathering spaces, promenades that provide continuous public shoreline access, and protected courtyards and paseos that offer a range of more intimate public experiences. We envision a district that will complement the activities and retailing of Jack London Square rather than duplicating or competing with them."

FAMOUS MOVIE QUOTES ABOUT SPECIFIC PLANS

"Specific Plans? We ain't got no Specific Plans. We don't need no Specific Plans. I don't have to show you no stinking Specific Plans." – said the developer to the city in **"Treasure of the Oak-to-Ninth."**

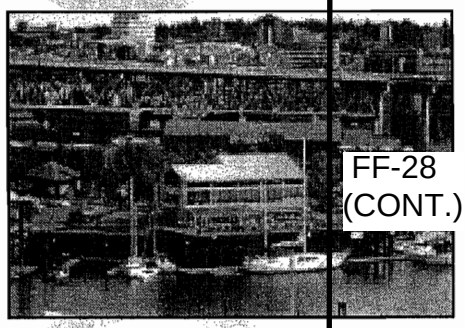
from pages 40-42 of 50 of the developer's written response to the ports RFQ

from pages 44 of 50 of the developer's written response to the ports RFQ

Then they cheated.

In their written response to the ports RFQ for developing this area, the developers sucker-punched the public. Not only did they list the Roma Design Group as one of their design consultants (Roma was the main design consultant for the Estuary Policy Plan - at a cost of a million dollars of consultant and staff time)t they specifically noted they had commissioned Roma to prepare a Specific Plan for the project:

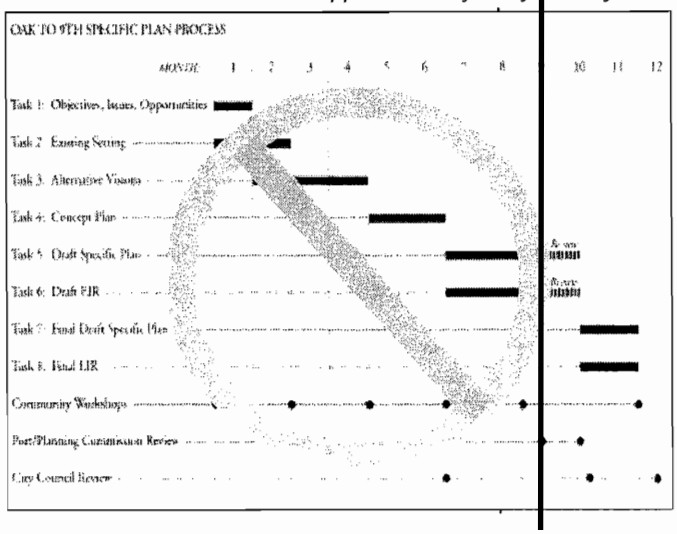
"For the Oak to Ninth area, the Specific Plan will include the entire ***120 acre*** [emphasis added] planning area on both sides of the Embarcadero. This will be important in establishing the context for planned waterfront development, and in ensuring future activity linkages between the city and the estuary. Oakland Harbor Partners has commissioned ROMA Design Group, an internationally recognized design firm specializing in waterfront redevelopment to lead the Specific Plan process. They will be supported by McLarand Vasquez Emsiek & Partners and Michael Willis Architects and an EIR consultant acceptable to both City and Port staffs that has experience in handling projects of this magnitude.



FF-28 (CONT.)

The Specific Plan process affords us the opportunity to create a meaningful dialogue with the Oakland community regarding the future of this key waterfront asset. Community outreach will be an important aspect of our Specific Plan process. At the outset of the planning process, we will undertake a community-wide symposium with key individuals and groups who have a stake in the future of the area, including community and business representatives, property owners, tenants, members of the 5th Avenue Point community, policy makers, etc.

The public enthusiastically supported this developer's proposal as superior because they would be holding a series of public workshops every two months for eleven months to slowly and publicly develop a Specific Plan for the area. The developers provide an elaborate chart that clearly showed the meeting schedule. None of this ever happened - it's just eye candy.



Picture of Granville Island, Vancouver provided by developer in their response to RFQ

Time-line chart provided by developer page 46 of 50 of the developers written response to the ports RFQ

now they are about to steal.

The original RFQ put out by the port only proposed to lease areas of the land to developers. These would be very long term leases - common in major real estate deals - long enough that one can get regular financing because the lease could go for 50 years.

But even a lease of that length means that eventually, the control of the land returns to the citizens of Oakland. A wise move. In fifty years, the children of today's Oakland children will be on the city council. Things will have changed enough that they may want to do something else with the waterfront. Good for them.

Whoa Nelly, what's this? Apparently the 'wise' city fathers and mothers are prepared to sell the land to the developer!

FAMOUS MOVIE QUOTES ABOUT SPECIFIC PLANS

"Round up the usual suspects." – from the EIR scene in the movie **"Cause-a-Blank-a in Oakland"**

Land in Oakland is going for $1-2 million and even more per acre these days. Rare waterfront land should be 2-3 times as much. This would mean that the 60+ acres of the Oak-to-Ninth district waterfront land should be worth $200 million or more. The selling price [after 'discounts such as the 'cost' to demolish Ninth Avenue terminal - and who asked for that?) is about $18 million. And as if that is not a steal-this-land price, it has been reported the developer will be asking for $20 million from the redevelopment agency. In otherwords Oakland will pay the developer $2 million to own the land. Amazing what bargains are available.

one great Big Brown Field

It is not hard to see that Mayor Brown's footprints are all over the stomping out of the Estuary Policy Plan. The developer has completely turned the EPP on its head. The essence of this area in the EPP was to be the one place in Oakland that could work for large public gatherings. Away from bothering housing, large Estuary Parks will serve Oakland well in the coming century as it grows into the urbane center it is meant to be.

FAMOUS MOVIE QUOTES ABOUT SPECIFIC PLANS

"You've got to ask yourself one question. Do I feel lucky? Well, do ya, city?" – the scene where the Developer is showing the City their plans in **"Dirty EIR"**

But the developer's plans - showing shadows of the Mayors '10k' housing program - is not the way to go. Unfortunately, the mayor's housing policy has apparently given the green light to this developer. The EIR say this is now policy.

It's time for the developer to put on the brakes, take a deep breath and go back and do what they said they were going to do - prepare a Specific Plan for the entire area of the Oak-to-Ninth district - all 120 acres - and not just their 'project area.'

Where the heck is 5th avenue?

The original proposal by the developer was in the spirit and direction of the Estuary Policy Plan. The EPP asked that the 5th Avenue community be expanded:

"OAK-4.1: Preserve and expand the existing Fifth Avenue Point community as a neighborhood of artists and artisan studios, small businesses, and water-dependent activities."

Photo of 5th avenue used in both EPP and developers response to RFQ

FF-28 (CONT.)

The developer went so far as to include this same photo of the 5th Avenue artistic enclave in their own presentation. In their submission they went on to say:

"To the west of Clinton Basin, we would propose activities that complement and extend the 5th Avenue Point community, including additional commercial space, live-work studios and workshops, galleries, and the possibility of an educational institution that is oriented to the visual and/or performing arts."

Now we learn in the EIR the developer plans to surround this community with eight story buildings- hardly following the EPP. Only a Specific Plan process can resolve these issues for the developer, the city and port, the neighborhood and all of Oakland.

parking? what parking?

chart from draft EIR - page III-16

TABLE III-5

PROPOSED ONSITE PARKING SUPPLY

Parking	Ratio	Minimum Parking Spaces
Covered Residential Parking	1 space per unit	3,100
Covered Parking for Retail/Commercial Use	1 space per 500 sq.ft. of floor area	400
Covered Parking for Marina Use	1 space per five marina slips	34
TOTAL		3,534

While the EIR states the developer does not intend on holding any festivals or events in the Oak-to-Ninth district, the lack of parking will preclude anyone from ever suggesting such an idea - a true lack of public access.

Where's the Beef?

It's pretty simple. If the citizens of Oakland don't stand up and make themselves heard, a developer with plans of their own is going to own the last large chunk of Oakland waterfront. What is truly amazing is the way the developer got to be the chosen one: they almost bragged on how they were going to let Oaklanders participate in the planning process. Never happened.

FAMOUS MOVIE QUOTES ABOUT SPECIFIC PLANS

"The stuff that dreams are made of."
– at the end of the movie after the Planning Commission had approved the developer's project, when asked what all the fuss was about a Specific Plan in **"The Maltreated Oakland"**

Using the age-old Oakland developer technique of 'wait and switch' - they just went into hiding for a few years and came out with a plan all their own.

The EIR now produced by the city is almost 1000 pages! But dissecting this tome is not the way to go - not if the waterfront development is to be for Oakland, and not some out-of-town developer to cash in on.

The Specific Plan process is an open, public invited process. The city and developer know there is a state law on how Specific Plans are to be created, and they know it would be hard to exclude the public.

If the public wants to have a say, they need to say so. Otherwise, the developer is going to privatize the last great piece of Oakland waterfront.

Estuary Plan – What Estuary Plan?

The proposed project – created with no public input – has very little to do with the adopted Estuary Policy Plan. The city is not bashful about this. The EIR clearly lets you know they've dumped the EPP:

"The project would not be consistent with the existing land use classification or the existing zoning and would require a General Plan Amendment and Rezoning to accommodate the proposed densities and residential uses."

from draft EIR - CHAPTER II – Summary - A. Project Description

Specific Plan? What Specific Plan?

*In a chapter titled **'Specific Plan Process'** the developer clearly explained what was to be done:*

"Under California law, a Specific Plan is intended to implement the policies of a community's General Plan, by providing more specific direction on: the location, type, mix and intensity of land uses and open space; the configuration and pattern of transportation facilities; the public services, facilities and infrastructure necessary to support new development; standards and guidelines that promote community design objectives; and an implementation program that describes the phasing, financing and regulatory actions necessary to realize the plan."

from developer's response to RFQ

FAMOUS MOVIE QUOTES ABOUT SPECIFIC PLANS

"You don't understand! I coulda had class. I coulda had a Specific Plan. I could've had something, instead of a bum design, which is what I got." – from the movie **"On the Oakland Waterfront"**

The Specific Plan process also requires public input in its preparation, something ignored by the developer.

Where are we going and how are we going to get there?

Here we go again. Once again the city seems to think that Oaklanders should not have any say in the way Oakland can be developed! The developer (and the city and the port) need to know that they have to do a Specific Plan - as originally promised and discussed - just like they said they would.

FAMOUS MOVIE QUOTES ABOUT SPECIFIC PLANS

"We won't have much in Oakland, but we will always have Paris." – from a scene in **"Cause-a-Blank-a in Oakland"**

It is no accident the Port mentioned 'Specific Plan' seventy-one times in its RFQ! The developer did not come to this with eyes wide shut. Responding to an EIR for a project that has had no pubic input is not the way to go.

Who ya goin' to call?

Oakland City Council contacts:

FF-28 (CONT.)

Nancy Nadel (District 3)
nnadel@oaklandnet.com (510) 238-7003

Henry Chang (at-large)
cityyochang@aol.com (510) 238-7008

Desley Brooks (District 6)
dbrooks@oaklandnet.com (510) 238-7006

Pat Kernighan (District 2)
pkerringighan@oaklandnet.com (510) 238-7302

Larry Reed (District 7)
lreid@oaklandnet.com (510) 238-7007

Jean Quan (District 4)
jquan@oaklandnet.com (510) 238-7004

Jane Brunner (District 1)
jbrunner@oaklandnet.com (510) 238-7001

Ignacio De La Fuente (District 5)
idelafuente@oaklandnet.com (510) 238-7005;

Mayor Jerry Brown
officeofthemayor@oaklandnet.com 238-3141;

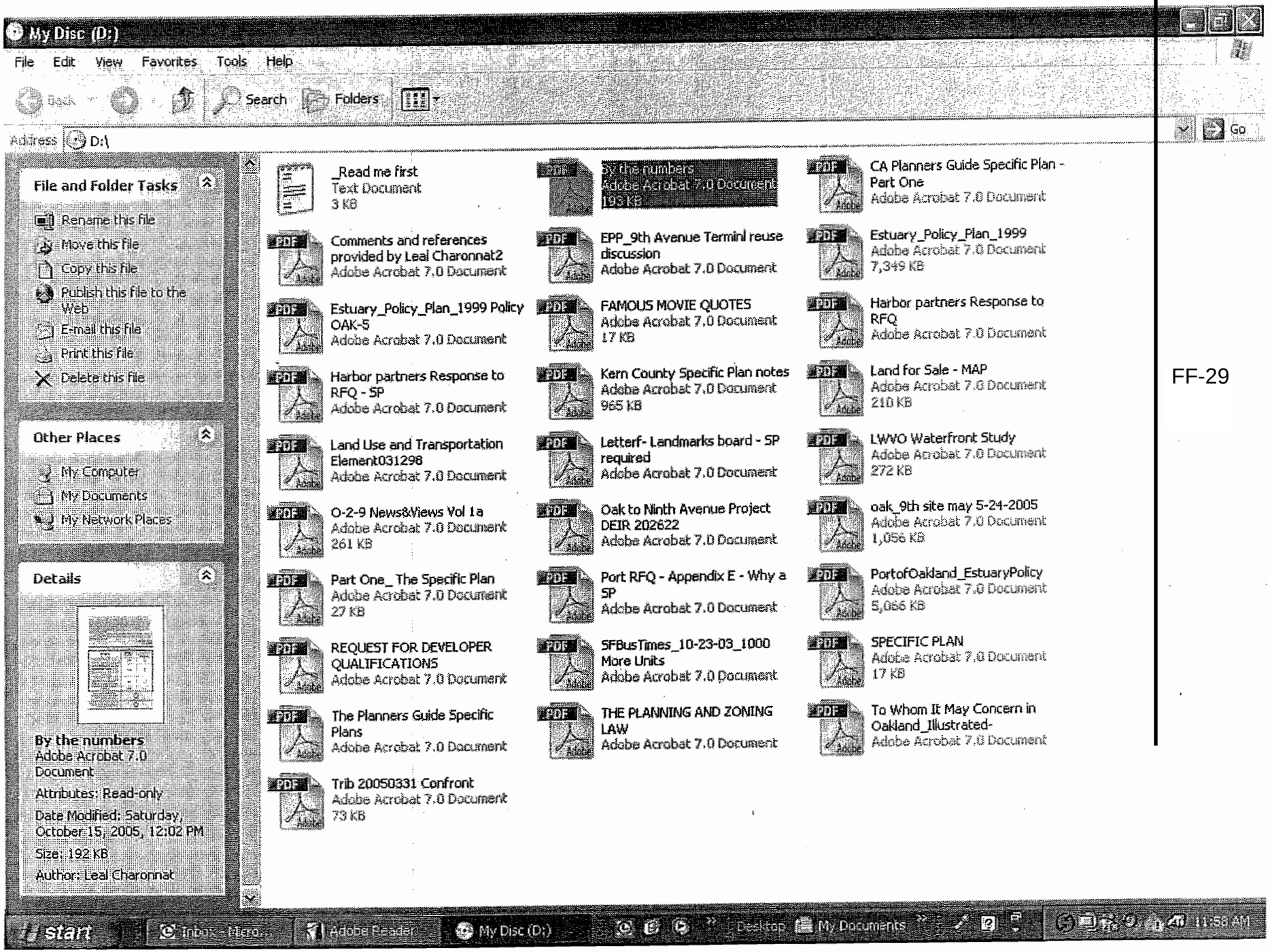
City administrator Deborah Edgerly
cityadministrator@oaklandnet.com
(510) 238-3301 fax. (510) 238-2223.

You can write to all of the above at

One City Hall Plaza, Third Floor
Oakland, CA 94612

This is personal - and political. *At this time only the City Council members have enough clout to slow down this project and require the developer to create a Specific Plan - the one they said they would do in the first place. Then all of Oakland may have a hand in the design of how this last piece of Oakland waterfront will be used.*

THE FOLLOWING LIST OF DOCUMENTS ARE INCLUDED IN THE COMPACT DISC THAT WAS SUBMITTED BY LEAL CHARONNAY WITH HIS COMMENTS ON THE OAK TO NINTH DEIR



FF-29

Letter FF - Leal Chardonnay, Architecture + Engineering

FF-1 See Master Response A regarding preparation of a specific plan.

FF-2 The comment suggests that the project would preclude "large civic gatherings." See Response to Comment Z-2.

As stated on DEIR p. IV.A-37, the Estuary Plan provides a residential density for the project area although it does not explicitly identify residential as an allowable land use activity. As stated on DEIR p. IV.A-16, the project does not propose changes or expansion of the "local artisan community," (Fifth Avenue Point).

FF-3 The comment states an opinion that the Ninth Avenue Terminal deserves to be reused as both a cultural and financial resource. The analysis in Chapter V (Alternatives) of the DEIR includes alternatives that retain all or part of the Ninth Avenue Terminal. The information in the DEIR and this FEIR document, together with supplemental information prepared for the project and the alternatives (separate from this environmental document), will allow City decisionmakers to evaluate and balance the cultural and financial considerations and opportunities raised by the comment prior to taking action on the proposal.

FF-4 See Master Response A regarding preparation of a specific plan.

FF-5 The project analyzed in the DEIR is described in text, tables, and graphics in Chapter III. The description of proposed buildings heights and a project height variant is provided on DEIR pp. III-8 through III-10, Tables III-3 and III-4, and Figures III-5 and III-6. Additionally, a series of photographic visual simulations of the project are provide for purposes of the EIR analysis, Figures IV.K-2 through IV.K-19 that accurately depict the scale and height of the project in context with existing structures and buildings.

FF-6 The comment is noted and does not address the adequacy of the DEIR analysis or topics related to CEQA. However, with regard to the DEIR's purpose, it is to "clearly explain to the public what the Estuary Policy Plan called for and how the developer's project was in conflict," in addition to how it may be in compliance. Also, the DEIR process benefits from public input, which allows the scope of issues addressed in the document to respond to those issues of particular concern to the community, as appropriate under CEQA.

FF-7 The comment is correct in that the project sponsor is not proposing to hold events (such as concerts or festivals) at the project site (DEIR p. III-18). As previously stated, this does not preclude other entities from sponsoring such organized events at the new public open spaces created by the project, subject to City approval. The purpose of the DEIR is to provide adequate information about the factors that the City would consider (to the extent that they address potential impact to the environment under CEQA) when considering public events on the project site.

FF-8 The comment is noted and does not raise issues with the adequacy of the analysis in the Draft EIR or issues under CEQA.

FF-9 The comment is noted and does not raise issues with the adequacy of the analysis in the Draft EIR or issues under CEQA.

FF-10 The comment describes an alternative to the project that retains the Ninth Avenue Terminal building. See Response to Comment K-3.

FF-11 The comment suggests a frequency and degree of maintenance that would be required for the proposed project without substantial evidence. As discussed in Response to Comment S-8, the frequency and type of maintenance of the pier structure would not be different if the building is retained or an open space is constructed.

FF-12 The comment is noted and accurately describes the general jurisdiction of BCDC on the project site.

FF-13 The comment is noted and does not raise issues with the adequacy of the analysis in the Draft EIR or issues under CEQA.

FF-14 See Response to Comment U-11.

FF-15 The comment is noted and does not raise issues with the adequacy of the analysis in the Draft EIR or issues under CEQA.

FF-16 The comment is noted and does not raise issues with the adequacy of the analysis in the Draft EIR or issues under CEQA. As of publication of this Final EIR, a public hearing is scheduled before the Planning Commission as indicated on the notice in the front cover of this document.

FF-17 The comment is noted and accurately indicates City contact information for submitting comments on the Draft EIR.

FF-18 See Master Response A regarding preparation of a specific plan.

FF-19 The comment is noted and does not raise issues with the adequacy of the analysis in the Draft EIR or issues under CEQA.

FF-20 The comment asserts that the project open space violates Government Code § 65561, which sets forth the State's policies encouraging public agencies to plan for, and implement actions to ensure, the preservation of open space. The City has complied with this provision and related Government Code provisions through the adoption and implementation of the Open Space, Conservation, and Recreation ("OSCAR") Element of the City's General Plan. These Government Code provisions do not apply to specific projects. If the City approves the project, it will be required to find that the project is consistent with the General Plan, including the OSCAR Element. Although the DEIR

states that the project sponsor would not be proposing to hold any concerts, festivals, or other large events at the open space areas, other entities or community groups could apply for the appropriate City permits and approvals to conduct these types of community events at the open space in the project site.

FF-21 See Response to Comment FF-7. To the extent that aspects of the project design (open space location or size, parking, proximity to residential uses, etc.) do not align with the degree of "large civic-like events" that the City envisions on the project site, the City decisionmakers on the project have the discretion to modify or deny the project, or opt for one of the alternatives in the DEIR that more closely aligns with the City decisionmakers' vision related to this topic.

FF-22 See Master Response A regarding preparation of a specific plan.

FF-23 The DEIR addresses impacts and mitigation measures regarding potentially significant impacts to the Fifth Avenue Point community in Impact A.1 (physical community division) on DEIR p. IV.A-35 and Impact A.3 (land use compatibility / change in environment) on DEIR p. IV.A-40. The project's compliance with Estuary Policy Plan Policy OAK-4.1 is discussed on DEIR p. IV.A-16, and its compliance with overall neighborhood (N) policies in the LUTE Element of the General Plan is discussed on DEIR p. IV. A-9.

First, Mitigation Measure A.1, identifies a number of site planning considerations that address the impact resulting from the project "developing new and different uses and buildings immediately adjacent to Fifth Avenue Point…." The impact discussion recognizes that the project would not "divide" the core of uses within the Fifth Avenue Point, but would separate it from its existing industrial/manufacturing district. Measures that aim to minimize this physical division include effective pedestrian and bicycle connections between the project and Fifth Avenue Point, and the provision of appropriate buffering. The Fifth Avenue Point parcel is located in the middle of, but is not part of, the Oak to Ninth Avenue Project site and is not likely to be acquired for inclusion in the project site. The deliberate implementation of the mitigation measures identified are expected to effectively create as much physical and visual integration as is feasible given the varied character and land uses between the two areas.

The comment asserts that the project highrises would "completely overshadow" and "hinder the existence" of the Fifth Avenue Point community. First, the visual and shadow analysis in Chapter IV.K (Visual Quality and Shadow) of the DEIR find the projects impacts related to these topics are less than significant based on the significance criteria of established by the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines. In particular, the shadow impact conclusion on DEIR p. IV.K-62 describes that, although Fifth Avenue Point would be partially shaded in the morning hours most of the year, the shaded area would subside by mid-morning to noon. This does not constitute an "unreasonable blockage of light," thus the less-than-significant impact is appropriate.

The statement that the project would hinder the Fifth Avenue Point community's existence is speculative since there is no evidence to suggest that the project would create physical effects that would be detrimental to the Fifth Avenue Point area – an area currently adjacent to intensive uses that include a mix of light industrial, service uses, a major concrete mix manufacturing operation, and no direct useable waterfront open space.

FF-24 The comment states that the project proposal to retain 8 percent of the Ninth Avenue Terminal is a "major departure" from the Estuary Policy Plan. As described in DEIR Chapter III (Project Description), the project proposes to retain a minimum of 15,000 square feet of the 180,000 square-foot structure.[6] This is not a major departure from the Estuary Policy Plan and aims to balance the potentially competing objectives laid out in the Estuary Policy Plan. While the supporting text of Estuary Policy Plan Policy OAK-2.4 recognizes that all or portions of the Terminal may be suitable for rehabilitation and adaptive reuse and that further study, and that initiation of a specific plan should occur prior to development, Policy Statement OAK-2.4 and illustrative graphics throughout the Plan foresee a large park in the area of the Terminal with no portion of the structure retained (recognizing that the structure currently impedes public access to and views of a key area of the Estuary). A significant and unavoidable cultural resources impact resulting from potential demolition of the Terminal is identified in the Estuary Policy Plan EIR and the City adopted a statement of overriding considerations for this impact (among others).

FF-25 See Response to Comment FF-23 regarding shadow impacts and consistency with Estuary Plan Policies related to Fifth Avenue Point.

FF-26 The comment identifies a number of characteristics that the Estuary Policy Plan envisions for the Oak to Ninth Avenue District, and which the comment asserts the project fails to provide. The comment correctly observes that the project does not propose "an expansion of the 5th Avenue artisan community" or a hotel. The project proposes approximately 200,000 square feet of commercial retail use, and all proposed reuses in the retained and rehabilitated Bulkhead Building would include "Tidelands Trust uses such as community, cultural, or recreational (i.e., public meeting rooms, banquet/festival space, or museum space focused on the cultural and maritime history of the Oak to Ninth Avenue area and the Ninth Avenue Terminal)."See Response to Comment FF-7 regarding "future large events such as concerts of festivals" on the project site.

FF-27 See Master Response A regarding preparation of a specific plan.

FF-28 Comment FF-26 is the Oak-to-Ninth – News & Views newsletter. The document does not address the adequacy of the Draft EIR analysis or potential impacts to the physical environmental impacts under CEQA. The comment describes the following: the history

6 Approximately 18,000 square feet of Tidelands Trust uses were assumed to be located in the retained Terminal Bulkhead Building for purposes of the EIR analysis.

of the project site and its key elements (e.g., Ninth Avenue Terminal and 5th Avenue artisan and business community); the Port of Oakland Request for Proposals (RFP) process and the project sponsor's response submittal; assertions about the appropriate land costs for the project site; how the proposed project (analyzed in the DEIR) varies from the project sponsor's RFP submittal; the proposed parking supply as presented in Table III-5 of the DEIR; the proposal for a General Plan Amendment and Rezoning; and Oakland City Council contact information. Overall, the comment describes evidence of its position that a specific plan for the area should be prepared, which is responded to in Master Response A in this document.

FF-29 The comment includes a list of references cited or used in the preparation of the comment. Except as noted below, each of the documents identified is available for public review at the City of Oakland, Community and Economic Development Agency, Planning Department, associated with Project No. ER04-009.

COMMENT LETTER GG

EAST BAY REGIONAL PARKS FOR THE FUTURE PARK DISTRICT

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City of Oakland
Planning & Zoning Division

Magaret Stanzione, Project Planner
City of Oakland
Community and Economic Development Agency
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

RE: Comments on DEIR, Oak to Ninth Avenue

Enclosed please find my comments on the DEIR. They represent my own views, not that of the Park District. They are arranged by pages of the DEIR sequentially. There is some repetition because some of the same or similar points are made at different points within the DEIR. Since the document, along with the process of amending the General Plan, is deemed by the drafters to be the equivalent of the Specific Plan called for by the Estuary Policy Plan (EPP), comments are more extensive than what might be expected only for a DEIR. GG-1

Presumably, a Specific Plan would attempt to plan for the optimal project and not simply respond to the proposed project. That should be the goal of the Planning Commission and City Council.

Since the Estuary Policy Plan was adopted only six years ago after an intensive study of the site by consultants and an advisory committee, and since it now forms part of the City's General Plan, all of the various issues discussed in the DEIR should be compared to the EPP. Specifically, each of the subjects in section IV (A thru N, inclusive) should examine the EPP, as well as the project, and compare them. GG-2

My principal objections to the Project and the DEIR which justifies it: GG-3

1) Failure to prepare a Specific Plan;
2) Elimination of about 40% of the open space called for by the EPP;
3) Blockage of existing views from the Embarcadero by curving streets and numerous bulky buildings. The proposed density is excessive.

Very truly yours,

John Sutter

John Sutter
Director, Ward 4

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Comments of John Sutter on Oak to Ninth Avenue Project

Draft Environmental Impact Report (DEIR)

Comments are referenced by page number of the DEIR. Questions are not rhetorical but are requests for additional information to be included in the final EIR. Most phrases in quotes are from the DEIR text.

II-3 Alternative 1-B: "No Project/Estuary Policy Plan"

Why is the Estuary Policy Plan (EPP) "No project?" Is it because it is so radically different from the project that it cannot be considered an alternative to it? If so, how does that square with the conclusion that the project is consistent with the EPP? (IV.A-13) Is it designated "No Project" because it is deemed financially unfeasible? If so, where is the financial analysis to so indicate? GG-4

II-39 What are the compensatory measures for mitigation of loss of waters of the U.S. including wetlands? Where will the mitigation through wetland creation or enhancement, if on site, be located? Where will additional wetland creation or enhancement offsite take place? GG-5

III-6 et seq. Project Characteristics. This section fails to discuss ultimate ownership of the public areas in the project. Who will own the parks, marinas, Ninth Avenue Terminal or its remnant wharf – the Port, the City, a homeowners association? If assessments on owners are not sufficient to pay for maintenance, who will pay? Who will be be liable for fines or any repairs mandated by regulatory agencies? GG-6

III-12 Proposed open space. The project's 20.7 acres of new open space would be reduced by approximately 2 to 4 acres if the Ninth Avenue Terminal is retained in its present condition, rather than a portion of it converted to open space as proposed by the project. The relevant acreages and percentages of new open space in the project and in the EPP should also be stated here. New open space in the project is stated as 19.25 acres, not 20.7 acres at V.37. GG-7

III-16 The use of the name "Gateway Park" will cause confusion. The East Bay Regional Park District is planning a park by that name at the eastern touchdown of the new Bay Bridge at the former Oakland Army Base site. There is a commitment for a Public Benefit Conveyance from the government for that purpose. Having two parks with the same name in Oakland would cause confusion. GG-8

III-18 Maintenance of the open space by a public agency is critical. The alternative of a project homeowners association or any kind of agency which is operated by the ultimate owners will work to the disadvantage of the public GG-9

generally. There would likely be a tendency to privatize the public open space by limiting access to certain hours and limiting activities to those that are of special interest to the residents; perhaps, for example, tennis courts may be installed in lieu of turf areas for pickup soccer games. How will this outcome be avoided? What measures are recommended to guarantee that the area will be truly public? GG-9 (CONT.)

There will be a special problem at the Jack London Aquatic Center which now has reasonably adequate parking. The proposal to build apartments and commercial space next door on parcel M is likely to interfere with JLAC usage. Apartment residents and commercial clients will probably use parking space now used by JLAC. Proposed mitigation: eliminate construction on Parcel M; retain it as open space, thereby opening up of Estuary Park to Embarcadero as proposed by the EPP. GG-10

III-18 What else would need to be financed by the selected maintenance financing scheme? Shuttle service? Maintenance of the pilings and wharf of the Ninth Avenue Terminal? The terminal itself? Marinas? GG-11

III-18, -19 "However, it is possible that in the future, upon further review and approval by the City of Oakland, entities could sponsor such organized events in new pulbic spaces created by the project." One of the goals of the EPP was to provide space for festivals, but that vision is lost in this project. It proposes multi-story housing adjacent to any possible festival location. Thus, the mistake of locating Estuary Park next to Portobello, thereby terminating festivals that used to held there on Labor Day, will be repeated. Where are the most feasible sites to remove proposed housing so as to make festivals possible? Parcels N and M should be considered for elimination as housing sites for this reason. GG-12

III-19 "There would especially be improved public opportunities for recreational sailing, rowing, canoeing and kayaking." What facilities are to be provided for these activities, and where would the boats be launched? How would maintenance of such facilities be financed? GG-13

III-19 "The layout of the streets would lead to the water and open space areas, and each street would be landscaped and provide on-street parking for convenient use by the public." Actually, most streets would have curves in them, blocking views of the water from Embarcadero. This is contrary to the EPP. Suggested mitigation: redesign streets. GG-14

Whether parking is convenient for use by the public depends on whether it is adequate, which, as discussed later, it is not.

III-22 et seq. Construction of the parks and Bay trail is delayed until as late as 2018. Is there some way to phase these areas in sooner? The Bay Trail is particularly important because other segments in Oakland and the East Bay are now being completed. GG-15

III-24 "Provide a mixture of dwelling sizes and types, including rental and for sale units." What is the proposed breakdown of rental units versus for sale units? What is the projected sale price of the for-sale units and the projected rents of the rental units? GG-16

III-25 "The project minimizes the use of public funds." But is this in the public interest when the City has not only adopted the EPP, but the voters approved Measure DD by an overwhelming 80% majority. That measure called for $53 million for waterfront improvements. The City Council has allocated up to over $14 million for expanding Estuary Park to Embarcadero by demolishing the Jetro Cash and Carry warehouse. Estuary Park was specifically mentioned in the DD ballot measure, as was Meadow Park, renamed Channel Park by the developer. That park is also significantly reduced in size in the developer's plan. Thus failing to develop these two parks as shown by the EPP not only violates the EPP but is contrary to the spirit of Measure DD. Assuming DD funds are not spent in the project area, where will they be spent? GG-17

III-28 "The City's approval of the project will be conditioned upon subsequent compliance with the provisions of SB 1622." That legislation requires an exchange of lands from which the public trust is lifted for other lands. In order to make sure that such an exchange takes place, the condition should provide that the exchange is completed <u>before</u> the project can proceed. The Port is continuing to offer for sale Estuary lands which might be suitable for the exchange. Unless there is a condition precedent, the exchange language may become meaningless. SB1622 requires public meetings to review the exchange. When will they take place? Before project approval? GG-18

IV.A-7 LUTE Policies. Buildings "should respect scenic view sheds and enhance opportunities for visual access of the waterfront and its activities." But the numerous bulky buildings of the project will block the waterfront and will continue to hide Estuary Park as a "stealth" park. Would a smaller number of buildings and construction of slender towers rather than bulky six- to eight- story buildings open up views of the water from the Embarcadero? Alternate designs with simulations should be included in the EIR. GG-19

Developments should avoid the "feeling of 'gated' or private communities." In fact, however, the project will do just that. GG-20

"...[D]evelopments along the estuary should be lower intensity than Jack London Square." The density is significantly higher. GG-21

IV.A-9 "The City would evaluate the appropriateness of the 'node to higher intensity'...and would assess the extent to which the project [provides] 'an open feeling at the marina, view opportunities, and public access along the shoreline." This DEIR proposes to serve as a substitute for the Specific Plan called for by the EPP, yet carefully avoids expressing an opinion on these important open space GG-22

density and view issues. Why? No such reluctance is noted when listing the alleged positive aspects of the project: for example "would allow for additional and expanded views of open spaces, ""new development would not be detrimental to adjacent residential communities," and would "enhance Fifth Avenue Point." GG-22 (CONT.)

IV.A10 "...The project would encourage public access...." But what about parking? Unless parking is adequate for residents, commercial users and park visitors, the access would be greatly limited. GG-23

"A public shuttle service...would be incorporated into the development..." How is this to be financed? A promise of a transit shuttle is meaningless unless a permanent long term method of financing the operation of the service is included in the project. Is the maintenance cost to be included in a proposed assessment to be paid by the ultimate owners? If so, will the owners be able to decide they don't want to pay for the shuttle service, in which case it will be shut down? How can that outcome be avoided? GG-24

IV.A-11 Permitted floor area ratio is explained but not compared with that proposed by the EPP in an understandable way. For example, at build-out will the project have four times or ten times the floor area likely under the EPP? GG-25

IV.A-13 The project "would be consistent with most Estuary Plan policies". This conclusion is unreasonable.

First, the EPP envisioned this area to be "the major recreational destination in the City" EPP 86. That vision is lost in the project. Second, Estuary Park was to be extended to the Embarcadero, no longer hiding as a "stealth" park. The importance in opening up the estuary to the public is minimized in the DEIR. Third, there is about a 40 percent reduction in the amount of new open space is the EPP as compared to the project. Moreover, the open space will be further reduced if the alternative of continuing usage of all or one-half of the Ninth Avenue Terminal is adopted. Fourth, the density of the project is far greater than that anticipated by the EPP. A readily understandable explanation of these density differences is needed here. Fifth, the dominant purpose called for by the EPP, recreation/commercial, is entirely different from that of the project, residential. Sixth, the EPP opened the water to the public by designing all streets leading to the water, so that the estuary would be visible from the Embarcadero; the project cuts off views by curves in most streets as pointed out above. Seventh, given much greater density, parking will be a problem for park users unlike the proposals of the EPP. Eighth, the EPP called for creation of areas for festivals; the project, with its 3,100 residential units, would rule out festival use. Ninth, the EPP called for creating a Specific Plan, a process which would have provided extensive input by the public, the Planning Commission and the City Council in the planning process; the project proposal avoids that important step. GG-26

"The City decision makers will be required to make a determination ... as to whether the new land uses... are appropriate...." Here again, since this document and the process of its adoption purport to be a substitute for a Specific Plan, there should be a specific recommendation. GG-27

IV.A-16-17 Specific Planning. This section argues that the DEIR process is an adequate substitute for the Specific Plan called for by the EPP. But the conclusion that the project is "based on basic principles of the Estuary Plan" is not sustainable as pointed out above. Also, the policies were not "developed through a focused planning effort of community and public partnership". In fact, the project plan was developed before there were <u>any</u> City-sponsored public hearings. Also, a Specific Plan would presumably be carried out to focus on the <u>optimal</u> development of the Oak to Ninth area, not as a response to a specific developer's proposal. The procedure adopted has had the effect of preventing input of the public, the Planning Commission and the City Council that the Specific Plan preparation would have provided. GG-28

"The City and the Port of Oakland have elected not to prepare a Specific Plan." But preparation of a Specific Plan is mandated by the EPP, which is part of the General Plan. The General Plan is amended by the City Council only after public hearings by the Planning Commission and the Council. Who made this "election" and under what authority? Was a resolution to this effect passed by the City Council? Was the Planning Commission notified of this election?

An analysis of this issue by Leal Charonnat is attached and incorporated herein. The EIR should respond to the points it raises. GG-29

IV.A-20 "The project would not conflict with OSCAR policies." But as pointed out at IV.A-19, OSCAR calls for 10 acres of total parkland per 1,000 residents. 5,000 residents are anticipated in this project; therefore 50 acres of new parkland would appear to be required to meet OSCAR guidelines. The developer is proposing 20.7 acres of new parkland, to be reduced by two to four acres if the Ninth Avenue Terminal is wholly or partially preserved. While the OSCAR's goals cannot be reached in most projects in Oakland, a much closer approximation is possible and should be achieved in this site, which is publicly owned and now devoid of residential uses. The DEIR finds no conflict by assigning all the park acreage to local-serving parkland. Is that reasonable? As conceded at IV.L-8, the area will attract regional use, not just local use. This issue is particularly important because of the meager amount of local–serving parkland available in Oakland, 1.33 acres per 1,000 population City-wide and only 0.78 acre per 1,000 population in the San Antonio District. GG-30

IV.A-31 refers to the Bay Plan requirement of adequate public parking for marinas. Will the parking be adequate, especially for those bringing boats to launch into the Estuary? GG-31

IV.A-32 The Bay Plan requires that views of the Bay be maintained, especially from "new streets to maintain and provide good views of the Bay" for travelers, particularly areas below roads coming over ridges and providing a first view of the Bay. The continued hiding of Estuary Park is particularly violative of this provision. So is the hiding of most of the Estuary by a mass of buildings and streets that curve, thereby blocking views of the water. GG-32

IV.A-33 The exchange agreement required by SB 1622, the Perata legislation. As pointed out above, the compliance should be required before the project begins construction. If the condition is for "subsequent compliance," how is that to be enforced? GG-33

IV.A-35 Impact on established community. The most effective means of mitigating the effect of project buildings on the existing community at Fifth Avenue and also Portobello is to eliminate portions of the project close to them, specifically sites N and M. Such mitigation should be evaluated. GG-34

IV.A-36 "The project would be consistent with most applicable General Plan policies." In fact, the project conflicts with the EPP, among other policies, as pointed above. GG-35

IV.A-37 General Plan Use and Development Standards. This discussion pointing out the inconsistencies with the General Plan as to residential use, density (apparently four times the density allowed by current law) should also be considered and stated in the section above "Project Consistency with Estuary Plan policies" starting at IV.A-13. There should also be an explanation of the difference in Floor Area Ratio (FAR) of the project as compared to that proposed by the EPP. GG-36

IV.A-41 Proposed Mitigation: "the project shall adhere to the regulations and standards of allowable uses, etc...." A more effective mitigation to address impacts on adjacent residential properties, including the Fifth Avenue Point and Portobello, would be elimination of residential units west of Fifth Avenue. This alternative should be addressed in the EIR. GG-37

IV.B-55 Transit Shuttle Service. See comment of IV.A-10. If it is to be financed by an assessment district on the ultimate owners, what other services will be included in assessments, such as maintenance of parks, Ninth Avenue Terminal wharf (with or without a park in lieu of the demolished terminal building), marinas, etc? Will the total assessments remain within a reasonable range? What will be the likely annual assessment on the typical condominium owner? Will those in the affordable units pay less? GG-38

IV.B-62 Suggested additional mitigation measure B.7. Design all streets east of the proposed Gateway Park so they provide views of the estuary from the Embarcadero. GG-39

IV.B-70 et seq. Parking Supply. There should be discussion of the number of parking spaces required for park users, the effect on parking of preservation of the Ninth Avenue Terminal, and a comparison on proposed parking under the project and the EPP. Parking needs to be addressed in the context of the likely income of the residents, which in turn relates to the likely sales prices and rentals of the units. Those with more income are likely to have more vehicles, and also boats which they may choose to store in their assigned parking area. What is the actual number of vehicles per dwelling unit in comparable Oakland projects? It is probably considerable more than the projected urban standard of 0.85 per unit. What is to prevent residents to demand that there be a permit parking system similar to what has been in place in other parts of the City? That would result in the reduction of spaces for park users and commercial users. Where will employees park? Will parking be placed in the open space areas? If so, doesn't this detract from that area as usable open space? To build this project with a shortfall of as much as 1,736 spaces is to effectively exclude many members of the public who are not residents of the project from using the proposed parks. GG-40

IV.F-11-16 "According to [ABAG] maps, the project site is in an area expected to have very high potential to experience liquefaction. Liquefaction…was cited as a concern…with the area known as the Crowley Yard identified with the most potential". The obvious mitigation measure is simply not to build on the most sensitive areas, apparently those west of Fifth Avenue. Please discuss this mitigation measure. GG-41

What measures will be provided to protect ultimate owners in the event of damage by liquefaction or settlement? Will a condition be included to require earth movement insurance, excluded by most homeowners' policies? Will there be a condition to require the developer to waive the 10-year statute of limitations which normally shields developers from claims arising 10 years after completion of construction? GG-42

IV.G-19-20 There will be an 11-year construction period and the project sponsor estimates that the number of piles will average 675 per parcel on the 13 parcels with a duration of 12 weeks per parcel. What is the anticipated and average and worst case effect on residents being exposed to this lengthy and extremely noisy environment? Will there be hearing loss or other health effects on those living nearby? Suggested mitigation – no construction west of Fifth Avenue. GG-43

IV.I-24 Compensatory mitigation includes "additional wetland creation or enhancement or offsite mitigation." This is vague. Where will the additional wetland creation or enhancement take place? And how extensive would it be? How will its maintenance be financed? GG-44

IV.K-6-7 The DEIR compares the project with the "existing esthetic quality of the area". In this, and as in all areas in this Section IV, there is a need to compare not only the existing condition, but the condition that would prevail if the EPP were GG-45

followed. The conclusion that "the project would not result in a demonstrable negative change in the visual character of the project site or its surroundings" fails to address the projected positive changes envisioned by the EPP. The same comment applies to the conclusion that the project "would not adversely affect scenic vistas".

IV.K-10 et seq. The simulations demonstrate that the bulk of the buildings will block views of the Estuary. However, there needs to be a comparison with the EPP. A mere comparison of the site in its present run-down condition and the project fails to give any recognition of the potential of the EPP. Simulations are suggested to be added showing the views and the building configuration anticipated in the EPP and the proposed DEIR alternatives. Also, simulations should show additional alternatives with possible slender towers in lieu of numerous bulky buildings so as to enhance view and access to the water. GG-45 (CONT.)

IV.K-39 "Therefore, the project's effect on scenic vistas would be less than significant." Here again, there is no attempt to compare the project and existing conditions with the EPP. One of the EPP's purposes was to open up the waterfront and greatly enhance scenic vistas, a vision largely lost in the project.

"The series of connected parks and open space proposed by the project would be region-serving as well as local-serving...." This is a reason for applying the service standard of 10 acres of parkland per 1,000 residents or 50 acres, rather than only 4 acres per 1,000 residents for local-serving parks (see comments above). GG-46

IV.L-8 Measure DD. The discussion fails to mention (1) that the DD measure ballot statement specifically referred to Estuary Park and Meadow Park, renamed Channel Park in the project, and (2) that the City has allocated up to $14 million for improvements at Estuary Park, including demolition of the Cash and Carry warehouse building. Waterfront activists supporting DD thought they were going to get at least an expanded Estuary Park and a new Meadow Park as set forth in the EPP. GG-47

IV.L-13 Schools. "Grade school children...living in the project site would attend La Escuelita and Franklin Elementary Schools". Is Escuelita one of the schools targeted for closure by the current school administration either for low attendance or for redevelopment? If so, does Franklin have adequate space to accommodate these students? How will Oakland High School accommodate an additional 620 new students? How will middle school students get to Westlake Middle school, which is 2.4 miles from the project? GG-48

IV.L-16 "... [T]he project would provide approximately 60% of the almost 36 acres of total <u>new</u> open space...delineated in the Estuary Policy Plan EIR." This is another way of saying that 40% of the proposed EPP open space is eliminated by the project. GG-49

While the EPP did not designate park and open space by acreage, this 40% loss is readily visible by simply comparing the project visuals with those of the EPP. Acreages were indicated in EPP drafts (41.5 acres total including existing Estuary Park). EPP draft of February 1998, page 97. The footprint of the outlined open space of that draft was carried forward substantially in the final EPP.

IV.L-17 Table IV.L-2 compares the proposed park acreage Estuary Policy Plan EIR and proposed project. Footnote "a" is wrong. It states "the area defined as Open Meadow Park in the Estuary Policy Plan includes the 6-acre Fifth Avenue Point community, an area not included in the proposed project". The Fifth Avenue Point is 6 acres plus a 28,000 square foot parcel (IV.A-5). Rather than absorbing the Fifth Avenue Point into Open Meadow Park, the EPP policy OAK-4.1 provides "preserve and expand the existing Fifth Avenue Point community...." EPP page 93. [Emphasis added] The graphics of the EPP are to the same effect. The illustrative open space key map figure III-10 (EPP, p. 87) shows the Fifth Avenue Point area extending eastward, and areas west of a straightened Fifth Avenue as parks and open space. Fifth Avenue was planned to be straightened to remove a curve at E.8th street and align it with Fifth Avenue north of E.8th street. Perhaps ½ acre or so of the Fifth Avenue Point area is designated in the EPP for extension of the Bay Trail; otherwise it remains intact. GG-49 (CONT.)

The source of this error is noteworthy. Table IV.L-2 states the source as "Estuary Policy Plan EIR, table III.D-1 and Harbor Bay Partners 2005." That EIR lists park acreage but makes no reference to the Fifth Avenue Point community. The obvious source, then, is Harbor Bay Partners, the developer. Subject to criticism that the project wipes out much of the open space called for by the EPP, the developer attempts to minimize the amount of that loss by providing misinformation.

IV.L-17 "... [T]he 20.7 acres of new park and open space area proposed by the project would be consistent with the objectives of...." various city plans including the EPP. See above comments. GG-50

IV.L-18 "The project would carry out a number of projects identified in the November 2002 Measure DD local bond measure." This comment fails to note what is not being done – the extension of Estuary Park to the Embarcadero, the creation of parks in all areas west of Fifth Avenue, and the creation of Crescent Park. These were all part of then-adopted EPP at the time of the November 2002 election. GG-51

V-1 "Feasible" alternatives are defined as an alternative that takes into account, among other factors, economic factors. Have the drafters done an economic analysis of the project, and also of the alternatives? If so, it is not attached as an appendix and should be. In any event, have the drafters determined that each of the alternatives is economically feasible? GG-52

While the DEIR may assume the demolition of the Ninth Avenue Terminal in alternative 1-B "No Project/Estuary Policy Plan," the EPP did not. It did, however, call for further study by the Port and the City to determine the feasibility of reusing the terminal. EPP page 91. This was one reason for a Specific Plan proposal. GG-53

The comparison of open space depicted by the EPP and by the project is stated as 41 acres versus 28.4 acres. But since the project places open space on the Ninth Avenue Terminal site, the 28.4 figure would be reduced by another 2 to 4 acres if the Ninth Avenue Terminal were retained. GG-54

V-19 Alternative 2. This alternative comes close to the vision of the EPP in terms of park and open space. The extension of Fourth Avenue as a loop towards the estuary, thereby providing separation of the housing from Shoreline Park is an imaginative solution. It invites people to visit the park and helps to avoid the "gated community" aspect of the project. The other streets east of Gateway Park, however, should lead to the water so as to open up vistas from Embarcadero. To approximate the EPP, buildings west of Fifth Avenue should be eliminated. GG-55

The reduction in density as compared to the project greatly reduces many of the negative environmental effects of the project. The developer would be hard pressed to argue that this alternative is financially unfeasible because at an earlier stage it proposed 1,700 units with 200 affordable units, as compared to the current proposal for 3,100 units with zero affordable. Even 1,800 units appear to be too dense for this site, walling off the Estuary from the Embarcadero. Alternate designs should be explored – and demonstrated by simulations – showing how views of the water can be opened with slender towers and fewer bulky view-blocking structures. GG-55

Retention of the 1920's but not the 1950's portion of the Ninth Avenue Terminal is a good compromise, preserving the most historical portion of the building. To the extent that any open space is lost by preserving that portion of the building, it should be made up elsewhere on the site. GG-57

V-29 et seq. Alternative 3. This alternative is desirable because it comes closest to the EPP vision as to open space, views and density. The street pattern invites one to the water. Views are not cut-off by curving streets. See comments below about the Ninth Avenue Terminal. GG-58

V-38 Ninth Avenue Terminal. Preserving the entire Ninth Avenue Terminal, rather than just the 1920's portion, has the great disadvantage of blocking views of the Embarcadero Cove and Coast Guard Island. It will also eliminate approximately two acres of open space under the project sponsor's scheme. Under any scenario, lost open space should be made up elsewhere in the project. GG-59

Retention of the terminal should be considered in the light of its possible use. Retaining it for its present use as a warehouse will add nothing to the vitality of the area. On the other hand, some of the Oakland Heritage Alliance proposals could GG-60

provide a real spark to the neighborhood. Particularly appealing is that of an art center like the Torpedo Factory Art Center of Alexandria, Virginia. Sculptors, painters, jewelry makers, glass blowers and other artists make their art work in public view there. It attracts 800,000 visitors a year and has revitalized an area with shops and restaurants that was previously a rundown industrial area. The EIR should consider such a use. What would be the needed parking for such a use or for other commercial uses of the building? GG-60 (CONT.)

What is the remaining useful life of the terminal and the structure on which it rests? If the wharf and pilings must be replaced, who will bear the cost and how will it be financed? This issue must also be examined under the project's proposal. GG-61

As to all the alternatives, there should be a chart which compares the density, building heights, and open space of each of the alternatives, and also that of the project so as to make easy comparisons. GG-62

Stanzione, Margaret

From: Allen Pulido [apulido@ebparks.org]
Sent: Monday, October 17, 2005 11:43 AM
To: mstanzione@oaklandnet.com
Subject: Attachment to John Sutter's Comments re Oak to Ninth Ave Proj.

Leal Charonnat Analysis.pdf (9...

Attached is Leal Charonnat's analysis as reference in John Sutter's comments emailed to you earlier today. A hardcopy has also been sent. Thanks,

Allen Pulido
Confidential Secretary
Board of Directors
East Bay Regional Park District
5610-544-2021

Comments and references provided by Leal Charonnat - September 7, 2005

DOCUMENT	PAGE OF QUOTE	REFERENCE QUOTE	COMMENT ON QUOTE
Planning and Zoning Law – State of California	7 of 49	65351. During the preparation or amendment of the general plan, the planning agency shall provide opportunities for the involvement of citizens, public agencies, public utility companies, and civic, education, and other community groups, through public hearings…	Review of a draft EIR does not comply with this section of the California code. This section clearly states that the public is to have 'opportunities' in the 'preparation' of the general plan [or amendments], and this has not been done. The developer has only held 'show-and-tell' meetings, but these have never involved the public in the process.
	19 of 49	65561. The Legislature finds and declares as follows: (a) That the preservation of open-space land, as defined in this article, is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation and for the use of natural resources. (b) That discouraging premature and unnecessary conversion of open-space land to urban uses is a matter of public interest and will be of benefit to urban dwellers because it will discourage non-contiguous development patterns which unnecessarily increase the costs of community services to community residents. (c) That the anticipated increase in the population of the state demands that cities, counties, and the state at the earliest possible date make definite plans for the preservation of valuable open-space land and take positive action to carry out such plans by the adoption and strict administration of laws, ordinances, rules and regulations as authorized by this chapter or by other appropriate methods. (d) That in order to assure that the interests of all its people are met in the orderly growth and development of the state and the preservation and conservation of its resources, it is necessary to provide for the development by the state, regional agencies, counties and cities, including charter cities, of statewide coordinated plans for the conservation and preservation of open-space lands. (e) That for these reasons this article is necessary for the promotion of the general welfare and for the protection of the public interest in open-space land.	Open space is such a priority with the state code that a specific law is created that emphasizes the creation of open space. This is important because a major focus of the EPP is open space for large community gatherings.

GG-63

Comments and references provided by Leal Charonnat - September 7, 2005

GG-63 (CONT.)

DOCUMENT	PAGE OF QUOTE	REFERENCE QUOTE	COMMENT ON QUOTE
Planning and Zoning Law – State of California	19 of 49	65562. It is the intent of the Legislature in enacting this article: (a) To assure that cities and counties recognize that open-space land is a limited and valuable resource which must be conserved wherever possible. (b) To assure that every city and county will prepare and carry out open-space plans which, along with state and regional open-space plans, will accomplish the objectives of a comprehensive open-space program. (Added by Stats. 1970, Ch. 1590.) 65563. On or before December 31, 1973,	Again, specific state law puts an emphasis on open space.
	10 of 49	65359. Any specific plan or other plan of the city or county that is applicable to the same areas or matters affected by a general plan amendment shall be reviewed and amended as necessary to make the specific or other plan consistent with the general plan. (Repealed and added by Stats. 1984, Ch. 1009.)	A Specific plan, when developed, shall be done in the same manner as the General Plan is developed – with public input in the creation of the plan, no just in response to an EIR.

Comments and references provided by Leal Charonnat - September 7, 2005

DOCUMENT	PAGE OF QUOTE	REFERENCE QUOTE	COMMENT ON QUOTE
Estuary Policy Plan	105 of 137	***POLICY OAK-5: INITIATE MORE SPECIFIC PLANNING OF THE ENTIRE OAK-TO NINTH DISTRICT.*** The Oak-to-Ninth district is large and diverse, with several unique, complicated issues that dominate its real development potential. It should be planned in sufficient detail to identify all potential issues, and to understand the options available to address these issues in a timely manner. A Specific Plan should be prepared prior to development. Planning should be based on a strategy which analyzes the area comprehensively and which accounts for the constraints imposed by subsoil environmental conditions. Transformation of the district will require that several outstanding issues be resolved simultaneously. Development feasibilities should be analyzed, phasing of improvements should be identified, and a funding strategy to finance and implement recommended open space should be addressed. These require that a realistic development program and site plan be developed.	This section clearly states that a Specific Plan be done prior to development. The fact that the

GG-65

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DOCUMENT	PAGE OF QUOTE	REFERENCE QUOTE	COMMENT ON QUOTE	
Draft EIR	111 of 955	Additionally, the process to prepare a Specific Plan is the same as that required for a General Plan (or amendments thereto) and would required opportunities for broad community and public agency involvement through public hearings (Government Code Section 65453 and 65351).	The developers process of showing his development plan to various people at various times does not meet the requirements of Section 65351 that requires 'opportunities…through public hearings'. [see Planning and Zoning Law]	
	111 of 955	Additionally, the process to prepare a Specific Plan is the same as that required for a General Plan (or amendments thereto) and would required opportunities for broad community and public agency involvement through public hearings (Government Code Section 65453 and 65351).	This paragraph clearly states that the process must follow the 'same' as that for a General Plan – however the EIR does not state that the 'preparation' of the proposed project was done this way	GG-65 (CONT.)
	110-111 of 955	Statutory requirements mandate that a Specific Plan must specify (in text and/or diagram) the following in detail: …[see list]…Each of the applicable Specific Plan requirements listed above is described in detail in this EIR.	The preparers of the draft EIR are clearly aware of the statutory requirements required of a Specific Plan, the required public participation is ignored. By not involving the public in the preparation of these components is a fatal flaw.	
	123 of 955	Consistent with state law, the CCERP requires that at least 15 percent of all housing developed in the CCERP Project Area by non-Agency entities be affordable to very-low-/low- and moderate-income households. Of these affordable units, at least 40 percent must be affordable to very-low-income households. The Redevelopment Agency is obligated to meet this provision for the CCERP Project Area in the aggregate, over a 10-year period.	The statement shows that there is a tremendous amount of 'affordable' housing based on the proposed 3000+ units that must be created in the redevelopment area (CCERP.)	GG-66
	128 of 955	Footnote #18 – *Pursuant to the Oakland General Plan, as amended June 2005, the Oakland General Plan recognizes that it contains policies that may in some cases compete with each other, and that decision-makers must determine whether, "on balance, the project is consistent (i.e., in general harmony) with the General Plan." Further, "the fact that a specific project does not meet all General Plan goals, policies, and objectives does not inherently result in a significant effect on the environment within the context of [CEQA]" (City of Oakland, 2005a).*	This footnote calls out legislation just passed [June 2005] that allows a project in conflict with the General Plan that would normally by CEQA standards to be significant to, instead, be allowed.	GG-67

Comments and references provided by Leal Charonnat - September 7, 2005

DOCUMENT	PAGE OF QUOTE	REFERENCE QUOTE	COMMENT ON QUOTE
Draft EIR – by City of Oakland	110 pf 995	***Specific Planning.*** The City and Port of Oakland have not elected to prepare a Specific Plan for the Oak-to-Ninth District as called for in the Estuary Plan. Both agencies determined that 1) the Oak to Ninth Project application (with the modifications proposed in this EIR), 2) the analysis provided in this EIR, and 3) the public review process required pursuant to CEQA and the City of Oakland, fulfill, and may in certain cases exceed, the objectives of detailed planning and analysis envisioned in the Estuary Plan (*Policy OAK-5*). Thus together, these elements (project application, environmental analysis, and public review process) are considered functionally equivalent to the preparation and review of a Specific Plan.	Despite the draft EIR assertion that the EIR is a replacement for the Specific Plan process, it is not. The California Planning and Zoning code [see elsewhere] clearly states that the public is to be involved in the "preparation" of the Specific Plan. Responding or commenting on an EIR of a project created solely by and proposed by a developer is not the same by any means. Further, there was no public disclosure of the city and port decision to scuttle the Specific Plan process [although the comment in the draft EIR clearly shows they are aware of a separate Specific Plan process when the draft EIR states they "have not elected to prepare a Specific Plan as called for in the Estuary Plan." .

GG-68

Comments and references provided by Leal Charonnat - September 7, 2005

DOCUMENT	PAGE OF QUOTE	REFERENCE QUOTE	COMMENT ON QUOTE
REQUEST FOR DEVELOPER QUALIFICATIONS	2, 2, 3, 3, 4, 4, 5, 6, 6, 7, 11, 11, 14, 16, 16, 17, 18, 24, 24, 25, 25, 25, 27, 27, 27, 27, 30, 30, 30, 30, 31, 31, 31, 31, 31, 31, 31, 32, 32, 34, 36, 37, 38, 39, 39, 39, 39, 39, 40, 40, 40, 40, 40, 40, 42, 88, 97, 98, 98, 99, 99, 101, 102, 102, 102, 103, 104, 104, 104, 106, 106 of 114	"through the Specific Plan process"	Time and again, the port's RFQ cited the Specific Plan Process over and over again for a total of 71 times – clearly a Specific Plan process was intended.
Harbor Partners Response to RFQ	40 of 50	We are looking forward to the opportunity of working creatively with the Port, City and community at large during the Specific Plan process. The development concept presented in this proposal has not been refined to plan level detail, as it is the belief of Oakland Harbor Partners that the next step must be preceded by an outreach program to develop input from the City, the Port and the community-at-large.	No such outreach as expressed was ever done.
	44 of 50	Oakland Harbor Partners has commissioned ROMA Design Group, an internationally recognized design firm specializing in waterfront redevelopment to lead the Specific Plan process.	The developer clearly intended to do a Specific Plan with the statement that they 'commissioned' a consultant for the work.
	44 of 50	The Specific Plan process affords us the opportunity to create a meaningful dialogue with the Oakland community regarding the future of this key waterfront asset.	
	44 of 50	Community outreach will be an important aspect of our Specific Plan process. At the outset of the planning process, we will undertake a community-wide symposium with key individuals and groups who have a stake in the future of the area, including community and business representatives, property owners, tenants, members of the 5th Avenue Point community, policy makers, etc.	No such outreach was ever done. And it is unclear whether the city or port ever publicly stated that the Specific Plan process was to be abandoned.
		For the Oak to Ninth area, the Specific Plan will include the entire 120 acre planning area on both sides of the Embarcadero.	Only the 60 acres of the developers project are Specific Plan of all 120 acres would have come up with a different plan, one that is not included in the limited EIR of the developer's project.
CA Planners Guide Specific Plan - Part One	4 of 4	"a specific plan must be "prepared, adopted, and amended in the same manner as general plans (§65453)"	The process for creating the specific plan must follow the same procedures as that of a General Plan, which was not done for the 'specific plan' for this project.

GG-69

Comments and references provided by Leal Charonnat - September 7, 2005

DOCUMENT	PAGE OF QUOTE	REFERENCE QUOTE	COMMENT ON QUOTE	
THE PLANNING AND ZONING LAW	15 of 49	65453. (a) A specific plan shall be prepared, adopted, and amended in the same manner as a general plan,	The process the developer used to create the project plan was not the same manner as that used by the city of Oakland to develop the general plan. No public meetings were involved. Commenting on an EIR on a plan after the fact it was created is not the same as participating in the preparation process.	GG-70
	19 of 49	65561. The Legislature finds and declares as follows: (a) That the preservation of open-space land, as defined in this article, is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation and for the use of natural resources. That discouraging premature and unnecessary conversion of open-space land to urban uses is a matter of public interest and will be of benefit to urban dwellers because it will discourage non-contiguous development patterns which unnecessarily increase the costs of community services to community residents. (c) That the anticipated increase in the population of the state demands that cities, counties, and the state at the earliest possible date make definite plans for the preservation of valuable open-space land and take positive action to carry out such plans by the adoption and strict administration of laws, ordinances, rules and regulations as authorized by this chapter or by other appropriate methods. (d) That in order to assure that the interests of all its people are met in the orderly growth and development of the state and the preservation and conservation of its resources, it is necessary to provide for the development by the state, regional agencies, counties and cities, including charter cities, of statewide coordinated plans for the conservation and preservation of open-space lands. (e) That for these reasons this article is necessary for the promotion of the general welfare and for the protection of the public interest in open-space land.	Open space is crucial to cities, California Planning code and the EPP clearly designated this area as a major component of Oakland's open space – which this project ignores. Because the specific plan process was bypassed, section 65561 has been completely ignored, not only by the developer, but by the EIR. This is a Significant Impact that cannot be mitigated – the elimination of open space use – that should negate this project. Only if a true and proper Specific Plan process is used could this plan be adopted.	GG-71

Comments and references provided by Leal Charonnat - September 7, 2005

OTHER COMMENTS				
DOCUMENT	PAGE OF QUOTE	REFERENCE QUOTE	COMMENT ON QUOTE	
Draft EIR	129 of 955	Impacts on 5th Avenue Community – Use setbacks, landscaping to reduce impacts to less than significant	Impact is not reduced to less than significant. The EIR does not address incompatible uses – i.e., artist shops vs. residential units.	GG-72
Sierra Club Yodeler July-August	1 of 1	Comments by John Sutter for Sierra Club – see article.	The draft EIR does not address the plain fact that open spaces abutting high-rise residential is in DIRECT conflict with large public use of such space; and that the EPP clearly identified this area as the location for large public gatherings that is to serve the entire city.	GG-73

Letter GG – John Sutter

GG-1 The comment is noted and speaks to the extent of the letter's comments. See Master Response A regarding preparation of a specific plan.

GG-2 The comment states that because the Estuary Policy Plan is part of the City's General Plan, all of the various issues discussed in the DEIR should be compared to the Estuary Policy Plan. Consistent with CEQA Guidelines Section 15125(e) (and as discussed in Response to Comment U-2), Chapter V of the DEIR provides an analysis of Alternative 1B (No Project / Estuary Policy Plan) that compares the proposed project to the "potential future conditions" that could occur with implementation of the Estuary Policy Plan. The environmental effects of the No Project / Estuary Policy Plan Alternative are discussed on DEIR pp. V-14 through V-19 for each environmental topic addressed in DEIR Chapter IV (Setting and Impact Analysis), Sections A through M. As provided for by CEQA Guidelines Section 15126.6(d), the analysis is discussed in less detail than the analysis conducted for the project, however, sufficient information is provided to allow "meaningful evaluation, analysis, and comparison with the proposed project." A comparative matrix of the impacts of the project and the alternatives is provided in Table V-5 starting on DEIR p. V-42.

GG-3 The purpose of an EIR is to evaluate and identify potential significant environmental effects that may result from the project, to identify feasible mitigation measures to reduce or avoid those impacts, and to identify and evaluate alternatives to the project. Pursuant to CEQA Guidelines Section 15121, the EIR is an informational document intended to "inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project." It is not the purpose of an EIR to "justify" a project, and the DEIR for the proposed project was not prepared with that intent.

The following addresses the comment's three principal objections to the project:

1) Preparation of a specific plan is addressed in Master Response A.

2) The comment is correct in that the project would provide a total of 20.7 acres of new open space, which is approximately 40 percent of what was as analyzed in the Estuary Plan EIR and illustrated in the Estuary Policy Plan [DEIR p. IV.L-16 and Table IV.L-2. (The Estuary Policy Plan does not provide open space acreage assumptions.) City decisionmakers of the project will ultimately consider the adequacy of the proposed new open space acreage.

3) See Response to Comment B-8 and U-17 regarding impacts on views from the Embarcadero. The DEIR alternatives analysis includes a range of lower-density, lower-height alternatives to the proposed project. City decisionmakers will ultimately evaluate the project and the alternatives and determine the appropriateness of the

density proposed by the project. To the extent that the density has physical environmental effects (e.g., traffic, noise, air quality, shadow), those effects are analyzed in the DEIR for consideration by the City in its deliberations.

GG-4 Alternative 1B (No Project / Estuary Policy Plan) allows the impacts of the proposed project to be compared with that of future possible development under the Estuary Policy Plan. CEQA requires a no project alternative to allow decisionmakers to compare the impacts of approving the project with the impacts of not approving the project (CEQA Guidelines Section 15125(e). See also Response to Comments GG-2 and U-2.

GG-5 Since regulatory permits have not yet been issued for the project, no quantification of potential wetland impacts (if any) has been made for the project. The project includes shoreline enhancements, which would include the improvement or creation of marsh habitat. If additional restoration of wetlands is required by the regulatory agencies, the applicant will provide the restoration as conditioned in permits and agreements for the project.

GG-6 Land ownership is not a CEQA issue pertaining to the physical environmental impacts of the project. See Response to Comment S-14 (second paragraph) and Master Response H, which discusses the project sponsor's intended responsibility for park maintenance and possible maintenance agreement mechanisms. The comment speculates about insufficient assessments and liability for fines and repairs, neither of which are issues relative to the physical impacts of the project under CEQA.

GG-7 The new open space acreage proposed by the project is discussed in the DEIR in Chapter III (Project Description) under *Proposed Parks, Open Space and Trails*, (DEIR pp. III-12 through III-19) and is depicted graphically (acreage indicated) in DEIR Figure III-7 (DEIR p. III-17). The description of the open space acreage envisioned by the Estuary Policy Plan and a comparison to the project is appropriately presented in Section IV.L (Public Services and Recreation) under Parks and Recreation Impacts (DEIR p. IV.L-15 through IV.L-18) and in Chapter V (Alternatives) under Alternative 1B(No Project / Estuary Policy Plan).

The following corrections are made starting on DEIR p. V-28 (additions shown as underlined; deletions as ~~strikeout~~):

L. Public Services and Facilities

Compared to the project, the Open Space / Partial Preservation Alternative would introduce fewer new residents (2,938 compared to 5,270) and households (1,728 compared to 3,100[4]) to the project site. Approximately 32.9~~33.4~~[5] acres of new park would be added to the project site (compared to 20.7~~19.25~~ new acres with the project), which would result 11.4 acres per 1,000 residents on the project site. Overall, this alternative would result in

the same less-than-significant impacts on public services and facilities that would occur with the project.

[4] 1,658 households compared to 2,976 project households, with 4 percent vacancy rate applied.
[5] Total 40.6 acres proposed, minus existing 7.7~~7.2~~ acre Estuary Park and Jack London Aquatic Center

The following corrections are made starting on DEIR p. V-37 (additions shown as underlined; deletions as ~~strikeout~~):

L. Public Services and Facilities

Compared to the project, the Reduced Development / Preservation Alternative would introduce fewer new residents (881 compared to 5,270) and households (518 compared to 3,100)[13] to the project site. Approximately 32.2~~32.7~~[14] acres of new park would be added to the project site (compared to 20.7~~19.25~~ new acres with the project), which would result 37.1 acres per 1,000 residents on the project site. Overall, this alternative would result in the same less-than-significant impacts on public services and facilities that would occur with the project.

[13] 497 households compared to 2,976 project households, with 4 percent vacancy rate applied.
[14] Total 39.9 acres proposed, minus existing 7.7~~7.2~~ acre Estuary Park and Jack London Aquatic Center

GG-8 The comment is noted. The project sponsor has assigned park names to the proposed open spaces primarily for purposes of planning and organization during the project review process, and the issue is not relevant to the physical impacts of the project under CEQA.

GG-9 See Response to Comment S-14 (second paragraph) and Master Response H.

GG-10 It is assumed that the comment mistakenly references Parcel M although Parcel N is intended (since it is adjacent to Jack London Aquatic Center and Estuary Park). Each of the alternatives (except Alternative 1A: No Project) presented in the Chapter V of the DEIR includes a scenario in which Parcel N would be redeveloped as open space. Prior to its action on the project, City decisionmakers will evaluate the project alternatives and ultimately reject the alternatives and adopted the proposed project, or alternatively elect one or a combination of the alternatives analyzed, instead of the project.

GG-11 The selected maintenance agreement mechanism for which the project sponsor would be responsible would pertain to open spaces, including pilings and wharf, marina facilities, and the private shuttle facilities. The City could retain maintenance responsibility for the Ninth Avenue Terminal Bulkhead Building (or Terminal shed if retained), however, this

issue is not pertinent to the impacts of the project on the physical environment under CEQA, and the City would consider and ultimately establish final responsibilities through the required conditions of approval for the project or a Development Agreement between the City and the project sponsor.

GG-12 See Response to Comment P-6 regarding Estuary Policy Plan goals for festival space. Alternative 3 (Reduced Development / Terminal Preservation) (DEIR p. V-31) considers no development of Parcel M or N. Alternative 1B (No Project / Estuary Policy Plan) (DEIR p. V-13) considers lesser development on Parcel M (compared to the project) and no development on Parcel N. Alternative 2 (Enhanced Open Space / Preservation) (DEIR p. V-23) considers no development on Parcel N. This range of alternative site developments is provided for consideration by City decisionmakers who will consider each alternative and the project prior to taking action.

GG-13 See Response to Comment GG-11.

GG-14 The statement in the DEIR is correct. See Response to Comment U-17 regarding street alignment and views to the water. See Master Response D, which discusses proposed parking management for park uses.

GG-15 See Master Response G regarding phasing of open space and trail improvements.

GG-16 The breakdown of proposed residential units by dwelling size, type, ownership type or rental is not pertinent to the evaluation of project impacts on the physical environment under CEQA. As discussed on DEIR p. IV.J-20 under *Housing and Population*, "The new housing would include one-bedroom, two-bedroom, and three-bedroom units, with the largest number being two-bedroom units. There would be a mix of types of housing including one-level condo/apartment-style units and flats, two-level townhouse-style units, and higher-ceiling loft-style housing. The project is anticipated to include both ownership and rental housing, with the majority of units being offered for sale. The project proposes market-rate housing covering a range of prices and rents depending on the size, type, and location of units as well as views and other amenities. The new housing would accommodate a mix of types and sizes of households."

GG-17 As discussed in Response to Comment GG-3, the project proposes less open space acreage than was analyzed in the Estuary Plan EIR and illustrated in the Estuary Policy Plan (DEIR p. IV.L-16 and Table IV.L-2) and that was addressed by Measure DD expenditures for the Oakland waterfront parks. This does not constitute a significant impact under CEQA. City decisionmakers of the project will ultimately consider the proposed project in light of the Estuary Plan and the objectives of Measure DD in the project area. The project sponsor's proposal to develop 20.7 acres of new public waterfront parks along the Estuary does not preclude the future use of Measure DD funds for improvements in the project area.

GG-18 The comment discussing the "exchange" and its timing and conditions and Tidelands Trust issues has no bearing on and does not concern the environmental consequences of the project discussed in the DEIR. The comment pertains to a separate property transaction between the Port and the State Lands Commission that is not a part of the project, but that is already authorized by the Legislature to take place on behalf of the State.

Before the exchange may take place, the legislation established specific criteria that must be met. The Legislature delegated to the State Lands Commission the authority to approve and implement the property transaction if those conditions are met. Among other matters, the legislation provides direction regarding the "exchange parcel" and the exchange approval process. No sale or exchange of Port property may be approved without a public hearing before the Board of Port Commissioners as required by the Charter of the City of Oakland and SB 1622. Additionally, as stated on DEIR p. IV.A-33 under *California State Lands Commission, Public Trust Doctrine*, the City's approval of the project will be conditioned upon subsequent compliance with the provisions of SB 1622, the Oak to Ninth Avenue District Exchange Act.

GG-19 See Response to Comment B-8 and U-17 regarding impacts on views from the Embarcadero. Also see Response to Comment GG-3, item 3, regarding alternative design scenarios.

GG-20 The comment speculates that the project would create the "feeling of [a] 'gated' or private community, but offers no justification or elaboration. The project would not be gated and would be situated on a grid of public streets. To the extent that the site arrangement conveys a private community within the project area, City decisionmakers will evaluate the appropriateness of the proposal as it considers the merits of the project design.

GG-21 As discussed in DEIR p. IV.A-9, the project would be "larger" than the approved Jack London Square redevelopment with respect to overall development square footage and building mass and heights. Alternatively, the Jack London Square redevelopment would have more intensive use activities, particularly daytime office and evening entertainment uses. As also indicated in the DEIR discussion, the City would evaluate the appropriateness of the "node of higher intensity" that the project would create and that the LUTE recognizes may be appropriate outside of Jack London Square.

GG-22 The DEIR is not intended as a substitute for a specific plan. The DEIR states conclusions about the project's potential impacts as determined after objective evaluation of the project against the significance criteria. The analysis of Land Use, Plans, and Policies and its applicable significance criteria require more subjectivity that other more discrete topics of the environmental analysis. This is also necessary given the interpretive nature of many policies themselves. The City of Oakland has acknowledged this fact by amending its General Plan to state "the fact that a specific project does not meet all General Plan goals, policies, and objectives doe not inherently result in a significant

effect on the environment within the context of CEQA," and that the City must determine whether "on balance, the project is consistent (i.e., in general harmony with) the General Plan."

Compliance with a particular policy is rarely a purely objective determination, and the DEIR makes every effort to acknowledge this where appropriate. In cases where the DEIR can reasonably assess that the project is consistent with a particular policy (particularly when supported by impact analysis provided elsewhere in the DEIR, such as view impacts), the DEIR makes such conclusions. Otherwise, the DEIR acknowledges that the policy addresses an issue beyond the purview of CEQA and discloses an appropriate level of information or conclusions (to be supplemented by other reports and analyses regarding non-CEQA aspects of the project) to assist the City in its project evaluation and balancing of policies.

GG-23 See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management and public access measures.

GG-24 See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit and shuttle service measures.

GG-25 As stated on DEIR p. IV.A-11, the existing Estuary Policy Plan land use classification, Planned Waterfront Development-1 (PWD-1), allows a maximum FAR of 1.0 per private parcel (with a maximum average FAR of 1.0 on all remaining parcels). The proposed amendments to the Estuary Policy Plan prescribe maximum and minimum density instead of FAR to guide new development. This, together with maximum commercial square footages and building heights would delineate the physical limits or "mass" of each building on each parcel of the project site. Thus, there is no comparison of existing and proposed FAR**.** In response to the example question posed by the comment, at buildout, the proposed project would be approximately 4.7 million gross square feet (DEIR p. IV.A-9). The Estuary Policy Plan proposed 150,000 square feet of building area plus floor area for a 650-room hotel (excluding development in Fifth Avenue Point) (DEIR Table V-2 on p. IV-12).

GG-26 Pages IV.A-13 through IV.A-17 of the DEIR discusses the project's relationship to key Estuary Plan Policies and concludes that it consistent with most policies. (See also Response to Comment P-1.) To respond to the nine points raised in the comment:

1) It is reasonable to presume that the creation of 20.7 acres of new open spaces and park facilities and marinas on the Oakland Estuary, and that would be connected to the Bay Trail and ultimately Lake Merritt, in addition to the creation of approximately 200,000 square feet of retail/commercial space, could create a "major recreation destination in the City." Consistent with the statements on page 86 of the Estuary Policy Plan (referenced by the comment), the project would create a "series of large open spaces, intended to provide for a wide variety of recreational experiences…transform [the waterfront area] from an industrial backwater into a recreational centerpiece...[provide

open spaces that] are intended to be connected to each other and to a larger city-wide system of trails and parks…and preserve[ing] the area's wetlands, wildlife habitat and other natural features."

2) See Response to Comment GG-10.

3) See Response to Comment GG-3, item 2.

4) See Response to Comment GG-25 regarding comparative FAR. Regarding density, as stated on DEIR p. IV.A-11, the existing Estuary Policy Plan land use classification, Planned Waterfront Development-1 (PWD-1), allows a maximum density of 40 units per net acre. As shown in Table IV.A-1 on DEIR p. IV.A-39, the proposed amendments to the Estuary Policy Plan prescribe a maximum residential density for each development parcel, with the lowest density being approximately 0.72 units per net acre (on 1.2-acre Parcel E), and the highest density being approximately 161 units per net acre (on 2.08-acre Parcel H). The average density for all development parcels taken together would be approximately 122.5 dwelling units per net acre.

5) The proposed project is a mixed use development of residential, commercial/retail, parks and open space, and marina uses. The project would provide less open space and substantially more residential use than was envisioned by the Estuary Plan, however, it maintains significant "recreational and commercial" components envisioned therein.

6) See Response to Comment B-8 and U-17 regarding impacts on views from the Embarcadero.

7) See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management and public access measures.

8) See Response to Comment P-6 regarding Estuary Policy Plan goals for festival space.

9) See Master Response A regarding preparation of a specific plan.

Overall, the City will consider the information provided in the DEIR (and other project information beyond the DEIR) to assess whether "on balance" the project is consistent (i.e., in general harmony) with the General Plan

GG-27 See Response to Comment GG-22.

GG-28 See Master Response A regarding preparation of a specific plan.

GG-29 Comment is noted.

GG-30 See Response to Comment Q-8.

GG-31 See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management measures pertaining to marina uses.

GG-32 See Response to Comment U-17 regarding street alignment and views to the water. Also see Response to Comment GG-10 regarding the expansion of Estuary Park north to the Embarcadero.

GG-33 See Response to Comment GG-18.

GG-34 See Response to Comment GG-12.

GG-35 See Response to Comment GG-26.

GG-36 The discussion of allowable uses and density, which is prescribed by the Planned Waterfront District-1 land use classification are use and development standards, not policies, and are appropriately discussed under *General Plan Use and Development Standards* on p. IV.A-37 of the DEIR. See Response to Comment GG-25 regarding FAR comparison.

GG-37 The residential development located west of Fifth Avenue Point is Parcel M. See Response to Comment GG-12.

GG-38 See Response to Comment GG-11 regarding functions that would be financed by an assessment district or similar mechanism. Despite the fact that the assessment costs or payment scales are not known at this stage of project development, this issue is not pertinent to the potential impacts of the project on the physical environment under CEQA or the adequacy of the DEIR. It is anticipated that the assessments would be at a level to ensure the adequate maintenance of open spaces (and other facilities addressed by assessment) in a manner that meets or exceeds minimum standards provided by the City. These standards would be enacted through conditions of approval for the project or a Development Agreement between the City and the project sponsor.

GG-39 The comment suggests additions to Mitigation Measure B.7 (DEIR p. IV.B-62) to design certain streets within the project area to provide Estuary views from the Embarcadero. Mitigation Measures B.7 responds to the project's significant impact of increasing the potential for conflicts among different traffic streams. (Impact B.7 on DEIR p. IV.B-57). The suggested mitigation does not address the significant impact of the project under CEQA (as determined by established significance criteria for *Site Access and Circulation* on DEIR p. IV.B-15).

GG-40 Provision of parking for park users is part of the design of open space for the project; see Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management measures. Provision for parking for different uses are reviewed and approved in accordance with the City's Municipal Code requirements for off-street parking (Municipal Code Chapter 17.116). A request for a

permit parking system could be made, and the City would review its merits on the basis of prevailing conditions at the time of the request. However, as described in Master Response D, based on representative hourly accumulation patterns for different land uses, the proposed parking supply would fully accommodate the peak weekday parking demand at project buildout. On weekend days, there would be parking spaces available on-street and in the Parcel G Garage (which would be open to the public). All of these spaces could be used by recreational visitors to the site.

GG-41 The project calls for the area of the project site known as the Crowley yard or Pacific Dry Dock, generally the east shore of Lake Merritt Channel), to be improved as park or open space (Channel Park). On the remaining two proposed structures west of 5th Avenue (Parcels K and L), Mitigation Measure F.2 would, as with all of the proposed structures, require preparation of site-specific geotechnical investigations. These investigations would provide mitigation for potential liquefaction as required by the California Seismic Hazards Mapping Act, described on DEIR p. IV.F-11 and discussed within Mitigation Measure F.2 on DEIR p. IVF-16. Ultimately, by adhering to the design criteria of the most current California Building Code requirements and the requirements of the Seismic Hazards Mapping Act, the proposed buildings would reasonably be expected to protect the public from significant adverse effects as a result of liquefaction.

GG-42 The comment is raises a question about earthquake insurance that does not address the adequacy of the environmental analysis in the DEIR or pertain to an issue of the physical environment under CEQA. See also Response to Comment E-8.

GG-43 Mitigation Measures G.1a through G.1d shall be implemented to reduce construction noise at nearby sensitive receptors. Although the average and worst case effect on residents is not quantifiable, specific measures, including limiting pile-driving to between 8:00 a.m. and 4:00 p.m. (excluding 12:00 p.m. to 1:30 p.m.) Monday through Friday, would limit the exposure of nearby residents by restricting pile driving to times when many residents would be at work or school. For those residents in the vicinity during pile driving, Mitigation Measures G.1b and G.1c would reduce the magnitude of noise that would affect the residents.

Even with these mitigation measures, noise from pile driving is expected to be significant (see Response to Comment 27 for a description of potential health effects from environmental noise) for a short-term duration. Residents would not be exposed to significant nearby pile-driving for the 11-year construction period, but rather for the construction periods of adjacent parcels. Noise levels from pile driving on further parcels would be attenuated by distance and shielding from new and/or existing buildings.

See Also Response to Comment GG-12 regarding project alternatives that do not involve construction west of Fifth Avenue.

GG-44 See Response to Comment GG-5.

GG-45 Pursuant to CEQA Guidelines Section 15125(e), the DEIR appropriately examines the project against the existing physical setting (as of publication of the Notice of Preparation) in and as well as the potential future conditions discussed in the Estuary Policy Plan. A detailed setting description and visual quality analysis of the Estuary Plan scenario (Alternative 1B: No Project / Estuary Policy Plan) is provided on DEIR pp. V-10 through V-13 and DEIR p. V-18, respectively. The comparison of the impacts of the project and the Estuary Policy Plan alternative impacts (both against existing setting) is provided in Table V-5 (DEIR pp. V-60 through V-62).

The visual quality analysis of the Estuary Policy Plan was based on the illustrative site plan and perspective provide as Figure V-1 in the Chapter V (Alternatives) of the DEIR.[7] Whereas detailed graphics that depict project building massing and height for purposes of the environmental analysis of the project, only the conceptual illustration of development that could occur under the implementation of the Estuary Policy Plan (Figure V-1) is available for consideration, as is appropriate for a policy plan document.

GG-46 See Response to Comment Q-8.

GG-47 The overview of Measure DD (DEIR p. IV.L-8) as it pertains to improvements within the project area is adequate for purposes of the DEIR analysis of parks and recreation impacts of the project. The specific dollar amount allocated or the identification of specific projects is not pertinent to the environmental analysis. The expansion of Estuary Park and creation of a park on the east shore of Lake Merritt Channel along the project site is established by the Estuary Policy Plan, to which the project is compared and analyzed on DEIR pp. IV.L-15 through IV.L-18.

GG-48 The information presented in the discussion of public school impacts (DEIR pp. IV.L-13 through IV.L-14) is based on consultation and information provided for the DEIR by the managing staff of the Oakland Unified School District, Facilities Management and Planning. Information provided by OUSD specified the capacity of the district's facilities to accommodate potential new enrollment generated by the project throughout the period of project development. Information provided by OUSD did not indicate potential future closures of elementary schools in the project area, thus it would not be appropriate for the City's DEIR to speculate about such closures.

The comment asks how Oakland High School will accommodate an additional 620 new students. The DEIR states on p. IV.L-14 that "it is unlikely that 620 new students could be accommodated at Oakland High School, if introduced within a short period of time. As further stated therein, based on information from OUSD, "if classroom capacity within the Oakland High School Attendance Area…was not available at the time students from the project would enter the school system, OUSD may accommodate these students at school outside the Oakland High School service boundaries," and expects that it would

[7] Illustrative perspective shown in DEIR Figure V-1 is also included in the Estuary Policy Plan as Figure III-1: Oak to 9th Bird's-eye Perspective.

be able to accommodate project students given the existing low enrollments in the project area.

The comment asks how middle school students will get to Westlake Middle School, approximately 2.4 miles from the project site. Although not pertinent to the DEIR analysis of the project under CEQA, it would be anticipated the students would travel to school by private vehicle or a number of alterative modes of transportation as is currently employed for home-to-school travel (e.g., public transit, bicycle, walking, car-pooling, etc.)

GG-49 Consistent with Figure III-10 (Oak to Ninth Illustrative Open Space Key Map) on page 87 of the Estuary Policy Plan (DEIR Appendix F), footnote "a" accurately points out that Open Meadow Park includes the approximately six-acre Fifth Avenue Point area – as shown west of 5th Avenue. The size of the proposed Open Meadow Park, 11 acres, is taken directly from the referenced Table III.D-1 in the Estuary Policy Plan EIR. The comment is misguided in assuming that the project sponsor provided this information in an attempt to "minimize the amount of that [Estuary Plan open space] loss by providing misinformation." The acreage of Meadow Park is 11 acres regardless of what portion of the Fifth Avenue Point area is displaced or shifted eastward, thus the percentage of the Estuary Plan open space acreage provided by the project is consistently approximately 60 percent (or conversely, the percentage of Estuary Plan open space acreage that would not occur with the project is consistently 40 percent). The footnotes provided in DEIR Table IV.L-2 are an effort to provide an apples-to-apples comparison of open space acreage even though the project sites differ in overall size (due primarily to exclusion of the Fifth Avenue Point are within the project site). The information provided by Oakland Harbor Partners in Table IV.L-2 (as referenced) is the proposed project acreage.

GG-50 See Response to Comment GG-3, item 2.

GG-51 The expansion of Estuary Park and the creation of Crescent Park and a park on the east shore of Lake Merritt Channel along the project site (west of Fifth Avenue) are all components of the Estuary Policy Plan, to which the project is compared and analyzed on DEIR pp. IV.L-15 through IV.L-18. The implementation of Measure DD projects (or lack of implementation) is not a significance threshold criterion by which the project's impacts are evaluated under CEQA.

GG-52 The project sponsor has prepared an economic feasibility and constraints report (capital and operational) on for each of the project alternatives, including the consideration of retaining all or parts of the Ninth Avenue Terminal (as proposed in Alternatives 2 and 3 and the Full Preservation Sub-Alternative described in Chapter V, Alternatives, of the DEIR). This report will be provided to City decisionmakers separate from this environmental report for consideration prior to their taking action on the proposal.

GG-53 Illustrations of the Oak to Ninth District that are provided in the Estuary Policy Plan consistently depict future development of the area based on demolition of the Ninth

Avenue Terminal. As the comment states, the p. IV.A-15 of the DEIR acknowledges that the Estuary Plan recognizes that all or portions of the Terminal may be suitable for rehabilitation and adaptive reuse, as well as the fact that the structure currently impedes public access to and views of a key area of the Estuary. Alternatives that consider full and partial preservation of the Terminal are evaluated in Chapter V (Alternatives) of the DEIR. See Master Response A regarding preparation of a specific plan.

GG-54 The DEIR cites total acreages of open space for the Estuary Plan (41.5 acres) and for the project (28.4 acres) for the geographic area defined by the project site (to allow relatively accurate comparison). Both scenarios would introduce open space on the area that is now the Ninth Avenue Terminal. Therefore, the comment is correct that if the Terminal were retained under the project, the total open space acreage would be increased by two to four acres. However, the same would be true if the Terminal were retained under the Estuary Plan scenario as well.

GG-55 The comment cites the merits of Alternative 2 (Enhanced Open Space/Partial Preservation) and is noted. A scenario that does not include construction west of Fifth Avenue is addressed in Alternatives 1B (No Project / Estuary Policy Plan), and Alternative 3 (Reduced Development / Preservation).

GG-56 Additionally, each of the alternatives described and analyzed in Chapter V (Alternatives) of the DEIR reflect lesser density, building height and bulk than that proposed project. City decisionmakers will evaluate the project alternatives analyzed in Chapter V of the EIR and ultimately reject these alternatives and adopted the proposed project, or alternatively elect one or a combination of the alternatives analyzed instead of the project. Also see Response to Comment Q-2, second paragraph.

GG-57 The comment highlights merits of Alternative 2 (Enhanced Open Space / Partial Preservation) and is noted. This alternative is designed to provide more open space than is proposed by the project, as well as retain a portion of the Ninth Avenue Terminal. Compared to the total 28.4 acres of open space proposed by the project, a total of 40.6 acres of open space would be provided under Alternative 2 – generally the same amount as the Estuary Policy Plan Alternative 1B (41.5 acres). Therefore, Alternative 2 is adequate to provide the City with an enhanced open space scenario to the project. No additional open space acreage is necessary for purposes of the DEIR.

GG-58 The comment cites the merits of Alternative 3 (Reduced Development / Terminal Preservation) and is noted.

GG-59 The comment recognizes, as does the Estuary Policy Plan, that preserving the entire Ninth Avenue Terminal would block views of the Estuary (Embarcadero Cove and Coast Guard Island from certain perspectives). The comment states that “lost open space should be made up elsewhere in the project.” There is no existing open space on the site, except Estuary Park. Therefore, there are no scenarios in which open space could be “lost.”

GG-60 See Master Response B regarding further analysis of reuse alternatives of the Ninth Avenue Terminal.

GG-61 See Response to Comment T-8.

GG-62 A synopsis of the project and each alternative is provided as a running heading on Table V-5, Summary of Impacts of Project and Alternatives (starting on DEIR p. V-42), to allow for easy comparison. The headings summarize the detailed description of each alternative provided in Chapter V of the DEIR.

GG-63: State law requires that prior to adoption of a general plan amendment the planning commission and the legislative body each shall hold a public hearing. These public hearing requirements will be met for the general plan amendments proposed in conjunction with the project. Additionally, the project sponsor has conducted over 100 community meetings (See detailed description in Master Response A), and the City retained CirclePoint to conduct a community outreach process which involved nine small group meetings and two community-wide meetings. A number of official City hearings have been conducted on the project and its proposed approvals, including hearings at the Landmarks Preservation Advisory Board, the Park and Recreation Advisory Committee, and the Planning Commission in connection with the Draft EIR. Recently, the Planning Commission sponsored a publicly-noticed tour of the project site. Thus, there have been and will be numerous opportunities for public input on the proposed general plan amendments.

GG-64 See the Master Response A on preparation of a specific plan.

GG-65 See the Master Response A on preparation of a specific plan.

GG-66 As stated in the DEIR on p. IV.J-42, “development of the project would require at least 420 low- to moderate-income units in the Central City East Redevelopment Project Area, at least 168 to be affordable to very-low-income households (based on the 2,800 units proposed east of Lake Merritt Channel). The affordable units could be included in the project (as part of the 2,800 units) or developed elsewhere in the Central City East Redevelopment Project Area.”

GG-67 As stated in the Oakland General Plan Amendment legislation referenced by the comment, “the fact that a specific project does not meet all General Plan goals, policies, and objectives does not inherently result in a significant effect on the environment within the context of [CEQA].”

GG-68 See the Master Response A on preparation of a specific plan.

GG-69 See the Master Response A on preparation of a specific plan.

GG-70 See the Master Response A on preparation of a specific plan.

GG-71 The comment suggests that the project, which would develop 20.7 acres of new waterfront open space where none exists (an amount that is approximately 40 percent less than what was analyzed and envisioned for the project site in the Estuary Policy Plan) constitutes a violation of Planning and Zoning Law (Section 65561). Section 65561 addresses the preservation of open space land…the assurance of continued availability of land…for recreation and for the use of natural resources. It speaks to discouraging the premature and unnecessary conversion of open-space land to urban uses and the demand that jurisdictions make and carry out definite plans for preservation of valuable open space land. The comment suggests that through preparation of a specific plan, Section 65561 would have been adequately addressed. In 1996, the City adopted the Open Space, Conservation, and Recreation (OSCAR) Element of the General Plan to address the management of open land, natural resources, and parks in Oakland, pursuant to Section 65561. The project does not propose to amend the OSCAR Element, nor does it conflict with its policies, as discussed on DEIR p. IV.A-20. In its consideration of the project, the City will evaluate the characteristics of the project in light of Estuary Plan objectives and policies, including those pertinent to the provision of open space in the Oak to Ninth District.

GG-72 The comment presumes that uses in the Fifth Avenue Point community and the project are incompatible uses ("i.e., artist shops vs. residential units). To the extent that such activities would be incompatible (e.g., potentially operational noise or odor from certain artist activities in proximity to residential uses), site configuration and standards, including setbacks and landscaping to addresses potential conflicts. Additionally, the proposed project development adjacent to Fifth Avenue Point would include commercial, parking, and service uses on the ground floor and be separated from Fifth Avenue Point area by roadways and/or paths.

GG-73 See Response to Comment Z-2 regarding potential large public gatherings on the project site.

Stanzione, Margaret

From: mike [mike@Cosentinolaw.com]
Sent: Tuesday, October 18, 2005 6:30 PM
To: mstanzione@oaklandnet.com
Subject: Oak to 9th Project; Oakland Planning Department

Dear Margaret,
This is my written comment about the above referenced project; I hope I am sending it to the correct person; if not, perhaps you can tell me where to send it.

I read that as proposed, the project anticipates five 24 story apartment buildings along the Oakland waterfront. My law office at Marina Village, Alameda, is directly across the estuary from the proposed project. I have enjoyed the view of the waterfront and Oakland hills from this location since 1985. The mere thought of a single 24 story building close to the waterfront is offensive to my senses. Needless to say, five such buildings is outrageously offensive. Such buildings, if needed at all, should be placed downtown or very far from the waterfront. Such buildings would tower over the waterfront and deny the citizens of Oakland and of other cities clear access to the waterfront. It would be equivalent to walking through someone's front yard in order to enjoy what the inhabitants of such buildings would enjoy every day, to the detriment of everyone else. I cannot imagine a sight more ugly; what a black eye it would be to the City of Oakland (and everywhere else within viewing range). Please do not allow this project to impose such ugliness on us. HH-1

The Ninth Avenue terminal must be saved; it is beautiful as it stands and would be basically unchanged if developed as a retail/commercial center. Any destruction of the building and pier would be an irreparable loss to the City. Surely a plan could accommodate my concern regarding the five 24 story buildings and the Ninth Avenue terminal. HH-2

Also, please send me a copy of the draft EIR for the project.

Sincerely, Michael Cosentino, 1070 Marina Village Parkway, Suite 206, Alameda CA 94501. (510) 523-4702.

Letter HH – Mike Cosentino

HH-1 The comment describes the view from directly across the Estuary from the project. A view from a nearby vantage point along the Alameda shoreline is depicted in the DEIR in Figure IV.K-2 and IV.K-17 (on DEIR pp. IV.K-13 and IV.K-36, respectively). As described on DEIR p. IV.K-12, the existing long-range views of the downtown Oakland skyline and portions of the East Bay hills in the background would remain. The character of the site would change noticeably – heavy machinery, cranes, and containers along the waterfront would be replaced by project buildings set approximately 200 to 400 feet back from the shoreline. The 65- to 66-foot tall building podiums would fall just below the ridgeline of the East Bay hills, and the proposed towers would be clustered to create a visual focus at the center of the site and to minimize the obstruction of any views. The project's impact on views and scenic vistas would be less than significant, as stated on DEIR p. IV.K-10.

HH-2 The DEIR analyzes project alternatives that consider full and partial preservation of the Terminal. These include Alternative 2 (Enhanced Open Space / Partial Ninth Avenue Terminal Preservation and Adaptive Reuses) discussed starting on p. V-19, Alternative 3 (Reduced Development / Terminal Preservation) discussed starting on DEIR p. V-29, and the Full Preservation and Adaptive Reuse Sub-Alternative discussed starting on DEIR p. V-38.

COMMENT LETTER II

TO: City of Oakland CEDA Planning & Zoning Division

FROM: Margaret Elizares

RE: Case No. ER 04-0009
Oak to Ninth Development
Oakland Harbor Partners, Applicant

SUBJECT: Comments on Draft EIR

DATE: October 19, 2005

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OCT 24 2005
City of Oakland
Planning & Zoning Division

This process is inconsistent with the Estuary Policy Plan portion of the General Plan which calls for a SPECIFIC PLAN, not a so-called "functional equivalent." Real public input must be included in the preparation of a SPECIFIC PLAN, not a fait accompli project deal. As presented, this project requires a General Plan Amendment before it can proceed. II-1

Public benefits must be secured first and foremost.

The Ninth Avenue Terminal can and should be preserved and restored for the benefit of all Oakland citizens. Call off the wrecking crew that has demolished so many of our waterfront's structures. Jack London Village was a viable, functioning example where citizens and tourists alike came to visit our waterfront, walk among beautiful, tall trees which provided habitat for hundreds of birds, patronize two dozen businesses and eat at waterfront restaurants that generated jobs, income and tax revenue, but is now a wasteland. II-2

The applicant's project provides woefully inadequate PUBLIC open space as called for by the Estuary Policy Plan. This project, by design, is entirely too dense and tall and will ruin the views and visual quality of our last open look at much of our Estuary. II-3

It seriously lacks access to and from the rest of Oakland only through NARROW Oak Street and 5th Avenue, streets which are frequently blocked by crossing trains, now known to average 14 to 16 trips a day. Their number is likely to increase in the future due to the continued increases in fuel costs for trucks. Hopes of public transit service to the area are surely dim. II-4

The upgrade of the sewer system and utilities to support such a dense HOUSING project of this size will be hugely costly and disruptive for months, if not years, to come. Who will pay for this? II-5

IV.F-1. The 2002 Treadwell & Rollo investigation and report is much too general and cannot be relied upon for this specific site, ABAG's 2003 maps conclude "this project site is in an area expected to have a very high potential to experience liquefaction." The Crowley Yard was identified as having the most potential. The goal of the the California Building Code is to provide minimum standards to safeguard life or limb, health and public welfare. This project does not meet those standards. II-6

Margaret Elizares
7501 Sunkist Drive
Oakland, CA 94605-3022

Elizares comments on Draft EIR

Any impartial geologist will advise it is unwise to build dense or high HOUSING on bay fill muds like these. Even a modest earthquake will surely cause liquefaction in these soils. The result will be the snapping of pilings and, more dangerously, of gas mains which will lead to fires such as those experienced in the Marina District of San Francisco in the 1989 Loma Prieta quake. II-6 (CONT.)

As an interested and concerned private citizen I attended many meetings on the formulation of the Estuary Policy Plan years ago. Many of us hoped there would be no more housing, but other public uses, on the water side of the railroad tracks. II-7

This site is not an environmentally sustainable place to live, but could be a beautiful place to do business and visit if planned well. Instead, our dreams have turned into this nightmare. II-8

For all of the above reasons and many more the only fair alternative to avoid the impacts of this plan is Alternative 1A, No Project. II-9

Start all over again and do it right this time and in the public interest, not for the profit of a few. II-10

Margaret Elizares
7501 Sunkist Drive
Oakland, CA 94605-30

Letter II – Margaret Elizares

II-1 See Master Response A regarding preparation of a specific plan. The comment is correct in that the project proposes a General Plan Amendment primarily to modify the existing land use classification to allow the residential land uses and densities proposed by the project.

II-2 The DEIR analyzes project alternatives that consider full and partial preservation of the Terminal. These include Alternative 2 (Enhanced Open Space / Partial Ninth Avenue Terminal Preservation and Adaptive Reuses) discussed starting on p. V-19, Alternative 3 (Reduced Development / Terminal Preservation) discussed starting on DEIR p. V-29, and the Full Preservation and Adaptive Reuse Sub-Alternative discussed starting on DEIR p. V-38.

II-3 The project would provide a total of 20.7 acres of new open space. The Estuary Plan envisioned a total of 35.7 acres of new open space, as analyzed in the Estuary Plan EIR and illustrated in the Estuary Policy Plan (DEIR p. IV.L-16 and Table IV.L-2). All open space in the project area would be public area. City decisionmakers of the project will ultimately consider the adequacy of the proposed new parks and open space acreage.

As discussed in the DEIR and depicted in the series of visual simulations in Section IV.K (Visual Quality and Shadow) (DEIR Figures IV.K-2 through IV.K-16), the project would introduce new and taller buildings than what currently exists on the site. It would also allow for new and expanded views of the waterfront that do not currently exist from points along public streets within and adjacent to the project site. See also Response to Comment B-8.

II-4 As shown in Figure IV.B-2, DEIR p. IV.B-23, about 45 percent of project-generated vehicle trips would use area freeways (i.e., I-880 and I-980) to travel to and from the project site; the other 55 percent would use other (non-freeway) roadways. See Responses to Comments J-1 and J-3 regarding railroad operations, and Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures.

II-5 The comment does not address physical environmental impacts under CEQA or the adequacy of the analysis in the DEIR. However, the project sponsor would be responsible for cost of public utility improvements required for the development on the project site.

II-6 The 2002 Treadwell & Rollo report is a master plan geotechnical report, the purpose of which is to develop design-level geotechnical recommendations primarily for cost estimating purposes. As stated in the DEIR on p. IV. F-16, site-specific, design level geotechnical investigations for each building will be conducted to determine appropriate mitigation for potential liquefaction at each building site. These investigations would occur prior to issuance of any building or grading permit for each building, as required by

applicable state and local Codes. The Crowley Yard, where the potential for liquefaction is highest, is planned for open space (Channel Park) and would not have any permanent structures. Overall though, Treadwell & Rollo has concluded that, with regard to geotechnical issues, the entire project site can be developed as proposed. The proposed structures would be built according to the most current seismic standards as found in the California Building Code (CBC) and pursuant to an approval of the California Geological Survey for compliance with the Seismic Hazard Mapping Act. The geotechnical recommendations would become part of the project, would include design measures for the mitigation of liquefaction. In addition, the reports will include the design of flexible utility connections to withstand the anticipated effects in the case of an earthquake. It should be noted that despite implementation of the most current seismic engineering practices, the potential for a significant earthquake is unavoidable and could cause damage. However, as the commenter states, adherence to the CBC is reasonably expected to help safeguard the public from harm related to geologic and seismic hazards.

II-7 Comment is noted and does not address physical environmental impacts under CEQA or adequacy of the analysis in the DEIR.

II-8 The comment asserts that the project site is not an environmentally sustainable place to live, but does not specify or elaborate on this statement. Chapter IV of the DEIR (Setting and Impact Analysis) contains a thorough analysis of the potential impacts pursuant to CEQA that could result from the proposed project. Where feasible, adequate mitigation measures are identified to reduce significant impacts to less-than-significant levels. The analysis is summarized in DEIR Chapter II (Summary).

II-9 As discussed on DEIR p. V-39, Alternative 1A (No Project), under which there would be no substantial change existing conditions on the project site, would avoid all significant unavoidable and significant impacts associated with the project and each of the other alternatives. The DEIR recognized that this would be the case even though there are existing conditions on the projects site that may be more adverse than would occur with the project (or other alternative), and that would continue. These would include contaminated soils conditions, limited views of the Estuary, and unprotected sensitive biological resources and wetlands.

II-10 Comment is noted and does not address physical environmental impacts under CEQA or adequacy of the analysis in the DEIR.

COMMENT LETTER JJ

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City of Oakland
Planning & Zoning Division

Oct 23, 2005

Margaret Stanzione, Project Planner
City of Oakland Community and Economic Development Agency
Planning and Zoning Division
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

RE: Draft Environmental Impact Report for the Oak to Ninth Mixed Use Development Project, Case File Number ER04-0009

Dear Margaret Stanzione:

Thank you for the opportunity to comment on the Draft Environmental Impact Report for the Oak to Ninth Mixed Use Development Project, Case File Number ER04-0009. I am an archaeologist familiar with the record of cultural resource management excavations in Oakland. The draft EIR's archaeological evaluation and proposed mitigation measures are incomplete and inadequate, must be amended to bring the project into compliance with CEQA. Major areas of concern are: 1) the DEIR inaccurately characterizing the known record of nearby previously encountered shellmound sites. 2) The DEIR inadequately assessing the possibilities for encountering archaeological remains within the product area, and failing to provide adequate mitigation measures. 3) A mitigation plan that requires construction workers to serve as archaeological monitors, which saddles workers with a cultural resource management role for which they have no training. JJ-1

The DEIR inaccurately represents the record of known shellmound discoveries, inaccurately giving the impression there are no known shellmound sites close by, and inaccurately giving the impression the project area has already been checked for archaeological remains associated with Native Californians. For example, the DEIR mentions N. C. Nelson's 1909 survey of Bay Area shellmounds did not record a site within the project location. (DEIR IV.E-1) This has no bearing on whether there may be legally-significant archaeological remains within the project area. Nelson's 1909 survey was a visual survey of shellmounds that still extended above the surrounding ground level. It did not attempt to account for subsurface remains, such as those that Nelson in 1909 noted had for the last forty or fifty years been "rapidly ... disappearing from the bay shores." (1909 :310) JJ-2

Nelson's 1909 survey did not record the existence of the shellmound site discovered in 1952 at Harrison and 2nd Streets, which today is a registered archaeological site. Nelson's 1909 survey had also failed to locate the shellmound site archaeologists have recorded on the southeastern shore of Lake Merritt. And the shellmound site(s) around the Civic Center BART station to which the DEIR alludes (IV.E-1) were likewise not represented in Nelson's 1909 survey, but had become registered sites after multiple encounters during construction. Additionally, he Jack London Square redevelopment DEIR reported "[r]ecent surveys have noted that subsurface components of CA-ALA-314 may exist in the area (p. IV.E-4)." (W.L. Nelson, 2000, *Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment* JJ-3

W507, Oakland to San Jose, on File at the Northwest Information Center, File No. 22820; Cited in ESA's DEIR, Environmental Science Associates, 2003, *Draft Environmental Impact Report for the Jack London Square Redevelopment*, dated September 8, 2003; publicly available at City of Oakland Community and Economic Development Agency, Planning and Zoning Division. See especially Table IV.E-1, "Identified Cultural Resources and Surveys Conducted Within the Project Area," page IV.E-4) JJ-3 (CONT.)

The DEIR notes the project area and its relationship to "the historic extent of the Bay tidal marsh land" make it the sort of area likely to host "Native American archaeological sites that can shed light on the Costanoan ways of life in the pre-mission area". (IV.E-3) One registered shellmound site has been recorded within five blocks of the project area, and at least two are within a mile. Further, a resident of land encompassed by the project area, Charles Weber, recently showed me a Native American artifact he noted was recovered from his backyard. It seems that area residents have also observed archaeological remains related to early Oakland history during digging in the area. JJ-4

The DEIR should be revised to more accurately reflect the known context of the project area, and appropriate mitigations should be prepared.

The DEIR contains an attempt at characterizing the project area's likelihood for legally-significant archaeological remains that fails to meet standards for survey or reporting. The DEIR relays: "in April 2005 a Registered Professional Archaeologist conducted a reconnaissance level survey of the project site to determine if undisturbed soils or areas suitable for survey exist" (IV.E -12). Upon contacting the Project Planner, I was told there is no survey report supporting this statement in the DEIR, and there would be none. If this statement in DEIR is the only written record of this "survey", it would need to conform to reporting standards of the Northwest Information Center, and at the very minimum provide a description of methods used and area studied. As it stands,what's in the DEIR is hearsay, if you can technically have "hearsay" from an unnamed source. This seems to put the City in a vulnerable position when it comes time to certify the EIR.

JJ-5

The DEIR fails to follow established practice for evaluating the possibilities of archaeological resources in this type of modified coastal area. The above mentioned "survey" isn't even and appropriate discovery method for this area. San Francisco shares Oakland's history of modifying the historic coastline, and has long practiced archaeological evaluations of the areas that were formerly tidal coast, but today buried with historic fill. The attached map from Pastron and Hattori (1990: 5) shows multiple legally-significant archaeological sites associated with historic tidal environments and discovered underneath subsequent land filling. One example is the Hoff Store site from the Gold Rush era. The second attached map, from Olmsted's 1991 *Guide to Historic Research in San Francisco: An archaeological aid*, also demonstrates standard practice in investigating historic tidal areas requires more than "a reconnaissance level survey". The DEIR's mitigations should be revised to bring the project in line with the practices demonstrated in the above works and projects such as that reported in Olmsted, et al's 1981 *Bayside San Francisco: Cultural Resource Survey of Mission Bay, the Potrero, Islais Basin, Hunsters Point & Bayview*, or 1981's *Rincon de las Salinas y Potrero Viejo -- The Vanished corner: historical archeological program, Southeast Treatment Plant, 1978-1979*, (Clean Water Program, San

Francisco).

Mitigation Measure E.1a would require construction workers to serve as archaeological monitors (IV.E-24). This is inappropriate under CEQA standards. And Oakland has experience that it does not work. The attached letter, dated April 28, 2004, relays a recent failure of a mitigation that required construction workers to act as archaeological monitors. During ground disturbing activities that unearthed historic remains, construction workers did not halt activities as they were specified to, even though the mitigation measure had set the trigger point as low as "an archaeological artifact".

To meet CEQA standards, the EIR should specify a qualified archaeologist compile land use records to determine if areas are likely to potentially yield legally-significant archaeological remains. This sensitivity study should be ground-tested by test excavations. It can be appropriate, when testing for shellmound remains, for this testing to take the form of multiple mechanical auger tests and or shovel test probes. If the results of this archaeological sensitivity study warrant it, a pre-construction archaeological testing and remediation plan can be prepared an implemented. With area residents reporting seeing and or recovering archaeological artifacts within the immediate area, professional archaeological monitoring should be conducted during all phases of ground disturbing activities. The City of Oakland is legally obligated to protect significant archaeological remains, even if their existence was previously unknown. The outlined procedure, or one like it, would bring the project into legal compliance in a manner than avoids additional project expenses or delays. JJ-6

The mitigation measures also need to provide a program for appropriate treatment of Native American artifacts that may be present in historic fill. JJ-7

Regarding Mitigation Measure E.1b (IV.E-24), how would Native American monitors or consultants be incorporated in the event the mitigation measure is triggered? How would Native American monitors or consultants be incorporated if Native American remains other than skeletons are discovered? JJ-8

At a minimum, Native Californian groups should also be invited to comment on the DEIR's provisions, and should early on be invited into the planning process to contribute to determining the scope for adequate study of the area and possible mitigation alternatives should Native American artifacts be found.

Mitigation Measure E.3b would archive large format photographs at the Oakland History Room of the Oakland Public Library (IV.E-26&7). This measure should be amended to provide to the Library funds to support accessioning and curating this archival material. Any mitigation measures that would generate audio and or visual material, such as Mitigation Measure E.8 (IV.E-30&1), should also provide written transcripts on archival quality paper, and archiving and curating funds should accompany the deposit of all materials. JJ-9

Finally, the EIR should explore more alternatives that include reuse of all or at least the majority of the 9th Avenue Terminal. This significant historic resource should be treated in compliance with the Secretary of the Interior's Standards. Historic resources had also been previously evaluated in the Estuary Policy Plan, and the planned project and project alternatives should be brought into compliance with this Plan. JJ-10

Sincerely,

Anna Naruta, M.A., Ph.D. Candidate

(for identification purposes only ----
Anthropology Department / Archaeological Research Facility
University of California, Berkeley)
P.O. Box 1514
Oakland, CA 94604

Sources Cited:

Environmental Science Associates, 2003, *Draft Environmental Impact Report for the Jack London Square Redevelopment*, dated September 8, 2003; publicly available at City of Oakland Community and Economic Development Agency, Planning and Zoning Division.

_____., 2005, Oak to Ninth Avenue Project *Draft Environmental Impact Report,* State Clearinghouse Number 2004062013. Dated August 2005; publicly available at City of Oakland Community and Economic Development Agency, Planning and Zoning Division, Case File Number ER04-0009

Nelson, N.C., 1909, *Shellmounds of the San Francisco Bay Region*, University of California Publications, American Archaeology and Ethnology, volume 7, number 4.

Nelson, W.L., 2000, *Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment W507, Oakland to San Jose*, on File at the Northwest Information Center, File No. 22820; cited in ESA's DEIR, especially Table IV.E-1, "Identified Cultural Resources and Surveys Conducted Within the Project Area," page IV.E-4

Olmsted, Nancy, 1991, *Guide to Historic Research in San Francisco: An archaeological aid*, Prepared by Resource Consultants for the California Department of Transportation, District 4, Oakland, California.

Olmsted, Roger, et al, 1981, *Bayside San Francisco: Cultural Resource Survey of Mission Bay,*

the Potrero, Islais Basin, Hunsters Point & Bayview. (Clean Water Program, San Francisco).

_____., 1981, *Rincon de las Salinas y Potrero Viejo -- The Vanished corner: historical archeological program, Southeast Treatment Plant, 1978-1979*. San Francisco, San Francisco Clean Water Program.

Pastron, Allen, and Eugene Hattori, eds, 1990, *The Hoff Store and Gold Rush Merchandise from San Francisco*, Society for Historical Archaeology, Special Publications Series Number 7.

COMMENT LETTER JJ

From:
Pastron, Allen, and Eugene Hattori, eds, 1990, *The Hoff Store and Gold Rush Merchandise from San Francisco*, Society for Historical Archaeology, Special Publications Series Number 7.

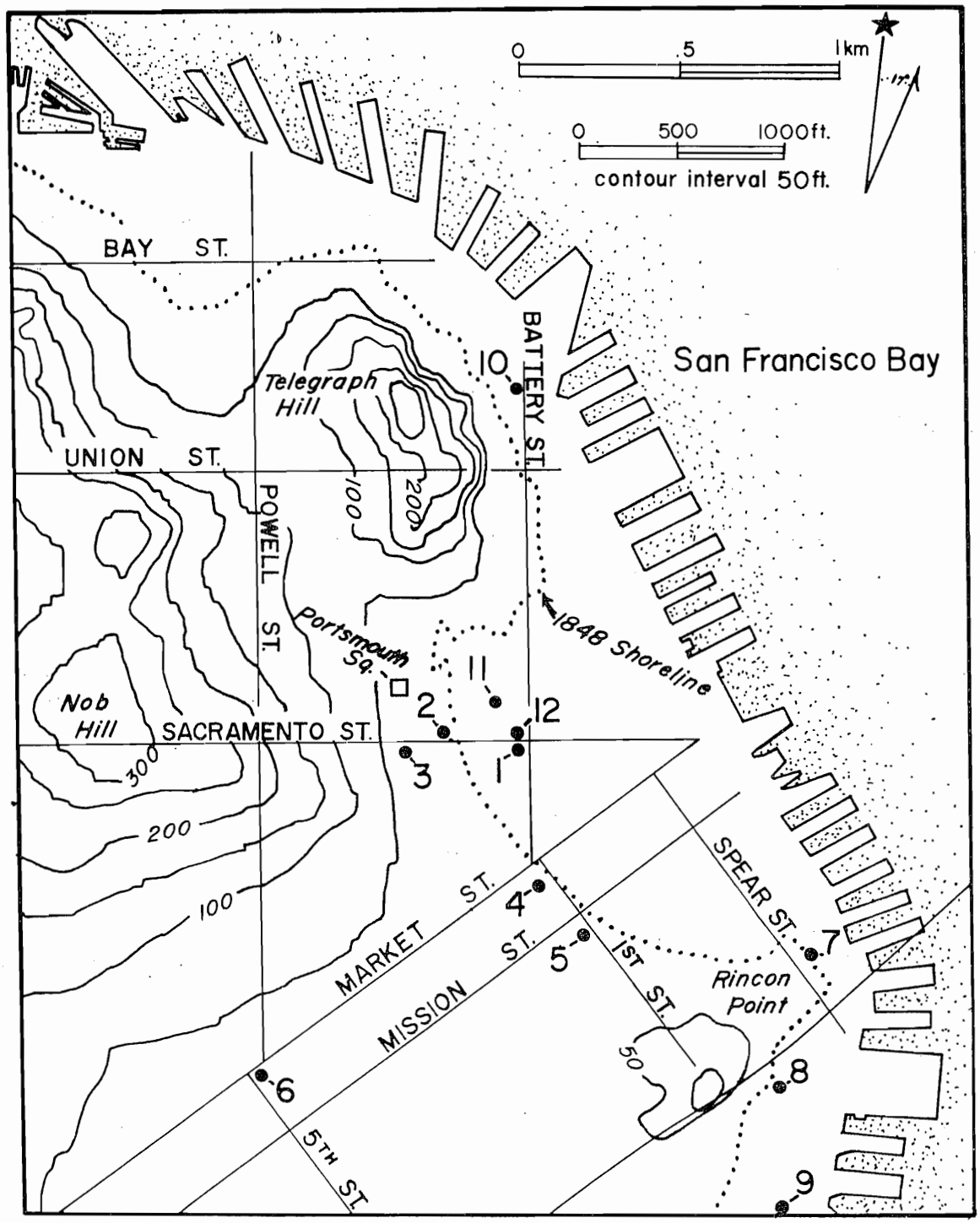
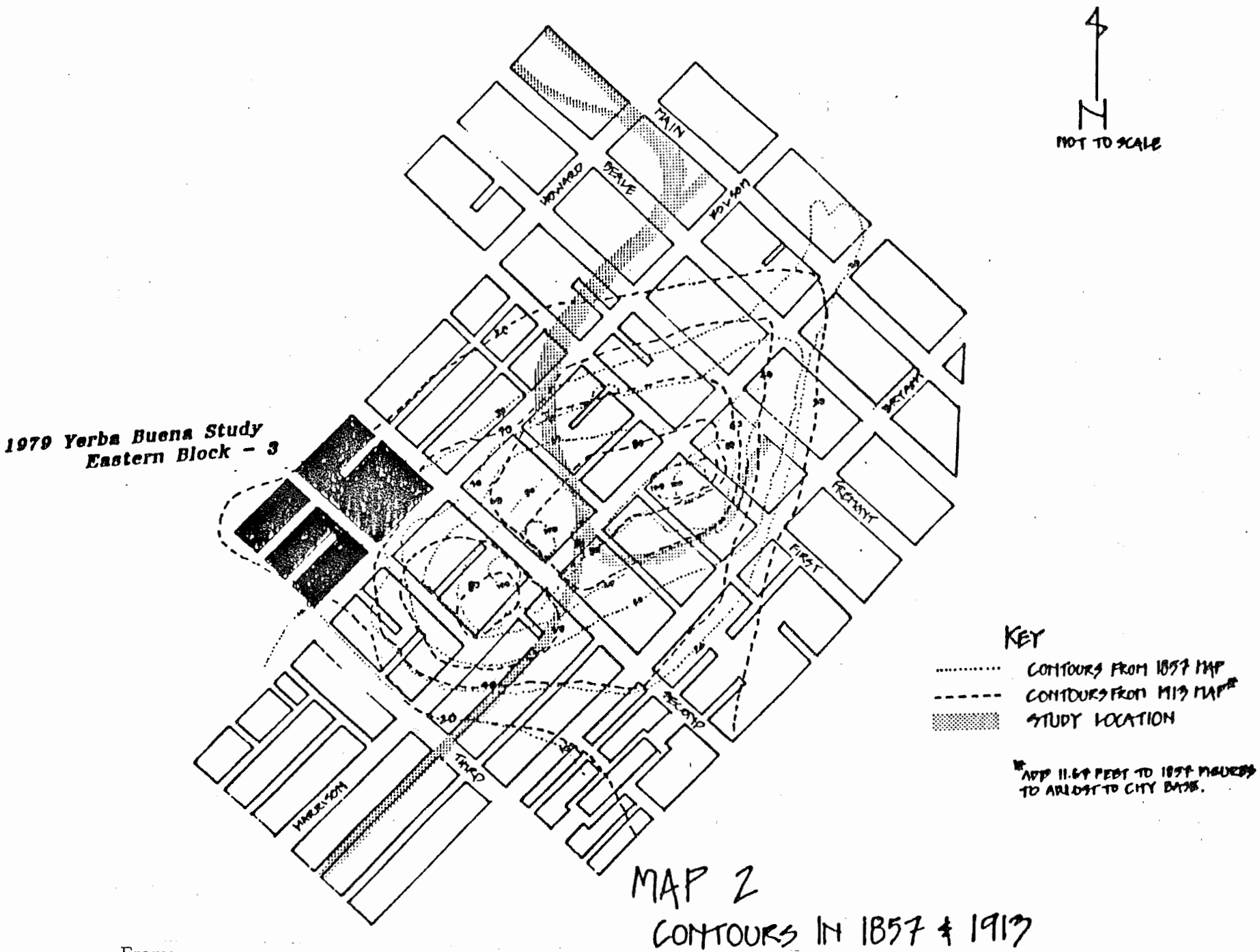


FIGURE 2–1. San Francisco archaeological sites: (1) Hoff Store site; (2) 505 Montgomery Street; (3) 600 California Street; (4) CA-SFr-112; (5) 100 First Plaza; (6) CA-SFr-113; (7) Hills Plaza; (8) Rincon Point Fishing Village; (9) Whaler *Lydia;* (10) *William Gray* at Levi's Plaza; (11) Storeship *Niantic;* (12) Storeship *Apollo.*

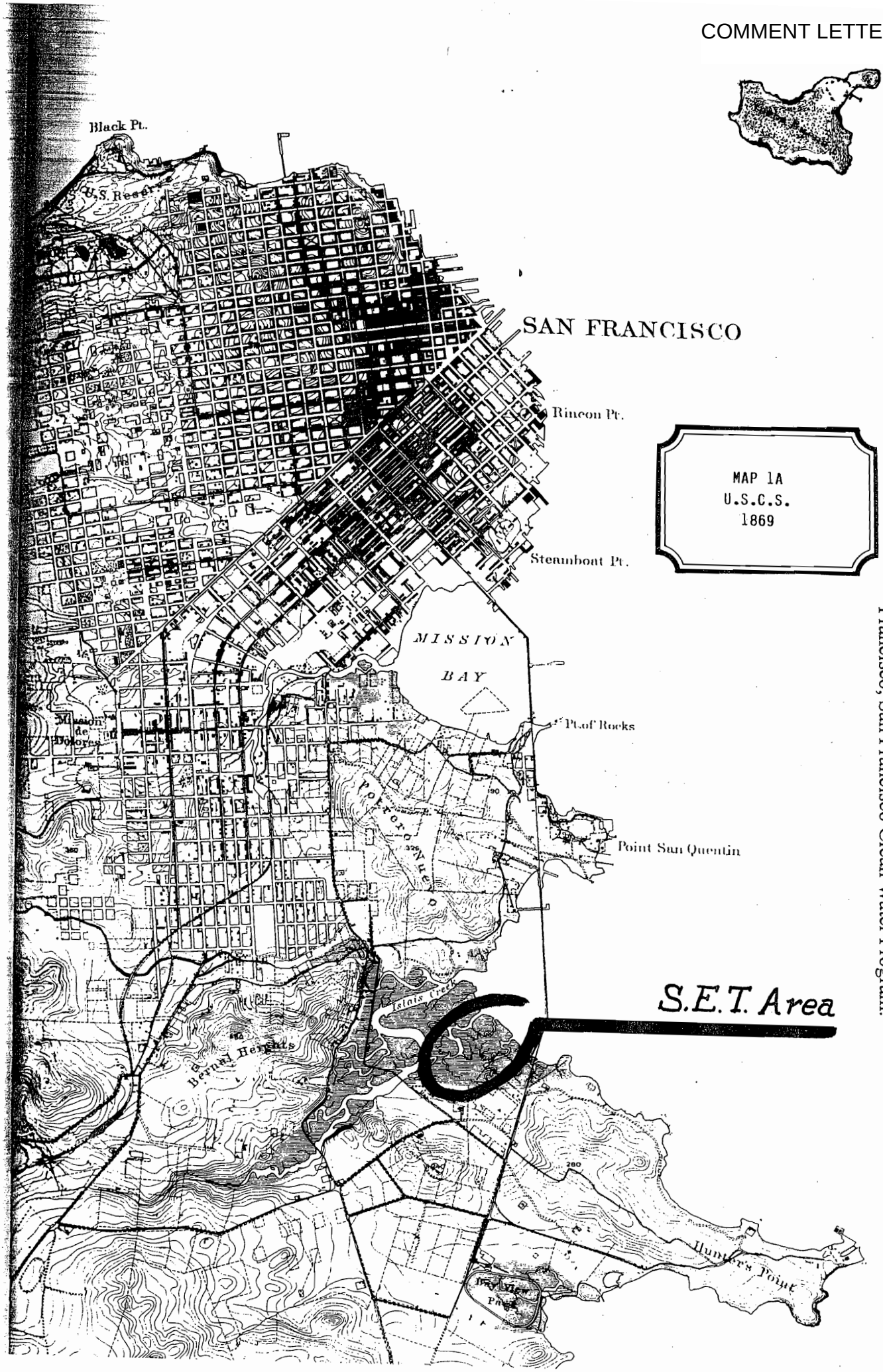


MAP 2
CONTOURS IN 1857 & 1913

From:
Olmsted, Nancy, 1991, *Guide to Historic Research in San Francisco: An archaeological aid*, Prepared by Resource Consultants for the California Department of Transportation, District 4, Oakland, California.

COMMENT LETTER JJ

COMMENT LETTER JJ



From:
Olmsted, Roger, et al, 1981, *Rincon de las Salinas y Potrero Viejo -- The Vanished corner: historical archeological program, Southeast Treatment Plant, 1978-1979*. San Francisco, San Francisco Clean Water Program.

Claudia Cappio, Development Director
Community and Economic Development Agency
250 Frank H. Ogawa Plaza
Oakland, CA 94612

Re: Broadway-West Grand Mixed-Use Project,
Case File Numbers PUD03552, PUDF03553, ER030022

April 20, 2004

Dear Development Director Cappio:

It has come to our attention that ground-disturbing work has begun on the Broadway-West Grand development. We request your attention to the mitigation measures adopted by the Planning Commission as part of the Conditions of Approval for this project. The conditions of approval for this project are not currently being met. This potentially jeopardizes unique archaeological resources protected under CEQA.

Mitigation Measure E.1a reads in part:

> "Representatives of established local Chinese-American organizations (including the Chinese Historical Society of America and the Oakland Asian Cultural Center) shall be invited to participate in a focused community review of the archival cultural resource evaluation prior to any subsequent recovery of potential resources or prior to the start of construction, whichever is earlier. The City shall consider the community comments in its review and approval of any plan for additional archaeological work or monitoring. (Staff Report to Planning Commission, December 1, 2004, Conditions of Approval, page 29)"

The Chinese Historical Society of America has not been contacted for the specified "focused community review of the archival cultural resource evaluation," yet earthmoving has already begun in the project area. Ground-disturbing activities should be halted until the cultural resource evaluation is completed, the CHSA and Oakland Asian Cultural Center have been invited to review it, and their comments considered.

Without the archival cultural resource evaluation, there is no basis for assuming the current project activities are not destroying unique and significant archaeological resources protected under CEQA. Primary documents show the project vicinity in the later 1800s was the site of the residences of a number of Chinese Oaklanders who, despite legalized discrimination, successfully pursued a living as independent farmers. (Naruta 2004, 2005). The project area itself was either the location of these independent farmers' residences, or those of their immediate neighbors. Information able to characterize the lives and relations

of these individuals is unavailable from documents. Archaeological remains from these previously forgotten Chinese farmers of the 1870s, or of the immediate neighbors of the 1880s Charter Avenue Chinatown could be of immense significance in understand early Oakland and its cultural changes. Prior to evidence showing otherwise, the data so far known requires we assume the project area may contain legally-significant archaeological remains. It must be evaluated and treated in accordance with CEQA protections.

Further, it has been brought to our attention that current project activities are uncovering numerous indicators that significant and intact archaeological remains may be present. The attached photo, taken April 19, 2005, shows one area of the ground-disturbing activities that have revealed historic building foundations, historic brick, buried organic-rich soils extending far below grade, and other indications of possible legally-significant archaeological remains. According to the Conditions of Approval, just one of these items must trigger having a qualified archaeologist investigate the site:

> "Should an archaeological artifact be discovered on-site during project construction, all activities within a 50 foot radius would be halted until the findings can be fully investigated by a qualified archaeologist to evaluate the find and assess the significance of the find according to the CEQA definition of a historical or unique archaeological resource. (from Mitigation Measure E.1a, Staff Report to Planning Commission, December 1, 2004, page 29)"

Thank you for your attention to enforcing the project's Conditions of Approval.

Sincerely,

Anna Naruta
2005-2007 Board Member
Chinese Historical Society of America

References Cited:

Naruta, Anna. 2004. Draft EIR comment letter for the Broadway-West Grand Mixed-Use Project DEIR, Case File Number ER03-0022. Letter dated October 8, 2004.

_____. 2005. "Oakland's San Pablo Avenue Chinatown: A compilation of research to aid the upcoming archaeological sensitivity study and treatment plan to be drafted by the archaeological contractor for Forest City's Uptown redevelopment project." Oakland: UptownChinatown.org. January 2005. On file at the Oakland Cultural Heritage Survey, Oakland Public Library, and the Oakland Asian Cultural Center.

Letter JJ - Anna Naruta

JJ-1: The use of Nelson's (1909) survey of shellmounds throughout the margins of the Bay as a reference is by no means suggesting that this is the only source or means by which to identify the location of prehistoric sites in the Bay Area. Because the Nelson survey is the first systematic and scientific survey of these shellmound sites and that it occurred before, in some cases, development of the historic margins of the Bay, this source is useful in predicting where shellmound sites, or similar features, would have been located. This EIR section does not contend that this survey verified the existence of all observed sites using subsurface techniques or that the survey was adequate in all aspects of mapping and site identification. However, Nelson (1906) did excavate the Emeryville shellmound (CA-ALA-309) to augment earlier investigations and was instrumental in the interpretation of site stratigraphy to answer research questions about the shellmounds themselves.

JJ-2 As mentioned in the response above, Nelson's (1909) survey was not used as the only possible source for information on whether sites may or may not exist along the margins of the Bay. It's clear from more recent archaeology and discoveries made along the Peninsula and elsewhere that sites are located outside of the purview of Nelson's (1909) survey. This EIR section does not purport to use Nelson's survey as the only definitive evidence for whether sites exist or not in a given area.

JJ-3 As mentioned in the EIR, the area that constitutes the Oak to Ninth project area was historically bay waters and tidal marsh (see Sowers 1995; SFEI 1997). The present-day character of the site is fill material. The process of filling the bay to allow for the construction of docks, boat building facilities, and so forth, has likely destroyed any archaeological remains that may have been located at this site. Furthermore, the presence of shellmounds in the vicinity is not in dispute, and there is no question that a series of mounds once existed at Emeryville and likely southward along the bay margins. However, the mere presence of shellmounds—those actually identified and excavated and those putatively identified through historical evidence—does not predict with certitude the presence of shellmounds or any other cultural feature or artifact anywhere along the historic margins of the Bay (Indeed, the margins of the bay south of Emeryville are relatively sparse for identified sites compared to the northern east bay). As stated in the EIR, sea level rising during the Holocene likely inundated older shellmounds and components of the shellmounds recorded during the early part of the 20th century.

JJ-4 Based on a thorough review of recognized published and unpublished resources cited in the DEIR and ultimately the professional judgment of a registered archeologist, the reconnaissance level survey conducted for the DEIR analysis is appropriate and adequate upon which to assess the potential for impacts to archeological resources and identify appropriate mitigation measures to reduced potential impacts to less than significant levels. If the literature research and the site reconnaissance survey had suggested or indicated discrete archaeological sites or features existed on or near the project site,

additional subsurface discovery could be warranted. As outlined in the Response to Comment S-18, in the opinion of the registered archaeologist conducting the DEIR assessment, extensive discovery techniques and full testing survey does not appear warranted given that 1) the project site is in bay waters and consists of considerable artificial fill material with a low probability of re-deposited archaeological remains (even thought it is recognized that archaeological sites have been shown to occur below fill material and underwater due to Holocene sea level rise, but this fact alone does not predict archaeological sites where tidal waters were artificially filled); and 2) given the expense and effort of methods that would be required to identify archaeological material on the project site, compared the low probability of discovering sites in artificial fill.

JJ-5 Historic land use records were accessed to determine the nature of the site prior to development (see references in Response to Comment JJ-3, also the 1871 Rancho San Antonio Plat Map, the 1857 A.D. Bache et al. San Antonio Creek Map, and the 1878 Thompson & West, Historical Atlas Map of Alameda County—all part of the records search). As mentioned, these maps show the project area as mostly bay with small patches of tidal marsh. Because of the large percentage of bay for this area, discrete archaeological sites were considered less likely. While full ground-testing does not appear warranted for reasons outlined above, please see added mitigation measures below to address the issue of accidental finds during construction.

JJ-6 During preparation of the DEIR, the Native American Heritage Commission was contacted concerning the project, and letters were sent to each Native American contact provided by the Commission. While no responses have been received in response to that correspondence, adequate mitigation measures are identified starting on DEIR p. IV.E-24 that address the required contact with relevant Native American organizations potential in the event that an archaeological site or burial remains is discovered, disposition of artifacts will be considered by the archaeologist called to the site.

To further detail this process, the additional and revised mitigation measures are added as starting on DEIR p. IV.E-24 (additions shown as underlined; deletions as ~~strikeout~~):

> **Mitigation Measure E.1a: An archival cultural resource evaluation shall be implemented prior to the start of construction or other ground-disturbing activities to identify whether historic or unique archaeological resources exist within the project site. The archival cultural resource evaluation, or "sensitivity study," shall be conducted by a cultural resource professional approved by the City and who meets the Secretary of the Interior's Professional Qualifications Standards for Prehistoric and Historical Archaeology.**
>
> **The purpose of the archival cultural resource evaluation is to: (1) identify documentation and studies to determine the presence and location of potentially significant archaeological deposits; (2) determine if such deposits meet the definition of a historical resource under CEQA Guidelines Section**

15064.5 or a unique archaeological resource under CEQA Section 21083.2(g); (3) guide additional archaeological work, potentially including pre-construction subsurface archaeological investigation if warranted, to recover the information potential of such deposits; and (4) define an archaeological monitoring plan, if warranted. A pre-construction meeting shall occur with the cultural resource professional and the City regarding the findings of the evaluation, and shall include consultation with and considerations of the Department of Toxic Substances (DTSC), the Lead Agency for the environmental cleanup activities on the project site. If excavation is the only feasible means of data recovery, such excavation shall be in accord with the provisions of CEQA Guidelines Section 15126.4(b)(3)(C). Any additional archaeological work and or monitoring shall be pursuant to a plan approved by the City. If a pre-constructing testing program is deemed necessary by the qualified professional as a result of the archival study, it shall be guided by the archival study and shall use a combination of subsurface investigation methods (including backhoe trenching, augering, and archaeological excavation units, as appropriate).

If monitoring of any areas during ground disturbing activates is determined to be required based on the results of the archival evaluation and the pre-construction testing, the monitoring will be conducted by a qualified cultural resources professional and the monitoring plan will include appropriate provisions for evaluating any archaeological deposits, consultation with the City, and any necessary data recovery program.

Mitigation Measure E.1b: Prior to the commencement of ground distributing activities, all construction personnel shall receive environmental training from a cultural resource professional approved by the City and who meets the Secretary of the Interior's Professional Qualifications Standards for Prehistoric and Historical Archaeology. The purpose of the environmental training is to inform all construction personnel of the possibility of encountering historical resources. All construction personnel specifically involved in onsite activities that may uncover prehistoric resources shall be trained in the identification of prehistoric resources and immediate actions required if potential resources are found.

Mitigation Measure E.1~~a~~c: Pursuant to CEQA Guidelines 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore, in the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project proponent and/or lead agency shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the City. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.

Mitigation Measure E.1~~b~~d: In the event that human skeletal remains are uncovered at the project site during construction or ground-breaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and follow the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.

Significance after Mitigation: Less than Significant.

JJ-7 The comment references Mitigation Measure E.3b although the statements apply to Mitigation Measure E.3a, which requires that "documentary photographs [of the historic resource] would be archived locally at the Oakland History Room (OHR) of the Oakland Public Library. The mitigation details the standards, methods and format for the archived materials, which would be managed by qualified public library staff in perpetuity as a function of standard operations of the OHR, thus additional funding to fully implement Mitigation Measure E.3a is not warranted. Similarly, Mitigation Measure E.8 specifies an historical exhibit that would include, at a minimum, materials depicting the history of the Oakland Municipal Terminals through a variety of physical, aural and visual media.

The additional text is added to Mitigation Measure E.8 on p. IV.E-24 (additions shown as underlined; deletions as ~~strikeout~~):

Mitigation Measure E.8: The project sponsor shall set aside a minimum of 200 square feet of floor area within the Bulkhead Building for an historical exhibit depicting the history of the Oakland Municipal Terminals. At a minimum, the exhibit would consist of the following:

5) An educative and documentary audio/visual history on the Oak to Ninth area and accessory areas as appropriate, including:

a. Visual explanation of wharf design versus other types of pier design;

b. Oral histories of people who worked at the building and/or other maritime industries in the area;

c. Historic film clips.

d. History of the development of the harbor;

e. History of the development of the Port Board;

f. PWA and WPA involvement at the Port;

g. World War II uses;

h. A visual film documentation of the existing warehouse/industrial character of the area, including views from the water to the City.

i. Written transcripts on archival quality paper for any audio or visual exhibits prepared for this mitigation.

JJ-8 See Master Response 2 regarding alternative reuses for all or part of the Ninth Avenue Terminal. Regarding compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, Mitigation Measure E.3b on p. IV.D-27 of the DEIR specifies that, under the project scenario in which the Bulkhead Building would be adaptively reused and rehabilitated, these actions would comply with the Secretary's Standards. Alternative 3 (Reduced Development / Terminal Preservation) discussed starting on DEIR p. V-29, and the Full Preservation and Adaptive Reuse Sub-Alternative discussed starting on DEIR p. V-38, both also would require consistency with the Secretary's Standards.

The comment states that the Estuary Policy Plan evaluated historic resources and that the project and the alternatives should be brought into compliance with that Plan. Section IV.A (Land Use, Plans, and Policies) of the DEIR includes a detailed discussion of the project's relationship to the Estuary Policy Plan's policies starting on p. IV.A-13 and concludes that the project would not conflict with the Plan. The alternatives analysis in Chapter V of the DEIR discusses the relationship of each alternative to the Estuary Plan Policies in particular. The evaluation of historic resources in the Estuary Policy Plan EIR (consistent with the policy statements in the plan) concluded that the project would have a significant and unavoidable impact given the potential that all or portions of the Ninth Avenue Terminal would be demolished. The City adopted a statement of overriding considerations stating why the benefits of the project (Estuary Policy Plan with Terminal potentially demolished) would outweigh the significant unavoidable impact.

References

San Francisco Estuary Institute (SFEI). *Historical View of Central Bay Subregion, ca. 1770-1820, based upon Eco Atlas 1.50.* Map on file at Environmental Science Associates, Oakland, CA.

Sowers, J.M. *Creek and Watershed Map of Oakland and Berkeley.* Historical wetlands research conducted by Historical Ecology Group, San Francisco Estuary Institute. Map on file at Environmental Science Associates, Oakland, CA.

COMMENT LETTER KK

Pamela and Charles Weber
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City of Oakland
Planning & Zoning Division

October 23, 2005

Margaret Stanzione
Project Planner
City of Oakland
Community and Economic
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250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

Re: Comments on DEIR, Oak to Ninth Avenue

Dear Ms Stanzione:

Following are our comments on the Draft Environmental Impact Report for Oak to Ninth Avenue.

III-4. "After implementation of the Oak to Ninth project, the site would consist of approximately 64.2 acres…"and "…after changes in land area resulting from shoreline alterations in Clinton Basin." This statement fails to state the project sponsor's intent to fill two acres of Clinton Basin.. The increased land area to be created by the fill is then used to positively calculate the ratio of open space-to-total land area in the Project Characteristics. The proposed land-fill issue alone is of such significance to warrant additional public hearings prior to approval of the draft EIR. KK-1

III-5 "The project would demolish a maximum of approximately 165,000 square feet of the existing Ninth Avenue Terminal building and a portion of its existing wharf."

III-18 "The Port or the City would own the open spaces proposed by the project." KK-2

The project sponsor will demolish an historic building in the process of being landmarked (with an Oakland Landmarks Preservation Advisory Board rating of "A") on public property. Who gave the project sponsor the authority to do this? How will ownership of the Ninth Avenue Terminal on public property be transferred to the project sponsor? KK-3

The voters of Oakland mandated approximately $22 million of Measure DD funds to be expended on waterfront parks on the area from Oak to Ninth, and the project sponsor has no right to change the intent of measure DD. The DEIR does not discuss how these funds will be expended, and whether the Park Department will be involved in the planning process or administration of the waterfront improvements. KK-3 (CONT.)

This section fails to discuss who will pay for maintenance of the piers, riprap, park landscaping, parking and amenities of the "open spaces". KK-4

III-16. "Gateway Park would be sited at the main entry to the project." This presumes the project sponsor will obtain approval to fill 2 acres of Clinton Basin. KK-5

The 3,100 residential units projects a population density equal to Manhattan, hardly a glowing recommendation of ideal California living conditions. KK-6

IV.B-1. This section does not address the approved development currently underway at Jack London Square which includes 1.2 million square feet of new office, retail, residential, theater, supermarket and theater space within one mile of Oak to Ninth. The DEIR for that project predicts weekday afternoon trip generation of 24,914 and weekend afternoon trip generation of 20,788. The access roads to the south end of Jack London Square are the same as those to Oak-to-Ninth. It is recommended that the transportation element of the DEIR for Oak-to-Ninth be combined with the EIR for the Jack London Square development and that public hearings on this component of the DEIR be held. KK-7

The subject DEIR for Oak to Ninth does not address the proposal by CalTrans to close the Jackson Street onramp to northbound 880, although the Jack London Square DEIR acknowledges the proposed closure. This closure will force northbound and eastbound traffic from Oak-to-Ninth to negotiate city streets in Chinatown. KK-8

The traffic study also fails to discuss the additional traffic on the Embarcadero created when there is a slowdown or blockage on southbound 880; traffic exits at Jackson Street, down Oak Street to the Embarcadero, causing delays of up to 15 minutes from Oak Street to Fifth Avenue on the Embarcadero. Such a delay, compounded by an additional 3,000 cars per day during commute periods, and the closure of 5th Avenue by trains, could be substantial. KK-9

IV.B-68 Adds an estimated 50 truck round trips per day during the site preparation phase and 50 truck round trips per day during construction, both of which could be occurring simultaneously.. Many of these trucks are slow-moving and would add greatly to traffic delay times and congestion. KK-10

IV.B-9. Existing Intersection LOS (Level of Service) and Delay. The intersection of 5th Avenue and the Embarcadero is rated "F" – with a current delay of 54 seconds per vehicle in the morning and greater than 70 seconds in the afternoon. Delays caused by trains are not addressed. KK-11

Margaret Stanzione
October 23, 2005

IV.B-60. Railroad Operations. This section is incorrect and misleading. Field data was collected only from 7 am to 6 pm. A more accurate figure for freight trains is 18 per day, for a traffic delay of 3 to 10 minutes each. Combined with Amtrak passenger service of 38 trains per day, the more accurate estimate of total traffic delay at Fifth Avenue and Oak Street is currently 98 minutes per day. Compounding railroad traffic delays with a freeway backup that forces traffic onto the Embarcadero and an additional 3,100 to 6,000 vehicles per day during commute periods, the Embarcadero could become the Bay Area's worst traffic jam. An emergency vehicle would not have a chance of getting through to a waterfront emergency. Business owners at Jack London Square have already publicly expressed concern about how they would handle a serious medical emergency on the waterfront when there is a long freight train on site and heavy Embarcadero traffic. KK-12

IV.B-74 Allocation of one parking space per residential unit. The Metropolitan Transportation Commission reported in 2000 that the average Bay Area household owns 1.85 cars. If this project is permitted to build only 3,100 parking spaces, it can be assured that all 665 spaces planned for retail, marinas and the aquatic center will be continually occupied by residents' secondary vehicles and guests. Full-time policing of "no parking" zones along the Embarcadero and the privately owned properties within the project would be required. KK-13

If for any reason during the build-out phase the developer increases the number of parking spaces per unit, the additional traffic generated by these vehicles will invalidate the traffic study proposed for approval in the DEIR. It appears that the proposed parking ratio was geared toward presenting an acceptable traffic study. KK-14

The planned ratio of parking of 1 space per 1,000 square feet of commercial space is inadequate. A 5,000 sq. ft. store might have 3 employees, thus leaving 2 parking spaces at a time for customers. Which retailers have agreed to leases on these terms? KK-15

IV.E-14. Table IV.E-1 Philbrick Boatworks building #4. The section indicates the Philbrick Boatworks building was built in 1947. This is incorrect. The building was being used in the 1920's – 1930's as a receiving station for bananas and other produce from Central and South America. This building may not have architectural significance but its maritime history is significant. KK-16

IV.G-17. Projected Noise Levels. The project is planned to be built out over 11 years, with all facets of the project – ground clearing, excavation, foundations, erection, exterior finishing and pile driving creating noise levels which exceed acceptable levels.

"Noise-sensitive uses nearest the proposed demolition and construction activity would be the residents of the adjacent residential complex (Portobello) and work-live tenants in the adjacent Fifth Avenue Point and tenants occupying buildings completed during initial construction phases." KK-17

OSHA requires employers to monitor noise exposure levels in a way that accurately identifies employees exposed to noise at or above 85 decibels averaged over 8 working hours. This

exposure measurement must include all continuous, intermittent and impulsive noise within an 80 to 130 decibel range. Employers must provide hearing protectors to all workers exposed to 80hour TWA noise levels of 85 decibels or above. KK-17 (CONT.)

What provision will the developer make for noise protection for the tenants and business operations existing at the Fifth Avenue Point Community and Portobello? KK-18

IV.J-1. Oak-to-Ninth is currently occupied by 21 tenants which employ about 230 workers, all of whom will be out of work if this project moves forward. The developer makes no provision to attempt to negotiate with existing tenants to keep them at the site or relocate them to other areas of the project. Twenty-one business licenses will be lost to the City of Oakland, with their attendant sales tax. Will incremental property tax, which will be directed solely to the Redevelopment Agency, make up for the loss of long-standing businesses in Oakland? KK-19

IV.J-5. This section fails to mention the Philbrick Boat Works, which has been in continuous operation since the 1940s. Philbrick boats are famous in the genre of wooden boats. There is no mention in the DEIR of an attempt by the project sponsor to relocate this important part of Oakland's waterfront history. KK-20

Table IV.J-17. Estimated retail sales are preposterous for the size and type of retail proposed. Central area neighborhood retail projects $336 per square foot in sales – equivalent to a successful Nordstrom, except that this store might have only 20 parking spaces, 7 of which might be occupied by employees. KK-21

IV.K-39. To state that existing views and vistas from land that is currently vacant or occupied by one-to-two-story buildings would not be significantly impacted by covering said land with 8-to-24 story buildings is preposterous. To say the project's effect on scenic vistas would be less than significant is a lie. KK-22

Figure IV.K-32 and IV.K-33. Shadow patters for March 9am and December 9am cover nearly the entire area of Ninth to Channel Park. This is contradicted by line 1, page IV.K-62 "The project would not results in significant shadow impacts as a result of new construction" and the final paragraph of that section "In conclusion, based on the above evaluation, the project would results in less-than-significant shadow effects." This is completely false. With increasing energy costs, the use of natural light is becoming more important than ever. KK-23

<u>Project Residents Would Contribute Additional Retail Spending</u>. This section estimates project residents would spend $30,645 <u>per unit</u> annually in Oak-to-Ninth retail/commercial enterprises. KK-24

IV.K-8 "The project would develop incrementally…The project sponsor proposes to develop the initial project phase(s) in the easternmost portion of the site, with subsequent phases likely to be constructed by other developers." Without a specific plan, what regulation and what governing body would have oversight over the "other developers." KK-25

Margaret Stanzione
October 23, 2005

IV.K-11-39. Comparison of existing and proposed views. Figures IV.K-2 through IV.K-19. Computer-enhanced photographs are intentionally composed from a distance or with trees or objects in the foreground to intentionally soften the impact of the massiveness and height of the structures. The alternate variant structures are depicted with the most misleading foregrounds. These depictions should be more realistically presented in the final EIR. KK-26

Figure IV.K-20. March Shadow Patterns, 9 am and September Shadow Patterns, 9 am. This figure illustrates nearly total darkness for 90% of the project. It is apparent that many residents of this project will rarely see sunlight KK-27

IV.L-9 This section deduces that the proposed project would have no adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives for any of the following services:

Fire protection, police protection; schools; and other public facilities KK-28

The DEIR for the proposed Jack London Square project, with its projected 1,200,000 square feet of new development and 20,000 to 24,000 trips per day, reached the same conclusion. How can 30,000 additional people per day visit a one-mile-long area served by a two-lane road and not require any additional fire, police and other public services?

The impact on public services of the combined Jack London Square and Oak to Ninth developments is of such significance that it warrants a combined DEIR public hearing.

IV.L-15. Creation of a 3.1 acre park at the expense of filling the Estuary is unnecessary and will create a politically volatile situation. The San Francisco airport has proven that airport safety would be increased by filling San Francisco Bay for an additional runway – after 15 years of applications, the approval has not been achieved. KK-29

An honest assessment of what this proposed development will be is a private community to which the public will not be welcome. KK-30

Respectfully submitted,

Charles M. Weber, Jr.

Pamela J. Weber

Letter KK– Pamela and Charles Weber

KK-1 Although, not explicitly stated that approximately two acres of fill would be added to the project site at the base of Clinton Basin, the text that the comment references on DEIR p. III-4 indicates that the land area of the project site would increase by two acres compared to existing conditions. The discussion of agency actions required for the project (DEIR p. III-25) also specifies that review and approval for "filling" would be required by the San Francisco Bay Conservation and Development Commission (BCDC). DEIR p. IV.A-32 (Land Use, Plans, and Policies) states that "the project may require new Bay fill to create new open spaces around Clinton Basin… and the extent to which the potential new bay fill is 'necessary' would be considered by BCDC and City…." A description of how the vertical bulkhead wall proposed around Clinton Basin would retain the fill necessary for the improvements around Clinton Basin (DEIR p. IV.D-20).

The potentially significant impacts that could result from bay fill activities (and other water-impacting activities) are identified and fully analyzed in the DEIR in Section IV.D (Hydrology and Water Quality), under Impact D.1 (construction impacts on water quality, starting on DEIR p. IV.D-20), and in Section IV.I (Biological Resources), under Impact I.2 (construction impacts [fill and excavation] on waters of the U.S., which addresses wetlands and as well as "jurisdictional waters of the U.S.," e.g., Clinton Basin, starting on DEIR p. IV.I-21). Mitigation measures are identified to reduce these potentially significant impacts to less-than-significant levels.

KK-2 The project sponsor has submitted an application for the proposed project, which would entail demolition of 165,000 square fee of the Ninth Avenue Terminal. The City is currently in the environmental and project review process of the proposal. Review and consideration by the Landmark's Preservation Advisory Board has been, and will continue to be, a part of that City's review process, and will forward its recommendation on the proposed landmarking of the Terminal to the City Planning Commission prior to its acting on the EIR or the project. If the City chooses to approve the project and allow full or partial demolition of the Terminal, it would be required to prepare and adopt statement of overriding considerations in support of its choice, as it previously did prior to adoption of the Estuary Policy Plan for which a significant unavoidable cultural resources impact was identified for full or partial demolition of the Terminal.

. Upon that approval, the project sponsor would be "authorized" to substantially demolish the Ninth Avenue Terminal, subject to its submitting and obtaining all required City permit applications and approvals for building demolition.

KK-3 Ownership of the Ninth Avenue Terminal (in whole or any portion that would be retained, including the Bulkhead Building proposed by the project) would be retained by the Port or City of Oakland.

KK-4 See Master Response G, which includes a discussion of the use of Measure DD expenditures for the project area. The project sponsor does not proposed to utilize Measure DD funds to implement the 20.7 new acres of new, City-owned and operated waterfront parks/open space and trails along the Estuary. This would not, however, preclude the future use of Measure DD funds for other improvements within the project area.

KK-5 See also Responses to Comments R-9 and GG-11 regarding maintenance responsibilities and scope.

KK-6 The comment includes an unsubstantiated comparison of the proposed residential density to [the City of] Manhattan and a conjecture about the characteristics that warrant "ideal California living conditions." The comment does address the adequacy of the DEIR or potential impacts on the physical environment under CEQA.

KK-7 The comment that the traffic analysis in the DEIR does not address the approved development currently underway at Jack London Square is incorrect. Existing built and entitled development in the Jack London Square area is considered throughout the analysis in Section IV.B (Transportation, Circulation and Parking) of the DEIR. Specific discussion of planned roadway, intersection, and transit improvements are discussed on DEIR pp. IV.B-16 and IV.B-17, many of which pertain to Jack London Square approvals and mitigation measures. Further, (as discussed in Response to Comment QQ-4 below), the analysis of intersection impacts is based on the Congestion Management Agency's (ACCMA) Countywide Travel Demand Model, which was modified with land use, employment and population projections from the Oakland Cumulative Growth Scenario (consistent with the standard process used by the City to prepare environmental analyses). Updated land use assumptions for the project study area, which includes other proposed and approved developments in the City of Oakland (including the Jack London Square Redevelopment project) were applied to the ACCMA model.

KK-8 The commenters mis-read the planned roadway improvement pertaining to the referenced on-ramp. As described in the Jack London Square Redevelopment DEIR, what would close, as part of improvements recommended in the SR 260 Deficiency Plan, would be the ramp connecting Jackson Street at 6th Street <u>to Broadway</u> (*emphasis* added). The on-ramp from Jackson Street to northbound I-880 would remain open. This roadway improvement is discussed in the first paragraph under Broadway/Jackson Interchange at I-880 on DEIR p. IV.B-16 of the Oak to Ninth DEIR.

KK-9 Standard traffic analyses for planning documents reflect prevailing (i.e., usual) conditions on roadways and at intersections. Consistent with those practices, the DEIR did not analysis irregular conditions (e.g., diversion of traffic off southbound I-880, as described by the commenter). It also should be noted that conditions that cause such periodic diversion of traffic onto the Embarcadero occur in the absence of the proposed project, and the project would not exacerbate those conditions. The commenter's characterization of "an additional 3,000 cars per day during commute periods" is incorrect; the estimated

number of vehicle trips generated by the project at buildout would be no more than about 2,590 vehicle trips during the PM peak hour.

KK-10 Potential impacts associated with project construction are discussed on DEIR pp. IV.B-65 to IV.B-69. Mitigation Measure B.10, on DEIR pp. IV.B-69 and IV.B-70 (as revised in this FEIR), would require that the project applicant meet with the Traffic Engineering and Parking Division of the Oakland Public Works Agency and other appropriate City of Oakland and non-City agencies (e.g., Caltrans) to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction. The project applicant would also be required to develop a construction management plan for review and approval by the City Traffic Engineering Division. Implementation of Mitigation Measure B.10 would reduce the impacts to a less-than-significant level.

KK-11 As stated in the Response to Comment KK-9, above, consistent with standard traffic analyses practices, the DEIR analysis reflects prevailing (i.e., usual) conditions at the intersection of 5th Avenue and the Embarcadero. The DEIR addressed the frequency of trains crossing 5th Avenue on DEIR p. IV.B-60.

KK-12 See Responses to Comments J-1 and J-3 regarding revisions to the DEIR descriptions of railroad service in the project area. The DEIR acknowledges that delays are incurred when the railroad crossing is blocked by a passing train, and that during those times, access to the project site would be impeded. However, the source of the commenter's characterization of the length of delay (3 to 10 minutes per freight train, and 98 minutes per day considering Amtrak trains, too) is unclear. As stated on DEIR p. IV.B-60, field observations at the 5th Avenue crossing (from 7:00 AM to 6:00 PM, when the great majority of project traffic would be generated) indicated that the crossing gates were down from one to five minutes per freight train. During the 11-hour data collection effort, freight trains caused the gates to be down for a total of about 20 minutes, or 3 percent of the total observed time.

The DEIR states that when a freight train is crossing the tracks across 5th Avenue, impeded access to the project site could be a serious concern for an emergency vehicle traveling to the project site. Available alternative routes are the at-grade crossing on Oak Street (to the north) and the overcrossing on 16th Avenue (to the south). In the opinion of the Oakland Police Department, the availability of alternative routes would minimize any significant delay in response time, given the relative frequency and duration of train obstructions at both the 5th Avenue and Oak Street crossings in typical conditions or in the instance of a simultaneous emergency in the project area.

See Response to Comment KK-9, above, regarding analysis of irregular occurrences of diversion of traffic off southbound I-880, and regarding the commenter's incorrect characterization of "an additional 3,100 to 6,000 vehicles per day during commute periods."

KK-13 See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management measures.

KK-14 See Response to Comment Q-3 regarding the relationship between parking demand and vehicle trip generation.

KK-15 The commenters mis-read the parking requirement for commercial space on the project site. As seen in Table IV.B-11, DEIR p. IV.B-72, the proposed planned waterfront zoning district parking standard for general commercial spaces would be one space per 500 square feet of floor area.

KK-16 See Response to Comment O-1 regarding the historic status of Philbrick Boat Works.

KK-17 The comment describes noise monitoring and measures to protect employees from exposure that is required of employers under Occupational Safety and Health Agency (OSHA) regulations. Project compliance with all applicable federal, state, and local laws is assumed, including those that apply to construction workers.

The following text shall be added on DEIR p. IV.G-5, as the third paragraph under *State of California Regulations*:

> **"The project would involve hazardous noise activities related to certain construction activities and duration of such activities. Construction operations on the site therefore would be subject to federal and state Occupational Safety and Health Agency (OHSA) standards that address construction employee hearing conservation and noise exposure." (DOSH, 2006; OSHA, 2006) References:**
>
> **California Division of Occupational Safety and Health (DOSH) website, http://www.dir.ca.gov/title8/5097.html; accessed January 4, 2006.**
>
> **U.S. Department of Occupational Safety and Health Agency (OSHA) website, http://www.osha.gov/SLTC/constructionnoise/programs.html; accessed January 4, 2006.**

KK-18 As discussed in the DEIR starting on p. IV.G-17, the project would have a significant and unavoidable construction noise impact (Impact G.1) due to "project construction noise levels that could exceed City of Oakland standards and cause disturbances in noise-sensitive areas, such as residential areas." Feasible mitigation measures are identified and detailed starting on DEIR p. IV.G-20 and incorporation measures specific to adjacent sensitive receptors, such as residents in Fifth Avenue Point and the Portobello Condominiums.

KK-19 The comment raises the topic of displaced employees, business relocation efforts, and whether new property tax generated from the project would cover the existing business

licenses and sales tax revenues that would be lost with the removal of existing businesses. To the extent that the project would displace existing businesses and jobs in a manner that would result in a potential impact on the physical environment under CEQA, these potential effects are discussed in detail under Impact J.2 (DEIR p. IV.J-28) and are determined to be less than significant.

KK-20 Other than highlighting two specific tenants that maintain long-term leases on the project site (Cash & Carry and the sand and gravel and ready-mix concrete operation), the discussion on DEIR p. IV.J-5 does not mention any specific businesses on the project site. Philbrick Boat Works is one of the two businesses cited as having been on the project site for "about 40 years" (which, based on information conveyed in Response to Comment O-1, may in fact be longer than 40 years).

KK-21 DEIR Appendix D.2 provides background on the retail analysis presented in the DEIR text and in Table IV.J-17 on DEIR p. IV.J-37. Appendix Table D.2-10 (Appendix D.2, p. 16) details the assumptions for estimating project retail sales for retail/commercial space (as shown in DEIR Table IV.J-17 on p. IV.J-37) and notes that Hausrath Economics Group considered potential retail uses and sales per square foot ratios for comparable retail uses and retail developments. Appendix Table D.2-11 (Appendix D.2, p. 17) provides a scenario of possible retail uses that could produce the estimated sales.

As shown in Appendix Table D.2-11, sales averaging $335 per square foot could reflect a mix of Central Area Neighborhood Retail uses including the following:

- Grocery store/market $350/sq. ft.
- Drug store $400/sq. ft.
- Smaller food shops $250-300/sq. ft. (used $275 avg.)
  (coffee, bagels, juices, sandwiches, deli, fish/meat, liquor/wine, baking, health foods, ice cream)

As shown in Appendix Table D.2-11, sales averaging $335 per square foot could reflect a mix of Central Area Neighborhood Retail uses including the following. The sales per square foot ratios are from Urban Land Institute publications and from Hausrath Economics Group experience on a number of Bay Area retail projects and consulting assignments over the years. The following summarizes comparables from an Urban Land Institute publication used in developing the sales estimates for the DEIR analysis:

Retail Tenants in Neighborhood Shopping Centers/Areas*
(sales volume per square foot)

Tenant Type	U.S. Median	Western U.S. Median**
Supermarket	$353.64	$407.79
Drugstore/pharmacy	408.40	596.14
Coffee/tea	376.52	--
Hamburgers	347.26	--
Restaurant with liquor	273.31	307.22
Restaurant without liquor	194.16	--
Liquor/wine	254.10	--
Sandwich shop	244.63	--
Pizza	200.67	--

* The neighborhood center is defined as one that provides for the sale of convenience goods such as food and drugs. A supermarket is often the principal tenant.
** Only available for selected types of tenants.

Source: ULI-the Urban Land Institute, *Dollars & Cents of Shopping Centers:2004*

It can be noted that the Central Area Neighborhood Retail uses are estimated to have the highest average sales volumes per square foot within the project, and that 21 percent of the retail/commercial space in the project is included in this area. The Central Area Retail uses are estimated to have the highest sales volumes because they are located along the project's Main Street, and the area would be the "neighborhood center" for shopping by residents of the project. Estimated sales volumes per square foot are estimated to vary among the different types and locations for retail/commercial space in the project. As shown in Appendix Tables D.2-10 and D.2-11, average sales volumes for the project are estimated to range from $125 per square foot to $335 per square foot of space.

The comment mentions that $335/336 per square foot in sales is equivalent to a successful Nordstroms. However, sales per square foot ratios are likely to be substantially higher for a successful Nordstroms, particularly one in the San Francisco Bay Area (*e.g.*, in downtown San Francisco, downtown Walnut Creek, or Palo Alto). As background, national data on median sales per square foot for national tenants in a super regional center or metropolitan area central business district (CBD) show the following:

Women's specialty retailer	
U.S. median	$378.89 per sq. ft.
Top 10 percent	826.94 per sq. ft.

Top 2 percent	1,091.56 per sq. ft.
Women's ready-to-wear retailer	
U.S. median	$270.34 per sq. ft.
Top 10 percent	503.73 per sq. ft.
Top 2 percent	681.57 per sq. ft.

Source: ULI-the Urban *Land Institute, Dollars & Cents of Shopping Centers: 2004*

The median sales volumes above are for the U.S. overall, and would be higher in the western U.S. A successful Nordstroms in the Bay Area could easily have sales ratios in the top 10 percent of the ratios for the U.S. overall that are shown above.

The statement incorrectly concludes that only 20 parking spaces would be provided to serve the proposed retail/commercial uses proposed. As shown in DEIR Table IV.B-11 on p. IV.B-72, the proposed parking standard for the project (1 space for 500 sq.ft. of general commercial use) would equate to approximately 400 parking spaces. Total proposed parking supply for the project is shown in DEIR Table IV.B-13 on p. IV.B-73 (3,534 spaces). This total onsite parking would be further increased by onstreet parking that is not considered part of the project parking supply for purposes of the parking demand and supply analysis in the DEIR. In addition, the total parking could be further increased essentially through possible and anticipated shared use of onsite parking spaces that would occur based on the interaction between various uses on the site – particularly residential and retail uses. A discussion of shared parking adjustments to parking demand begins on p. IV.B-73 of the DEIR. See also Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management measures.

KK-22 The analysis and conclusions of the project's effects on views and scenic vistas is guided by the significance criteria set forth in the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines stated on DEIR p. IV.K-6. Specifically, the assessment that buildings resulting from the project would be a less-than-significant impact is appropriate since the project would not result in 1) "a substantial adverse effect on a scenic vista" or 2) "substantially degrade the existing visual character or quality of the site and its surroundings." As discussed on DEIR p. IV.K-9, admittedly, visual quality is subjective, however it can reasonably be concluded that the project would not result in a substantial, demonstrable negative aesthetic effect, particularly compared to existing conditions of the site or potential development envisioned under the Estuary Policy Plan. Visual change due to the project would be noticeable and vast, however, change is not assumed to be adverse. Also, the change in views and vistas from public vantage points would be altered but would not be substantial or adverse, particular considering key views of the Oakland and San Francisco skyline, the Oakland Hills, or views of the Estuary. In some cases, new views would be created or existing views

expanded. The conclusion in the DEIR is consistent with the significance criteria under CEQA and priority views indicated in the General Plan.

KK-23 The conclusion that the project would not result in significant shadow impacts accurately summarizes the analysis of the project, which considers the incidence of shadow throughout the year and all times of day (DEIR Figures IV.K-20 through IV.K-31). The comment specifically speaks to DEIR Figures IV.K-31 and IV.K-32, which depict the worst case shadows (mornings in March and December) for the increased height variant of the project. These figures show that the shadow under the increased height variant is not substantially different than that of the project during mornings in March and December (DEIR Figures IV.K-20 and IV.K-29). Consistent with the discussion of Criteria Overview for shadow impacts (DEIR p. IV.K-41), it is most appropriate for the analysis to consider the range of shadow impacts that would occur throughout the day and year. The analysis not only considers the incidence of shadows during the spring equinox and winter solstice, when shadows are longest, but the duration of shadows, particularly on sensitive areas. As discussed and depicted in Figures IV.K-21 and IV.K-30, the extensive morning shadows subside by mid-morning to noon and for the remainder of the day. Therefore, consistent with the CEQA significance criteria shown on DEIR pp. IV.K-6 and discussed further on IV.K-41, the project would not cast shadow that would substantially impair any facilities, buildings, or areas identified by CEQA or that would conflict with any solar access policies in the General Plan (i.e., LUTE Policy N3.9).

KK-24 Table IV.J-18 on p. IV.J-38 shows the average annual spending per household and in total that is estimated for project residents and that is based on data provided by the U.S. Bureau of Labor Statistics, as footnoted in the table. The comment has mis-read the information to assume that this estimate of spending is anticipated to occur in the project retail/commercial enterprises.

KK-25 If the City approves the project, it would involve approval of a Preliminary Development Plan (PDP) and Final Development Plan (FDP), amendments to the General Plan and Zoning Code/Map, and all other conditions of approval, permits and agreements. These approvals would constitute the “regulations” that would govern the development of the project site into the future, regardless of future other development entities that are not the project sponsor. All phases of project development would adhere to the all project approvals being sought by the project sponsor, including the development standards proposed by the Planned Waterfront District-1. The City would be required to review and approve all FDPs for future phases of development to ensure general consistency with the PDP and all conditions, approvals, and agreements. Substantial modifications of changes the any approvals would be subject to review by the Planning Commission and other appropriate City review boards (e.g., LPAB, PRAC).

See Master Response A which discusses how, in many respects, the Oak to Ninth Avenue project proposal analyzed in the DEIR provides greater detail on a broader range of topics

than required for a specific plan, and how in this way provides the public and decision makers with information that may not be available at a specific plan level of planning. This allows also for the City to establish more specific guidance for development of the site over time.

KK-26 The development of computer-enhanced visual simulations provided in the DEIR were developed with direction provided from City staff and based on input received during the EIR scoping process and during numerous public meetings and hearings on the EIR and project. Significant consideration and effort go into selecting a range of public view corridors or vantage points from public areas that represent short-, medium- and long-range views of and across the site, as well as internal views of the site (as discussed on DEIR p. IV.K-5). Significant consideration is also given to the ensuring that the visual simulations reasonably depict the setting that may exist at buildout, particularly regarding landscaping, but not to the degree that intentionally obscures the image and precludes accurate interpretation or analysis. As stated on DEIR p. IV.K-10, "the images of the project shown in the simulations are intended to convey the general mass, height, and interrelationships of project buildings, individually and collectively…." In instances where landscaping is introduced in the simulation, it is realistic of that anticipated for the project at buildout (e.g. along Lake Merritt Channel in Figure IV.K-6 and IV.K-7; along the Embarcadero in Figure IV.K-5 and IV.K-10; and along internal streets in Figures IV.K-14 and IV.K-15). Because the detailed architectural design of project buildings is not yet developed, particularly at street level, landscaping in the close-in, internal street-level viewpoints in Figures IV.K-14 and IV.K-15 is shown to minimize the reviewers focus on building design detail and to focus on building mass and changes in views as intended for the CEQA analysis.

KK-27 See Response to Comment KK-23.

KK-28 The DEIR provides a thorough analysis of the project's effects on police protection services, fire and emergency services, public schools, parks and recreational facilities, and libraries in Section IV. L. (Public Services and Recreation Facilities). The analysis relies heavily on consultation with the senior agency staff for each service and is presented in the analysis. The cumulative analysis starting on DEIR p. IV.L-20 is discussed in substantial detail and not only considers future buildout growth in Jack London Square, but of all other foreseeable development in the city of Oakland and surrounding areas (per the Oakland Cumulative Growth Scenario). The significance criteria provided on DEIR p. IV.L-9, ultimately address whether new or expanded physical facilities would be needed with regard to the public services addressed, and whether that construction would result in significant adverse physical effects. As concluded in the DEIR, the project would not result in a significant impact pursuant to the CEQA significance criteria.

KK-29 See Response to Comment E-4. The comment speculates about potential political issues that could result from the project's proposal to fill approximately two acres of the Clinton

Basin in the Oakland Estuary, and compares that to the San Francisco airport proposal to fill some portion of San Francisco Bay for additional runway. The comment is conjecture and not relevant to the adequacy of the DEIR analysis or issues pertaining to CEQA.

KK-30 The project would contain a mix of private development areas (residential and retail/commercial development, marinas) and public areas (parks, open spaces, Ninth Avenue Terminal Bulkhead Building, streets and public paths). To the extent that the site arrangement conveys a private community within the project area, City decisionmakers will evaluate the appropriateness of the proposal as it considers the merits of the project design.

COMMENT LETTER LL

October 23, 2005

Marge Stanzione, Project Planner
City of Oakland
Community & Economic Development Agency
Planning Division, Suite 3315
250 Frank H Ogawa Plaza
Oakland, California 94612

RECEIVED
OCT 24 2005
City of Oakland
Planning & Zoning Division

Dear Ms. Stanzione:

The EIR on the proposed development of the Oak to Ninth district is invalid because there was no Specific Plan done which would have included the public's vision for this land.

You bypassed the requirement for a Specific Plan and gave away the last prime waterfront property to a narrow-minded developer instead of to the broadminded people of Oakland. LL-1

The people of Oakland deserve to have a say in how this property is developed. When a Specific Plan is implemented, then you can have a valid EIR.

Sincerely yours,
Eva Tolmach

Letter LL – Eva Tolmach

LL-1 See Master Response A regarding preparation of a specific plan.

COMMENT LETTER MM

CITY OF OAKLAND

CITY HALL • 1 FRANK H. OGAWA PLAZA • OAKLAND, CALIFORNIA 94612

NANCY J. NADEL
Councilmember
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RECEIVED
OCT 24 2005
City of Oakland
Planning & Zoning Division

October 24, 2005

Margaret Stanzione
Project Planner
City of Oakland
CEDA Planning Division
250 Frank Ogawa Plaza Suite 3315
Oakland, CA 94612

Re: Comments on Oak to 9th EIR

Dear Ms. Stanzione,

Thank you for the opportunity to present my comments on the Oak to 9th Avenue Project EIR:

1. I would have rather the city had done a specific plan as proposed in the Estuary Plan. That process would have given the city a more objective position rather than a reactive position. The elements of a specific plan could have been presented with costs for various scenarios so that the city could then determine what might be feasible over time. MM-1
2. Why is the Estuary Plan alternative considered a "no development" alternative since it includes a conference center, demolition of the 9th Ave. Terminal and considerable open space landscaping? I think designating it a "no development" alternative is a mistake. MM-2
3. I no longer have a copy of the Estuary Plan EIR. Was a more dense alternative explored? If so, I assume it was rejected as more environmentally damaging. Can you respond with whether this EIR and the Estuary Plan EIR are analyzing the issues with the same conclusions since they consider the same land in part, for determining the least environmentally damaging alternative? MM-3
4. The 9th Ave. Terminal building is unique in its size. I'd like to see the same type of effort for it's reuse as we are doing for the Wood St. Train station to determine a viable sustainable use. MM-4
5. Access and traffic are of great concern – a project that would result in significant unavoidable impacts at 5th and Broadway is unacceptable. This is our gateway to Jack London Square. MM-5

6. The hazardous waste at the site is considerable and complicated to mitigate. The cost of such clean-up is used as the economic rationale for a dense housing development. It would be helpful to have a chart of levels of clean-up required for the various scenarios (Estuary Plan alternative, reduced development alternative, the proposed project alternative), and the costs of such clean-up to better analyze our options as a city. MM-6
7. The Estuary Plan calls for a community center at this location. Options to re-use the Jetro Cash and Carry building for a community center should be explored. We tend to think about tearing everything down and rarely consider rehabilitation and improved landscaping as options. Tax payer dollars are limited and all options for creative reuse should be explored. MM-7
8. Scenic Vistas – I think it is essential that the waterfront be seen from afar at several points from a distance so that one doesn't have to live there to appreciate it. Figure IV K-17 also makes the shore look very building oriented and green open space is indiscernible from a distance. MM-8
9. If housing is to be considered at this location, mixed income housing would be my preference. Economic impacts without such inclusion should be analyzed. MM-9
10. Access for fire and emergency equipment while trains are on tracks is not discussed in the EIR. This should be analyzed for appropriate service levels. MM-10

I look forward to your responses.

Sincerely,

Nancy J. Nadel

LETTER MM – Nancy Nadel

MM-1 See Master Response A regarding preparation of a specific plan. The analysis in Chapter V of the DEIR includes alternatives that retain all or part of the Ninth Avenue Terminal. To supplement the information provided in the DEIR, particularly the alternatives analysis in Chapter V (Alternatives), the project sponsor has prepared an economic feasibility report (separate from this environmental report) that assesses the economic considerations for each of the alternatives and the project.

MM-2 See Responses to Comments U-2 and Y-8 regarding the no project alternative.

MM-3 The description and analysis of Alternative 1B (No Project / Estuary Policy Plan), which considers the development envisioned in the Estuary Plan and analyzed in its EIR, is provided starting on p. V-10 of the Oak to Ninth Project DEIR. This analysis covers the same topics that were analyzed in the Estuary Plan EIR. The impact conclusions of the DEIR are consistent with (or more conservative than) those of the Estuary Plan EIR.

The Estuary Plan EIR did not analyze a more intensive alternative. The EIR analyzed a no project alternative under which the City would not have adopted the then draft Estuary Plan, thereby leaving the then existing Waterfront Mixed Use land use classification (per the Land Use and Transportation Element of the General Plan), the existing City zoning regulations, the existing Port of Oakland development standards, and the existing City and Port practices would remain in effect and conditions would be the same as assumed under the LUTE. Under the no project alternative, the total number of households projected would be reduced to 2,379 from 2,507 and the total number of jobs would be increased from 15,330 to 16,865.

The Estuary Plan EIR also analyzed an environmentally superior alternative in which specific strategies within the then draft Estuary Plan were altered to reduce environmental impacts identified for traffic, air quality, wildlife, and aquatic resources, and "Port Priority Use" area designations as defined then for the Ninth Avenue Terminal by the San Francisco Bay Plan. Changes under this alternative that pertain to the Oak to Ninth District included 1) deletion of the proposed commercial, hotel and conference center, and work/live lofts to maintain existing uses and open space and preserve the Ninth Avenue Terminal; 2) deletion of the proposed expansion of the park areas and passive recreation piers on Lake Merritt Channel; and 3) maintaining existing warehousing and port related activities and facilities at the Ninth Avenue Terminal, consistent with the then designated "Port Priority Use" area. The impacts of this alternative compared to the then draft Estuary Plan would be reduced or avoided for the following topics: land use changes; indirect adverse housing impacts; public service impacts; visual, biotic, geologic, and water quality impacts (given no pier construction); cultural resource impacts; impacts on transportation, energy, and air quality since the amount of development accommodated would be smaller (although adverse effects could occur if development simply went elsewhere in the region, resulting in longer trip lengths);

hazardous material impacts given fewer disturbances of contaminated sites (although in the absence of development there would be no incentive to clean-up contaminated sites).

The environmental superior alternative was rejected for a number of reasons. Those specific to the Oak to Ninth District include the following:

1) The proposed commercial, hotel and conference center and work/live lofts were considered necessary to support the large investments proposed for expansion of park space and road improvements planned for the area. Elimination of the commercial enterprises would limit the City and Port's ability to finance the other public improvements for the area, and the entire area would be maintained with existing uses and open space to reduce the potential for traffic and related air quality impacts.

2) The proposed piers would provide important opportunities for members of the public and experience the Estuary environment and literally walk out onto the water.

3) Redevelopment of historic terminals and port related structures for public uses and activities increases opportunities for the public to experience and enjoy the Estuary and the waters edge.

Like the alternatives analyzed in the Estuary Plan EIR, the Oak to Ninth Project DEIR analyzed one or more alternatives that would reduced propose development and retain all or part of the Ninth Avenue Terminal. The Oak to Ninth Project DEIR did not analyze an alternative that excluded proposed in-water activities (shoreline improvements, marinas, Ninth Avenue Terminal pier improvements) that may reduce significant effects on "biotic, geologic, and water quality impacts," as these elements of the project are fundamental to the project sponsor's objectives.

MM-4 See Master Response B regarding further analysis of reuse alternatives for the Ninth Avenue Terminal. To summarize from that response, the DEIR recognizes several suggestions that were submitted to the City as response to the Notice of Preparation (NOP) or during preparation of the DEIR. Most of the suggestions included possible reuses for the Ninth Avenue Terminal. Specifically, the *Ninth Avenue Terminal: A Feasibility Study for Adaptive Reuse* (Perry et al., 2005) describes several examples of uses that could occur in the fully- or partially-retained Ninth Avenue Terminal. (Other commenters on the DEIR subsequently submitted further information on this topic.) For each of the alternatives that assume partial or full preservation of the Terminal, reuses assumed in each include a potential mix of cultural, educational, and recreational uses as envisioned in the Estuary Policy Plan, and that are assumed to be allowable trust-compliant uses (as confirmed as of publication of the DEIR; see Master Response B). If the City elects preservation, some assumptions would be made regarding the appropriate or preferred specific reuses (acknowledging that either decision may drive the other). To assist the City in its deliberations, it has the benefit of detailed reuse information submitted during the EIR scoping process and public hearings on the DEIR, during other non-EIR-related public input opportunities that have paralleled the EIR process, and from

educational study (i.e., the aforementioned *Ninth Avenue Terminal: A Feasibility Study for Adaptive Reuse*). Also, a number of comments within this FEIR document provide more detailed information regarding possible reuse opportunities for all or part of the Terminal. To further assist the City, the project sponsor has prepared an economic feasibility and constraints report (capital and operational) of retaining all or parts of the Ninth Avenue Terminal.

Unlike the Wood Street Project proposal, the proposed project does not propose to retain or reuse the Ninth Avenue Terminal Shed, but the project sponsor would retain and rehabilitate approximately 18,000 square feet (15,000 sq.ft. minimum) of the original Bulkhead Building. This portion contains the key north-facing elevation with the most architectural design treatment and was (and continues to be) used for front-of-house operations of the break-bulk terminal operations. Additionally, the Wood Street Project proposal did not have the consideration of an adopted City plan that included unresolved and conflicting objectives and policies specifically regarding the preservation of a major historic resource. Also, the Wood Street Project proposal required Oakland Redevelopment Agency funding assistance for preservation of the historic train terminal.

MM-5 The proposed project would not create the significant and unavoidable impact at the 5th Street and Broadway intersection. The existing PM peak-hour LOS F is a result of backups on 5th Street that are caused by downstream bottlenecks in the Webster Tube heading to Alameda, causing vehicles to stack in the two left-most lanes on 5th Street waiting to enter the Webster Tube. (It is noted that traffic in the two right-most lanes, which provide through access to I-880, and to Jack London Square via a right turn onto Broadway, is generally free-flow with delays only at the signals.) However, as described in Impacts B.1b (Interim Project, 2010), B.2c (Project Buildout, 2025), and B.3b (cumulative, 2025), the LOS F condition would worsen with the addition of traffic generated by the project. The project-generated increases in vehicle delay would exceed the thresholds of significance. See Master Response C (Significant and Unavoidable Transportation Impacts).

MM-6 The DEIR discusses how the project will “undertake remediation of contaminants in conjunction with development and/or improvement of relevant sites” starting on p. III-20, with further detail and discussion of related impacts and mitigation measures provided in Section IV.H (Hazardous Materials) of the DEIR. Regarding levels of cleanup required for the various scenarios, because each of the scenarios propose reuses that are primarily public open spaces and/or residential uses, cleanup would have to occur and would be essentially the same under each development alternative, even those scenarios that would have less development than the project. Even under the No Project Alternative (Alternative 1A) in which no development would occur, the Port would have to cleanup the site to levels suitable for ecological and industrial use, however, this is the only scenario that would require public expenditures for remediation of the project site.

MM-7 See Response to Comment Q-2, second paragraph. Additionally, consistent with the Estuary Policy Plan's objectives for the area to include a wide range of recreational-oriented facilities for public use, the proposed project (and each of its alternatives) proposes that any portion of the retained Ninth Avenue Terminal would include a potential mix of cultural, educational, and recreational uses assumed to be Tidelands Trust compliant.

MM-8 Figure IV.K-17 is a long-range view of the site from the Alameda Shoreline looking north. This viewpoint is approximately one-quarter mile away from the project site and at essentially the same elevation. The image shown is an actual digital photograph taken to depict how the site would appear from this view. Given the distance, buildings would be most prominent since the open spaces in its foreground (along the waterfront) would be relatively flat (and at the same elevation as the viewpoint) and minimal trees are introduced to the simulation. Other distant viewpoints of the project site would be from the northerly direction, and would therefore have minimal visual access of the waterfront that is located south of built development. Simulations from long- and medium viewpoints show that the project would have minimal affect on the visibility of the waterfront. Further, since the relatively low buildings that exist on the site now are likely lower than those envisioned by the Estuary Policy Plan (hotel, community buildings, etc.), the difference in long-range views of the waterfront under the project would not be substantially different than under the Estuary Plan.

MM-9 The comment speaks to the income mix of housing to be provided by the project, and the economic impacts of not providing an income mix. As addressed in Master Response H, this topic does not pertain the adequacy of the analysis presented in the DEIR or to physical environmental issues that are within the purview of the California Environmental Quality Act (CEQA) (Section 15064). Excluding the extent to which this socioeconomic topic could result in physical changes to the environment (which have been addressed in the impact analysis of the DEIR in Chapter IV), the income mix of housing is a policy consideration that City decisionmakers ultimately consider prior to taking action on the project.

The DEIR does, however, include a discussion of potential indirect impacts on housing market effects (additions to housing supply, development of affordable housing, improvement to job/housing relationship, potential effects on rents and prices in Oakland and vicinity) (starting on DEIR p. IV.J-41). This discussion concludes the project would not lead to significant indirect physical impacts (DEIR p. IV.J-46).

MM-10 See Responses to Comments KK-12 and S-38, in addition to the discussion of emergency access and railroad operations on DEIR pp. IV.B-60 and IV.L-10 and IV.L-13.

Oct 24, 2005

To Marge Stanzione, Project Planner
City of Oakland, CEDA
Ste 3315
250 Frank Ogawa Plaza
Oakland, CA 94612

From Patty St. Louis
499 Embarcadero #41
Oakland, CA 94606

RECEIVED
OCT 24 2005
City of Oakland
Planning & Zoning Division

Dear Ms. Stanzione,

I am a citizen of Oakland writing to inform you of my opinion of the EIR on the Oak-Ninth Estuary Development. I have been involved in the project as a citizen commenter since its early days as the Estuary Plan Advisory Committee. My concern has always been to preserve the natural shoreline so as to save what is beautiful about the area. I truely believe that this last vestige of natural habitat that exists at Clinton Basin and the mouth of the Lake Merritt Channel is a wonderful opportunity for all the people of Oakland to enjoy and

NN-1

NN

and a priceless educational opportunity for our children.

NN-2 Although I am pleased to see that the Wetland Enhancement Projects are included in the developers plans for the project area, I am not so very impressed as they ~~or~~ Clinton Basin project is State Mandated and the Channel Project is obvious. Regrettably I feel as though I and other Environmentally concerned citizens are being thrown a bone so that the developers can privitize and ~~and~~ obscure the waterfront with yet another big condominium project.

NN-3 I believe it is the intention of those developers to beautify the area, (Albiet for profit) however the effect is to create monotony.

NN-4 I would like to see a specific plan be developed before

NN-4 (CONT.)

the project is approved. I believe that was to be the procedure towards approval and a Specific Plan may resolve some of the contradictory aspects of the proposal as it stands.

Thank You

Patricia Shannon

LETTER NN – Patty St. Louis

NN-1 As stated on DEIR p. II-2, the project would improve the existing shoreline along the project site with varying treatments, including marsh habitats, and riprap, and bulkhead walls. Specific to Clinton Basin, the project would remove conditions of unprotected, eroding banks and debris (as described on DEIR p. IV.D-3) and create a new retaining wall-like edge to allow rebuilding and expansion of the existing marina facilities. South Park adjacent to the wetland restoration area and along Channel Park along the east shore of Lake Merritt Channel, improvements and new vegetated shorelines would occur where new marsh habitat could emerge. Proposed improvements are described on DEIR pp. III-18 and IV.D-20 and shown on Figure IV.D-3 on DEIR p. IV.D-21.

NN-2 The comment suggests that the proposed improvements to Clinton Basin are state mandated. There is no mandate for the project sponsor to implement the significant changes to Clinton Basin to facilitate shoreline stabilization and replacement of currently unusable marina facilities.

Regarding the comment that the project would privatize the waterfront, as stated in Response to Comment KK-30, the project would contain a mix of private development areas (residential and retail/commercial development, marinas) and public areas (parks, open spaces, Ninth Avenue Terminal Bulkhead Building, streets and public paths). To the extent that the site arrangement conveys a private community within the project area, City decisionmakers will evaluate the appropriateness of the proposal as it considers the merits of the project design. See Responses to Comments B-8 and U-17 regarding impacts on views of the waterfront.

NN-3 The comment addresses design aspects of the project that do not pertain to the physical impacts relevant to CEQA, as discussed in Master Response H regarding non-CEQA topics.

NN-4 See Master Response A regarding preparation of a specific plan.

Pavlinec, Joann

From: Kirk Peterson [art2arch@pacbell.net]
Sent: Wednesday, October 26, 2005 9:39 AM
To: Joann Pavlinec
Subject: DEIR

October 24, 2005

RECEIVED
OCT 24 2005
City of Oakland
Planning & Zoning Division

Joann Pavlinec

City of Oakland

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Joann,

After review of the Draft Eir for the Oak to 9th project I feel that the document is lacking sufficient discussion of various topics. The following are my comments (not in any particular order) regarding things that should be addressed in greater depth, or new things that should have been discussed, but were missing altogether:

• The experience of the Maritime character of the terminal, it's form and association with shipping and it's implication of connection with the sea and distant lands, is a very different thing from an aquatic/shoreline experience - which is already available to us elsewhere. And it's different from the relatively fake/contrived character of Jack london Square. The opportunity to have very big ships tied up there - and seeing them up close - is exciting. The EIR needs to look at whether this aspect of the existing terminal is significant. OO-1

• The EIR needs to get more specific about what use or mix of uses might be possible in the Terminal. There needs to be a list of uses. The EIR should cite other projects where there were similar issues. OO-2

• Maybe the housing should be on a huge podium, and have less streets and more parking in a smaller footprint. This would result in more parking in less area. OO-3

• The terminal could provide all the commercial space proposed by the developer. Look at implications for proposed project. OO-4

• Look at the possibility of a transit village: a portion or all of the site that is for car-free living. Owners/occupants would have a deed restriction forbidding car ownership. There is a car share fleet for their occasional use. There would be neighborhood parking stickers, which would not be available to transit village project residents. OO-5

• Oakland has some sort of 'green' policy now - and the greenness of recycling an historic structure could further the goal of this policy. How does the proposed project make Oakland more green? Is sustainability addressed in the design or use of materials? Can the EIR address this issue? OO-6

• The site has an historic building, maritime use, and open space that are not available elsewhere vs. demand for housing which can go many places, and would be better located where transportation, shopping/amenities and infrastructure are already in place. Why must this housing be here? OO-7

• The City is under-served as far as recreation space is concerned. Please examine the possibility of the whole site being a park - including open space, sport fields, boating facilities and the Terminal with mixed use occupancy. OO-8

• Discuss the relative importance of adhering more closely to the Estuary Plan as relates to the goals of the City's General Plan. Is housing a priority of the Estuary Plan, and can the Plan's goals really be determined to be less important that the creation of new housing? OO-9

• The Alternative projects mentioned in the Draft EIR are described with such brevity that they are hard to assess in themselves, and as such do not help illuminate the discussion of the proposed project. These alternatives should be 'fleshed out' (thought out and described in greater detail) so that they can be given due consideration. OO-10

• A new alternative project needs to be explored: excluding the Terminal Building and Wharf for this proposed project (in concept like the way the 5th Avenue area is excluded). There is potential for the terminal to be revenue producing, and it's demolition provides no income stream to the proposed development in the current proposal OO-11

• How can the environmental clean-up of the site be accomplished without the proposed project? What other sources of funding are available or possible for this purpose. If the Oak to 9th land is made into a park what is the required level of environmental clean-up? If the site is capped with clean fill (reducing the risk of exposure to toxics for future park users) what is the cleanup requirement? OO-12

• This project involves the sale of Public Trust Land to the developer. The public is it receive other land in exchange. The EIR needs to address to what extent this new 'exchange land' is comparable to the land being sold to the developer, in terms public access and ease of access (from land), location (neighborhood), access from/to the estuary, and how this new location is able to serve the goals of the General Plan and the Estuary Plan. The Oak to 9th property is located in an excellent place for public uses of many kinds (this includes a re-used Terminal) and is connected to both the Lake Merritt/Channel Park public areas, and to the Jack London/Broadway district. Can a 'replacement' parcel provide this level of amenity? OO-13

• The evaluation of the relative merits of a 'replacement parcel' cannot be made until it is identified and 'vetted' by the appropriate public and private parties. Further the exchange must be simultaneous: the loss of public use over time is a cumulative impact.

OO-13
(CONT.)

• The cost of improvements to a 'replacement parcel' need to be figured into the economic analysis of the proposed project. What will it cost to improve/develop some new location to make it suitable for public use comparable to the Oak to 9th land. This analysis needs to recognize that much of the Oak to 9th site has been 'mothballed' (like the marina) or has been inaccessible to the public (like the terminal and wharf), but both of these conditions are easily reversible. And who will pay for improvement to the 'replacement' site?

Please feel free to call me if you have any questions. It is now midmorning. I will call you in the afternoon to ascertain that you have received this letter, as I believe the deadline is today.

Thank you,

Kirk Peterson

Kirk E. Peterson

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Letter OO – Kirk Peterson

OO-1 The DEIR includes detailed discussion of the significance of the Ninth Avenue Terminal to historic maritime and overall transportation activities along the Oakland Estuary. This is presented starting on DEIR p. IV.E-15. As stated on DEIR p. IV.E-16 (and in the landmark application submitted for the project), "The Terminal is an amalgamation of water, rail and land transportation capability in one facility" and "an early example of an inter-modal transportation complex." This aspect of the Ninth Avenue Terminal significantly contributes to the structure having been designated an Oakland Cultural Heritage Survey (OCHS) rating of "A" (outstanding architectural example or extreme historical importance) and as a result, an historic resources under CEQA.

OO-2 See Master Response B regarding further analysis of reuse alternatives for the Ninth Avenue Terminal.

OO-3 The comment recommends an alternative street configuration and building design in an effort to accommodate "more parking in less area." Pursuant to CEQA, the alternatives identified and analyzed in Chapter V of the DEIR are selected to allow the consideration of alternatives that avoid or substantially lessening the significant adverse impacts of the project. Since adequacy of parking supply is not considered an aspect of the permanent physical environment under CEQA (as discussed starting on DEIR p. IV. B-70), the DEIR does not identify the project's parking shortfall (relative to peak parking demand) as a significant environmental effect under CEQA, and thus no alternative is warranted. The project's provision of parking and the adequacy of improvement measures identified starting on DEIR p. IV.B-74 and discussed in Master Response D regarding the draft Transportation Demand Management Plan (which identifies a surplus of parking with implementation of parking management and transit service measures identified therein) will be evaluated by the City as it considers all aspects of the project prior to acting on the proposal.

OO-4 The comment proposes possible reuses for the Ninth Avenue Terminal that would include the commercial uses proposed by the project. See Master Response B regarding further analysis of reuse alternatives for the Terminal. Additionally, uses within any portion of the Ninth Avenue Terminal would be required to be trust-consistent, and the commercial retail uses anticipated in the project would not likely comply with these limited activities.

OO-5 The comment describes a potential aspect of the project that does not address a potential impact of the physical environment under CEQA. The City decisionmakers of the project may, however, consider the comments suggestion of a transit village alternative as it considers all aspects of the project design prior to acting on the proposal.

OO-6 The significance criteria by which the project is analyzed under CEQA do not include criteria explicit to the principle of sustainability (however, in the very broad sense, measures to reduce or avoid adverse impacts on the physical environment support align with the concept of sustainability). The principle of sustainability underlies a number of

City policies – most explicitly in Housing Element Policy 7.1, which states "Develop and promote programs to foster the incorporation of sustainable design principles, energy efficiency and Smart Growth principles into residential developments"(DEIR p. IVA-22). In addition, in late 1998, the Oakland City Council adopted a Sustainable Community Development Initiative aimed at ensuring that sustainable practices are integral to a number of community activities. The Initiative identifies as priorities the promotion of in-fill housing, mixed use development, affordable housing, and open space plan implementation for Lake Merritt and the Estuary area.

As discussed in Response to Comment S-49, one of the project sponsor's objectives for the project is to "further Smart Growth principles," which the project aims to do by developing 3,100 new housing units within the City of Oakland, in proximity to major employment centers rather than in outlying communities that result in increased traffic congestion, lengthy commutes, and fuel consumption, etc. Additionally, several Historic Preservation Element policies that encourage the maintenance, rehabilitation, and reuse of existing building resources such as the Ninth Avenue Terminal would align with sustainability principles, as the comment points out. The project would also assist the Oakland Redevelopment Agency in meeting its affordable housing requirements and would create substantial new, accessible open space along the Oakland Estuary that is current inaccessible bordered by industrial and warehouse uses. Therefore, the project's measure of "greenness" or its support of sustainability principles can be evaluated on several levels – from the project's incorporation of energy-conserving design and construction, to substantial removal of an existing historic structure, to significant development of new housing and open space proposed in the central part of the City, to the improvements that would result to aspects of the physical environment (water quality, natural habitats, hazardous clean-up, etc.).

OO-7 The comment questions why the project must occur on the project site and not elsewhere where transportation, shopping/amenities, and infrastructure are already in place. The comment does not indicate a location in Oakland feasible to accommodate the proposed development and meet the objectives of the project sponsor and the Estuary Policy Plan for the Oak to Ninth District. As discussed starting on DEIR p. V-41, it is possible that the traffic, air quality, and noise impacts that occur with the project could be avoided or substantially reduced on a project site located in a less traffic-impacted area of the city or on a site not in proximity to a major freeway, however, an alternative site would not fulfill the basic project objective of redeveloping the Oak-to-Ninth District of the Oakland Estuary. Additionally, the alternatives evaluated in the DEIR successfully avoid and/or substantially reduce traffic, air quality, and noise impacts relative to the project's impacts. Regarding historic resources, locating the project at another site may avoid significant and unavoidable impacts to the Ninth Avenue Terminal. However this is accomplished within the alternatives evaluated in the DEIR while continuing to meet the basic project objectives.

OO-8 The comment describes a possible alterative to the project that is less intensive than the Estuary Policy Plan scenario. See Response to Comment Q-2 regarding the range of alternatives selected for analysis in the DEIR.

OO-9 The comment highlights the point that the General Plan contains a number of potentially competing goals and policies that the project would support to varying levels, depending on the reviewer's priorities. The DEIR has discussed the project's relationship to the key policies of the Estuary Plan as well as its support of Land Use and Transportation Element and Housing Element policies that support the development on new housing. The determination of relative importance of these policies is not a CEQA issue and the City will ultimately establish this determination by its ultimate action on the project.

OO-10 Chapter V of the DEIR includes a detailed narrative description of each alternative, (supported by detailed tables), and illustrative figures comparable to the proposed project site plan. Each narrative discusses the purpose of the alternative, its proposed development program by parcel, parcel acreages, open space acreage by proposed park, residential densities, relationship to Fifth Avenue Point, street layout, building heights, proposal for the Ninth Avenue Terminal in terms of preservation and reuse, improvements to Clinton Basin and the shoreline, and a other aspects that may be unique to a particular alternative.

Further, the environmental effects each alternative are discussed (consistent with each environmental topic addressed in DEIR Chapter IV [Setting and Impact Analysis], Sections A through M.) in less detail than the analysis conducted for the project, as provided for by CEQA Guidelines Section 15126.6(d). However, the analysis presents sufficient information to allow "meaningful evaluation, analysis, and comparison with the proposed project." A comparative matrix of the impacts of the project and the alternatives is provided in DEIR Table V-5 starting on DEIR p. V-42 and includes a summary of each alternative and the project as a running heading for the reviewer's convenience. Thus, the description as well as the analysis in the DEIR is provided at a level of detail appropriate under CEQA and suitable for thorough comparative analysis by the reviewers.

OO-11 See Master Response B regarding further analysis of reuse alternatives for the Ninth Avenue Terminal and Response to Comment Q-2 regarding adequacy of the range of alternatives analyzed in the DEIR.

OO-12 The environmental investigation and cleanup work on the project site has been ongoing for many years, with some of the remediation already complete. As stated in Response to Comment C-4, the ongoing environmental process of remediation is being overseen by the DTSC. How the cleanup will progress will depend upon the current responsible parties and the requirements of the overseeing agency.

OO-13 See Responses to Comments I-2 and GG-18.

COMMENT LETTER PP

SEA SCOUT SHIP MAKAI-SKIPPER BILL GAYLORD

4126 RAVENWOOD PLACE, CASTRO VALLEY, CA 94546

October 24, 2005

Re: Oak to Ninth Avenue Project
Draft EIR Comments

Margaret Stanzione, Project Planner
City of Oakland, Community and Economic Development Agency, Planning Division
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

Dear Ms. Stanzione,

The purpose of this letter is to address a significant environmental impact that was not addressed in the Oak to Ninth Project Draft EIR.

The Port Of Oakland has been providing free berthing to the San Francisco Council of the Boy Scouts of America since the 1960's. Although the Clinton Basin is currently closed, it still operates as the East Bay Sea Scout Base. The Sea Scout Ship Makai (Makai) has been moored at the Clinton Basin since the early 1980's.

The Makai is the oldest continuously operating sea scout program serving the East Bay in the San Francisco Bay Area Council.

PP-1

As part of the project, the Project Sponsor should be required to offer free berthing for an East Bay sea scouting program. Without the free berthing, the continuation of an East Bay sea scout program will be in serious jeopardy.

The existence of this educational and recreational program for high school age youth is an important part of the community and needs the continued support of this project. This program provides a rare opportunity for high school students to gain leadership skills while still having an exciting boating experience. It also provides a much needed youth program to enable young men and women to have a positive organization to participate in. Youth organizations for high school age men and women need to be preserved and promoted.

I look forward to a meeting to discuss the opportunities for the sea scouting program to continue in coordination with the project.

Please contact: Robert Karn at cell phone:(707) 321-7158, or via fax (707) 435-9988

Thank you for your consideration.

Sincerely,

Robert A. Karn

Robert A. Karn-First Mate Sea Scout Ship Makai

Letter PP– SEA SCOUT

PP-1 The comment discusses possible obligations of the project sponsor that are not related to CEQA issues. To the extent that the project sponsor would be required to provide or maintain existing marina-related benefits to organizations in the future could be taken under consideration by the City, who may incorporate such requirements as project conditions of approval or conditions of a Development Agreement.

COMMENT LETTER QQ

Jack London Mail

October 24, 2005

Marge Stanzione
Project Planner
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Community & Economic Development Agency
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RE: Oak to 9th DEIR Comments

Ms. Stanzione,

My first thought in reviewing this DEIR is that there's a LOT of information to disseminate! My second thought is of the density. 3100 units is more than we have in the Jack London District, and yet the amount of space is considerably less – even if you take out the businesses. Considering our battles with getting merchants to be in the area, I have to wonder how that's going to play in the Oak to 9th area. QQ-1

Here are my questions and concerns regarding the Oak to 9th Avenue Project as per the Draft Environmental Impact Report.

Tidelands Trust Designation: QQ-2
I could easily have missed this in my bleary-eyed reading of the DEIR, but if this project is to move forward, does the area retain its' Tidelands Trust designation? If so, what impact, if any, does this have on all of the alternatives being considered? Is there any benefit or drawback for future property owners within the project? For the City?

Traffic:
On pages IV.B-2 through IV.B-4, I did not see any dates regarding the data used for the local streets, only for the freeways and major roadways (Sept 2004). Does consideration for this data include the cumulative affect from the four new construction projects underway in the Jack London District? Also, is there consideration for the cumulative affect on traffic based on the approved Jack London Square Redevelopment Project? Oak Street should be added to the list on QQ-3 QQ-4 QQ-5

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COMMENT LETTER QQ

Jack London Mail

"Local Access". It is listed briefly under Embarcadero, but really should be listed separately. Additionally, the intersection of 3rd Street & Oak Street should be added to the list of "Existing Traffic Operating Conditions" on page IV.B-6. QQ-6

For items B.2c & B.2d (page II-8), are the same as items B.2e & B.2f in the Jack London Square Redevelopment EIR (page II-5). The same mitigation of "...optimization of traffic signal timing shall include coordination with signal phasing and timing of adjacent intersections, and require coordination with Caltrans to implement the measure" is listed. Caltrans has already said that 880 was "at capacity" (see letter dated 10/27/03 in the JLS FEIR). The FEIR (for Oak to 9th) should have information from a Traffic Engineer as to the cumulative affect of the four projects underway and the Jack London Square Redevelopment Plan, as well as taking into consideration the work planned for 880. Also, if there could be some mention/consideration of the timing of construction of all these projects, that would be helpful. QQ-7

My concern is that more often than not during peak hours and even during non-peak hours, traffic has been backed up down Oak from 5th Street all the way to 2nd, and occasionally even Embarcadero. There is concern as these other projects already underway finish and fill that this situation will continue to deteriorate and so it is an even bigger concern of adding 3100 residential units and a fair amount of commercial space and how that will further affect Oak Street all the way from Embarcadero to 5th, not just the intersection at Oak & 5th. QQ-8

9th Avenue Terminal:

For item E.3 (page II-12 & II-13), I don't see how keeping 15,000 square feet of the terminal provides you with any real feeling of the shed as it is as a whole. I'd like to see more of it preserved. If it's an issue of blocking views, then I say add more parking to the project on the ground floor. Also consider the views being blocked that are behind the project. QQ-9

Parking:

There is a mere 1 to 1 ratio for the residential units (3100 parking spaces), another 400 spaces for 200,000 square feet of retail, and 34 spaces for marina usage (page III-11). I need better clarification of the 450 spaces "...available primarily for use by park and mariner users: approximately 75 spaces in surface parking lots in the proposed open space areas, and approximately 375 on-street parking spaces." Obviously with a 1 to 1 ratio on the residential side, more than 375 spaces for on-street parking will be used by the residents based on other neighborhoods in Oakland. Considering the distance to public transportation (even if you add a shuttle), the majority of households have more than one car, even if that second car sits on the street during the day while they take public transportation. Will the future residents of this project be entitled to a parking permit plan? And if so, will it be the residential permit plan? QQ-10

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COMMENT LETTER QQ

Jack London Mail

"Green space" versus "Open Space":
This project has considers 44% of the space as "green space", yet there is no open space that I would consider as "open space". Where do outdoor events and things like Cirque du Soleil happen? Outdoor concerts and festivals? Jack London Square has no space for this – in fact, they're reducing the space in front of the ferry terminal with a pub, so where will events like this happen in the future? The 44% appears to be mostly the space that is required by the Tidelands Trust, so if you take that portion out, what is the real percentage of green space? QQ-11

Other important considerations:
Surrounding 5th Avenue without appropriate integration is a bad thing. QQ-12

The project as a whole creates yet another piece to the wall that is forming along Embarcadero – a wall that cuts off views and cuts off access in a figurative way, even if you don't mean to. Consider The Landing apartments and how few people use the green space there, except for the Bay Trail. QQ-13

Thank you for your time and consideration in reviewing my comments.

Thank you,

Joanna

Joanna Adler
Business owner & Resident of the neighboring Jack London District.

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LETTER QQ – Joanna Adler

QQ-1 The comment generally compares the residential density-to-open space ratio that exists in the Jack London District to that of the project, stating that the project would provide more units and less open space than that area. The Jack London District is generally the area bound by Adeline Street and Oak Street, south of I-880. The open space in this area generally includes that the approximately 40,000 square feet of new area to be developed as part of the Jack London Square Redevelopment Project, and the existing "meadow green" at the foot of Washington Street. The proposed Oak to Ninth Avenue Project proposes 20.7 acres of new open space. As shown in **Table V-2** on page V-24 of this FEIR, the Oak to Ninth Project would meet or exceed the City's park/open space service standard throughout each phase of its development and at buildout.

QQ-2 See Response to Comment I-2.

QQ-3 Manual intersection turning movement counts were conducted in May-June 2004 at the 52 study intersections analyzed in the DEIR. The existing traffic volumes at the 52 study intersections are representative of prevailing conditions at the time of the traffic counts, and include construction-related traffic occurring during peak periods at those intersections.

QQ-4 As described on DEIR p. IV.B-24, the analysis of intersection impacts used the Alameda County Congestion Management Agency's (ACCMA) Countywide Travel Demand Model, which was modified with land use, employment and population projections from the Oakland Cumulative Growth Scenario (consistent with the standard process used by the City to prepare environmental analyses). Updated land use assumptions for the project study area, which includes other proposed and approved developments in the City of Oakland (including the Jack London Square Redevelopment project) were applied to the ACCMA model.

QQ-5 Oak Street is described in 6th full paragraph on DEIR p. IV.B-3 under *Local Access*.

QQ-6 The intersection of 3rd and Oak Streets is an unsignalized "T"-intersection, through which project traffic would travel straight on Oak Street (i.e., no turning movements). As such, this intersection does not warrant inclusion as a study intersection for the EIR per the DEIR's screening process used to identify a project study area that adequately covers the potential project-generated traffic impacts.

QQ-7 The commenter is correct that the 5th Street / Broadway and 5th/Oak Streets intersections were included in both the Oak to Ninth and Jack London Square Redevelopment (JLS) project EIRs, but the cited mitigation measure (optimization of traffic signal timing) applies to the latter intersection only. As discussed on DEIR p. IV.B-17, some of the JLS EIR-identified intersection improvements would benefit the Oak to Ninth Poject, too. However, because the exact timing of implementation of these improvements has not been established, and is tied to the timing of development of the JLS project, for purposes

of the analysis of Oak to Ninth project impacts, none of the identified JLS mitigation measures were assumed to be in place. The discussion of mitigation measures for any intersection adversely affected by the Oak to Ninth Project includes references to the mitigation measures identified in the JLS EIR, and to opportunities for joint funding of improvements by projects in the area. See Responses to Comments D-5 and D-6, regarding Caltrans' comments about freeway and freeway ramp conditions. See Responses to Comments QQ-3 and QQ-4, above, about inclusion of cumulative effects of proposed and approved developments in the City of Oakland (including the developments currently under construction in the Jack London District) in the DEIR analysis of potential traffic impacts. Work planned on I-880 (assumed to mean the seismic retrofit project) is described on DEIR pp. IV.B-16 and IV.B-69, including the expected completion by 2010.QQ-8 The commenter's concern, given the best available information and the professional judgment of City staff and the EIR consultants, is adequately addressed in the DEIR.

QQ-9 See Response to Comment Q-2, second paragraph.

QQ-10 See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management and transit service measures.

QQ-11 As stated on p. III-12 of the DEIR under *Proposed Parks, Open Spaces and Trails*, the project would include "a mix of active and passive parks and open spaces[8] covering approximately 44 percent[9] of the project site…." Consistent with the initial footnote, the DEIR uses "park" and "open space" in combination (or sometimes interchangeably), which is particularly appropriate since the specific programming for the proposed parks/open spaces has not been established. The outdoor events referred to by the comment could in occur any of the proposed (or existing) parks/open spaces, with the 9.7-acre Shoreline Park being the most viable for larger events. The Tidelands Trust designation would not preclude public events from occurring in this area, assuming that these events are consistent with Trust purposes. Shoreline Park constitutes approximately one-third of the total parks/open space area on the project site.

QQ-12 The comment is noted and this response assumes the comment refers to the Fifth Avenue Point community. The DEIR discusses the project's physical relationship to this area on p. IV.A -9 (Land Use and Compatibility with Adjacent Uses), p. IV.A-16 (Estuary Plan Policies, Fifth Avenue Point), and p. IV.A-35 (Physical Division of Established Community). As also discussed on p. IV. A-35, Mitigation Measure A.1 that addresses the projects impact on the "established community" of Fifth Avenue Point includes measures aimed at ensuring safe, direct, and well-designed access between the outparcels

8 Consistent with the Open Space, Conservation, and Recreation Element (OSCAR) of the General Plan, "parks and open space" shall include the defined unpaved areas, as well as associated facilities, trails, and parking areas, as with Estuary Park and Jack London Aquatic Center.

9 44 percent includes the existing 7.7-acre Estuary Park and Jack London Aquatic Center. With these existing facilities and associated site area included, a total of 28.4 acres of open space would exist on the project site, which would result in approximately 37 percent of the project site as open space.

and the new public open spaces, trails, and marina uses on the project site. Regarding the integration of the Fifth Avenue Point outparcel in the project site development, which may be the intent of the comment, the project sponsor does not own nor intends to acquire the outparcel, therefore this area is not proposed as part of this project. To the extent that the development proposed adjacent to Fifth Avenue Point has adverse physical effects, such impacts are analyzed and appropriately mitigated throughout Chapter IV (Setting and Impact Analysis) of the DEIR. To the extent that the City finds the proposed relationship of the project to Fifth Avenue Point "bad," it will consider this as it takes action on the project.

QQ-13 See Response to Comment B-8 regarding proposed new buildings and effects on views and public access.

COMMENT LETTER RR

Oak to Ninth Avenue Project DEIR
Comment Letter

RECEIVED
OCT 28 2005
City of Oakland
Planning & Zoning Division

Rajiv Bhatia, MD, MPH
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October 24th, 2005

Transmitted via email to mstanzione@oaklandnet.com

Margaret Stanzione
Project Planner
City of Oakland
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Re: Comment on Oak to Ninth Avenue Project DEIR; Case ER 04- 0009

Dear Ms. Stanzione:

Thank you for the opportunity to provide comments on the Draft EIR for the Oak to Ninth Avenue Project. As a public health practitioner and resident of Oakland, I am interested that the Final EIR for this project includes a comprehensive analysis of all environmental health impacts on neighborhoods and residents both within and adjacent to this project.

As you know, Section 15065 of the regulations for the California Environmental Quality Act (CEQA) mandates an environmental impact report (EIR) to analyze any "...environmental effects of a project [that] will cause substantial adverse effects on human beings, either directly or indirectly.[1] CEQA guidelines section 15126.2, subdivision (a) requires an EIR to discuss "health and safety problems caused by the physical changes" that the proposed project will precipitate. A recent Court of Appeals ruling in Bakersfield Citizens for Local Control vs. the City of Bakersfield underscores the necessity of health analysis in an EIR prepared under CEQA. Analysis of health impacts is necessary to evaluate the full significance of environmental effects. Environmental Justice also demands a full analysis of the health impacts on low-income and minority populations. RR-1

I am particularly concerned that the Draft EIR has not fully studied health impacts related to transportation.[2 3 4] The Draft EIR acknowledges that development of the Oak-to-Ninth Avenue

1 California Code of Regulations. §15065

2 Dora C, Phillips M (editors). Transport, environment and health. Copenhagen: World Health Organization Regional Office for Europe; 2000.

3 Frank LD, Engelke P. How land use and transportation systems impact public health: A literature review of the relationship between physical activity and built form. Atlanta, GA: Centers for Disease Control; 2000.

4 Our Built and Natural Environments: A technical review of the interactions between land use, transportation, and environmental quality. USEPA Washington DC 2001

Project, which includes 3100 residential units and 3500 parking spaces, will increase vehicle trips not only around the project itself but also in the general area. The DEIR estimates, at build out, the project would result in an additional 27,110 daily vehicle trips external to the project. (Table IV.B-4) An estimated 19% of the total vehicle trips or 5151 daily vehicle trips would be destined for the Chinatown / Downtown Oakland Area. RR-1 (CONT.)

In the Transportation Section, the Draft EIR extensively evaluates how these 27,110 vehicle trips may affect delays for drivers of automobiles at intersections (auto LOS)—a social impact that has been traditionally studied in CEQA reviews. However, I believe that the analysis of intersection level LOS impacts for vehicle drivers does not comprise a full analysis of the significance of increased vehicle trips for all segments of the Oakland population. A more comprehensive analysis is particularly important for pedestrians, transit-dependent populations, low-income residents, children, and the elderly. I believe the EIR has not provided this comprehensive analysis of project-related potential adverse human impacts and their feasible mitigations. In general, these impacts directly or indirectly result from the increased vehicle trips generated by the Oak to Ninth Project and destined for the surrounding neighborhoods including downtown and Chinatown. For most vehicle-related impacts considered in the DEIR, impact analysis does not extend to areas affected by project-related vehicle trips such as Downtown and Chinatown. Four potentially significant health-related impacts requiring further analysis of significance and potential mitigation are:

A. **Increased pedestrian injuries and reductions in the quality of the pedestrian environment;**
B. **Increased motor vehicle injuries;**
C. **Increased respiratory disease due to vehicle emissions;**
D. **Increased community environmental noise.**

Furthermore, I am concerned that the Draft EIR has not fully analyzed and established the feasibility of available mitigations to reduce vehicle trips—the underlying cause of the abovementioned environmental health impacts. In fact, the DEIR acknowledges that project includes no plans or sub-projects to reduce vehicle trips. (IV.B-21) RR-2

A. Impacts on Pedestrian Travel Quality and Safety

The DEIR includes a remarkably brief analysis of impacts on pedestrians (IV.B-55 to IV.B-57) concluding that the projects impacts on pedestrian safety is less than significant. With regards to the needs of pedestrian environment quality and safety, the DEIR is insufficient in the following ways: RR-3

1. The DEIR does not provide any data of baseline pedestrian injury rates in the project area and adjacent areas subject to increased project-related vehicle trips. Without this data is it not possible to analyze potential impacts on pedestrian safety. **The FEIR should provide pedestrian injury rates disaggregated by census tract or an equivalent geospatial unit of analysis.**

2. The DEIR does not provide any data on the location of pedestrian injuries in the project area and adjacent areas subject to increased project-related vehicle trips. Location data points to areas of high hazard and should be the focus of attention for pedestrian safety analysis. Without this data is it not possible to analyze potential impacts on pedestrian safety. **The FEIR should provide a map of pedestrian injury intensity.**

3. The DEIR does not provide any data on the existence or location of populations potentially more vulnerable to impacts on pedestrian safety and quality. These populations include children, the elderly, walking-dependent, and transit-dependent populations. Many members of these sensitive populations reside in Chinatown which will bear a large number of increased vehicle trips. **The FEIR should analyze the existence of sensitive populations as part of the analysis of pedestrian impacts.**

RR-3 (CONT.)

4. The DEIR attributes pedestrian injuries to diverse environmental factors including vehicle volume, signal timing, intersection and roadway design, allowed right turns on read, parking movements, and pedestrian volumes. (IV.B-56) However, the DEIR contains neither analysis of baseline conditions of these factors nor analysis of how the project may affect these other environmental factors. **The FEIR should analyze baseline conditions of all pedestrian environmental factors in all areas, including Chinatown, subject to increased vehicle trips as a result of the project.** (See comments regarding methods below)

5. The DEIR does not use readily available tools to analyze impacts on the pedestrian environment. Several jurisdictions have developed pedestrian environment metrics (pedestrian LOS). These metrics are based on a standardized set of observations taken by a trained observer. The City of Oakland has not yet developed such a metric; however, LOS metrics are straightforward to construct and use. **The FEIR should use a pedestrian environment metric to better understand the existing pedestrian conditions in the project area and adjacent areas subject to significant increases in project related vehicle trips.** Two recent examples of pedestrian environment / LOS metrics are provided below:

    - The City of Gainesville Florida has developed Pedestrian LOS quantitative level of services measures and standards for the City and tested and evaluated these standards both on existing conditions and proposed projects.[5] Factors included

5 Dixon LB. Bicycle and Pedestian Level-of-Service Performance Measures for Congestion Management Systems. Transportation Research Record. Number 1538. 1996.

facility type, facility width, driveway conflicts, pedestrian signals, turn conflicts, crossing widths, speeds, buffers, lighting, and shade trees.

- The City of Charlotte North Carolina has developed a method for pedestrian level of service for intersections in 2005.[6] This pedestrian LOS metric weighs crossing distance, signal phasing and timing, corner radii, cross walk treatments, and traffic flow.

6. Pedestrian injuries are the direct result of vehicle—pedestrian conflicts. Increased vehicle trips result in an increase in pedestrian-vehicle conflicts and will likely result in increase pedestrian injuries and fatalities in adjacent areas. A recent study conducted by the Florida Department of Transportation support the relative importance of vehicle trips (and other factors) on pedestrian safety. The study found that traffic volume, traffic speed and lateral separation between pedestrians and traffic explained 85% of the variation in perceived safety and comfort for pedestrians.[7] The DEIR does not provide estimates of the effects of vehicle trips on pedestrian injuries in the project area or adjacent areas. These increases are quantifiable. **The FEIR should estimate changes in pedestrian injury incidence.** One reasonable assumption is that the incidence of injuries will increase in proportion to the increase in vehicle trips in any given and thus could be calculated simply: *Change in area pedestrian injury rate = baseline area injury rate X (vehicle trips generated / baseline vehicle trips).* RR-3 (CONT.)

7. The DEIR indicates that as mitigations to intersection LOS impacts, the project will include signals with pedestrian signal heads at several intersections (Embarcadero and Oak, Embarcadero and 5th Ave; Embarcadero and I-880 Northbound off-ramp; Embarcadero and Broadway.) The DEIR concludes that these traffic control devices will "safely accommodate the added vehicle and pedestrian traffic and the project would have a less than significant impact." The determination of 'less than significant impact' is not supported by any substantial evidence. **The FEIR should include evidence on the relative efficacy of traffic signal devices as measures to reduce pedestrian injuries and provide evidence demonstrating that reduction in injuries due to these signals will compensate for any increases in estimated injuries due to project related increases in vehicle and pedestrian injuries.**

8. The mitigations identified as adequate to mitigate impacts on pedestrian safety would only apply to a limited number of intersections in and around the project area. No mitigations are proposed for adjacent areas such as Chinatown which would see over 5000 additional vehicle trips per day. **The FEIR should either provide evidence demonstrating that the**

6 Charlotte Department of Transportation. Pedestrian and Bicycle Level of Service: Methodology for crossings as signalized intersections. 2005

7 Landis BW, Vatttikuti VR, Ottenberg RM, McLeod DS, Guttenplan M. Modeling the Roadside Walking Environment: A Pedestrian Level of Service. TRB Paper -1-0511 Tallahassee. 2000.

increased vehicle trips will not affect pedestrian injuries in Chinatown and other adjacent areas or analyzed these impacts and analyze and propose mitigations.

9. The DEIR states that the Revive Chinatown Plan includes funded pedestrian environment and safety improvements, including corner bulb-outs, scramble systems, pedestrian countdown times, and bilingual signs. (IV.B-56) While some short-term Plan improvements do have funding others are not funded. Mid term improvements are not funded. **The FEIR should not assume that all improvements identified in the Revive Chinatown Plan will occur.**

10. The probability of serious injury in a collision increases rapidly triples from 20 mph to 30 mph.[8] Ninety percent of pedestrians struck at speeds greater than 30 mph suffer severe injuries. The DEIR does not analyze effects of the project on vehicle speed which can affect the severity of pedestrian injuries. **The FEIR should analyze project effects on vehicle speed and consequent effects on pedestrian injuries.**

11. Development will likely increase pedestrian trips both in the project area and in adjacent areas; increase in pedestrian trips may either increase or decrease injuries through separate mechanisms. On one hand, an increase in pedestrian trips can increase the frequency of vehicle—pedestrian conflicts which results in greater injuries. Alternatively, some evidence suggests that greater pedestrian activity can decrease pedestrian hazards from motor vehicles.[9] **The FEIR should analyze the effects of pedestrian trips on pedestrian injuries.** RR-3 (CONT.)

12. In general, the analysis of pedestrian safety in the DEIR neither contains little if any substantive evidence or analysis. The DEIR does not appear to reflect the best available scientific knowledge in the field of pedestrian safety. **In the FEIR, the analysis of pedestrian impacts should be conducted by someone with specific expertise in the field.**

13. The DEIR provides extensive analysis regarding impacts on the quality of travel for automobile drivers. The same consideration of quality of travel should be applied to the class of the population who rely on walking to meet their travel needs. **Equity and environmental justice demands that the FEIR analysis of pedestrian environments should focus not only on safety but also on quality, and convenience for pedestrian travel in the project areas and surrounding areas.**

14. The DEIR provides for no specific mitigations for impacts on pedestrian safety or quality other than those already required for mitigating impacts on vehicle drivers. **The FEIR should consider all of the mitigations listed below. If the mitigations are not**

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8 New directions in Speed Management: a review of policy.

9 Leden L. Pedestrian risk decrease with pedestrian flow. A case study based on data from signalized intersections in Hamilton, Ontario. Accident Analysis and Prevention. 2002: 34:457-464.

analyzed, the FEIR should provide either evidence demonstrating that they are not effective or evidence demonstrating that they are not feasible.

14.1. Pedestrian Infrastructure Improvements in pedestrian infrastructure (e.g., presence of sidewalks, roadway buffers, street lighting, and reduced crossing speeds) can make walking safer, increase walking behavior, and reduce single-occupancy vehicle trips and associated vehicle emissions. **The FEIR should consider as mitigations funding specific improvements and necessary planning studies for suggested improvements in the Revive Chinatown Plan.**

14.2. Traffic Calming Traffic calming can reduce both the number and severity of injuries. Reviews of international studies demonstrate that on average traffic calming interventions reduce accidents by 15%.[10] Traffic calming can also increase the perception of neighborhood quality and increase walking behavior.[11] **Specifically, the FEIR should consider traffic calming improvements should be considered in and around the project area where appropriate.** RR-2 (CONT.)

14.3. The FEIR should consider Travel Demand Reduction measures as pedestrian safety mitigation measures (see comments on air quality below).

14.4. The FEIR should consider transit mitigations as pedestrian safety mitigation measures (see comments on air quality below).

14.5. The FEIR should consider shuttle service measures as pedestrian safety mitigation measures (see comments on air quality below).

B. Impacts on Motor Vehicle Injuries

Vehicle related injuries, including injuries to vehicle occupants, are a significant health impact in Oakland and the United States. Nationally, for people aged one to 40, traffic injuries are the single greatest cause of disability and death. Injuries involving motor vehicles are a major cause of life lost especially among children. In 2001, over 42,000 people died in traffic related incidents nationally.[12] Injuries to humans are adverse human impacts of at least comparable significance to intersection level delays which the DEIR analyzes extensively. RR-4

15. The DEIR does not provide any data of baseline motor vehicle injury rates in the project area and adjacent areas subject trips. This data is available from the California State traffic

10 Morrison DS, Petticrew M, Thomson H. What are the most effective ways of improving population health through transport interventions? Evidence from systematic reviews. Journal of Epidemiology and Community Health 2003:57:327-333.

11 Morrison DS, Petticrew M, Thomson H. Evaluation of the health effects of a neighborhood traffic Calming Scheme.. Journal of Epidemiology and Community Health 2004:58:837-840.

12 Earnst M. *Mean Streets 2004.* Washington DC: Surface Transportation Policy Project; 2004.

incident database. Without this data is it not possible to analyze potential impacts on vehicle injuries. **The FEIR should provide vehicle injury rates disaggregated by census tract or an equivalent geospatial unit of analysis.**

16. The DEIR does not provide any data on the location of vehicle injuries in the project area and adjacent areas subject to increased in vehicle trips. Location data points to areas of high hazard and should be the focus of attention for pedestrian safety analysis. Without this data is it not possible to analyze potential impacts on pedestrian safety. **The FEIR should provide a map of vehicle-related injury intensity.**

17. In general, motor vehicle injuries are proportional to vehicle trips and vehicle miles traveled. The greater than 27,000 project generated daily vehicle trips will likely result in an increase in motor vehicle injuries. Empirical research demonstrates that changes in vehicle mileage might provide a proportional change in vehicle crashes.[13] **The FEIR should estimate changes in vehicle injury incidence in the project area and adjacent areas.** A reasonable estimation of the change incidence of injuries may be provided by the following formula: Change in Area injury rate = Baseline Area injury rate X (vehicle trips generated / baseline vehicle trips).

RR-6 (CONT.)

18. Broadly speaking, each 1mph change in speed may reduce accident frequency by 5% with effects greatest for urban main roads and low speed residential roads.[14] The DEIR does not analyze effects of the project on vehicle speed which can affect the severity of motor vehicle injuries. **The FEIR should analyze project effects on vehicle speed and consequent effects on all vehicle-related injuries.**

19. The DEIR provides for no **mitigations** for impacts on vehicle injuries. **The FEIR should consider all of the mitigations listed below. If the mitigations are not analyzed, the FEIR should provide either evidence demonstrating that they are not effective or evidence demonstrating that they are not feasible.**

19.1. **Traffic Calming** Traffic calming can reduce both the number and severity of injuries. Reviews of international studies demonstrate that on average traffic calming interventions reduce accidents by 15%.[15] **Specifically, the FEIR should consider traffic calming improvements should be considered in and around the project area where appropriate.**

19.2. **The FEIR should consider Travel Demand Reduction measures as vehicle safety mitigation measures (see comments on air quality below).**

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13 Litman, T. If Health Matters: Integrating Public Health Objectives in Transportation Planning. Victoria Transportation Policy Institute. 2004.

14 Taylor M, Lynam D, Baruay A The effects of drivers speed on the frequency of road accidents. Transport Research Laboratory. TRL Report 421 Crowthorne, UK, 2000.

15 Morrison DS, Petticrew M, Thomson H. What are the most effective ways of improving population health through transport interventions? Evidence from systematic reviews. Journal of Epidemiology and Community Health 2003:57:327-333.

19.3. The FEIR should consider transit mitigations as vehicle injury mitigation measures (see comments on air quality below).

19.4. The FEIR should consider shuttle service measures as vehicle injury mitigation measures (see comments on air quality below).

RR-6 (CONT.)

C. Air quality and health impacts

20. The project finds that project related vehicle trips have significant adverse impacts on regional air quality However, increased vehicle trips will also result in increased local area vehicle emissions potentially resulting in an increase in respiratory disease among people living near roadways. Research confirms an inverse relationship between exposure to particulate matter, nitrogen dioxide, and soot and distance from roadways. The California Air Resources Board recently published guidelines which aim to decrease exposure to criteria air pollutants and toxic air contaminants related to vehicle air emissions.[16] **The FEIR should provide quantitative estimates of increases in vehicle emissions, including PM 10 and PM 2.5, in areas adjacent to the project which will bear project-related increases in vehicle trips.**

RR-5

21. The DEIR identifies sensitive receptors (for air quality impacts) as the elderly, young children, and people with pre-existing illnesses, and people performing strenuous work outdoors. The DEIR further identifies sensitive receptors as the Fifth Avenue Point work-live artist community as well as future proposed parks. Eighteen percent of project generated vehicle trips will be destined for Downtown & Chinatown, and children, the elderly, and strenuous workers doing strenuous work live and work in these areas. **The FEIR should identify sensitive populations and receptors to air quality impacts in the Chinatown—Downtown areas affected by project generated vehicle trips.**

RR-6

22. The DEIR identifies exposure of "...sensitive receptors to substantial pollutant concentrations" as a significance criterion. (IV.C-10) To evaluate such potential impact, the DEIR includes an analysis of Diesel Particulate Matter (DPM) exposure on the project site. (IV.C-22) However, analysis restricted to DPM is incomplete. Health effects due to roadway related vehicle emissions are not exclusively due to diesel particulate matter; health effects also result from PM-10 and PM-2.5 as well as other pollutants. The DEIR documents health effects due to PM-10 and PM-2.5 in table IV.C-1. Epidemiologic studies have found consistent associations between proximity to roadways and respiratory disease symptoms and lung function measures. [17] [18] The California Air Resources Board Air Quality

RR-7

16 Air Quality and Land Use Handbook: A Community Health Perspective. California Air Resources Board; 2005.

17 Brauer M, Hoek G, Van Vliet P, Meliefste K, Fischer PH, Wijga A, Koopman LP, Neijens HJ, Gerritsen J, Kerkhof M, Heinrich J, Bellander T, Brunekreef B. Air pollution from traffic and the development of respiratory infections and asthmatic and allergic symptoms in children. American Journal of Respiratory and Critical Care Medicine. 2002;166:1092-1098.

and Land Use Handbook (Handbook) also does not recommend that analysis of road way related environmental health effect be limited to analysis of Diesel Particulate Matter. Epidemiological research provides effect measures that allow the estimation of impact on health outcomes related to roadway related pollutants. **The FEIR should analyze how project generated vehicle emissions (including Pm-10 and PM-2.5) might affect respiratory disease among project residents, among residents of Chinatown-downtown, and among residents of other areas affected by project generated vehicle trips.** RR-7 (CONT.)

23. The DEIR finds that the project will result in significant cumulative contributions to regional air pollution. (IV.C-30) The DEIR proposes a set of measures including rideshare measures, shuttle measures, transit measures, and bicycle and pedestrian measures. The mitigation measure states the project sponsor shall, as feasible and practical, implement a combination of the measures. Many of the measures, particularly the area shuttle appear effective and feasible. However, many of the other specific measures are voluntary, not enforceable, and benefits from these measures would not be quantifiable. **The FEIR should describe the specific enforceable and quantifiable measures to reduce air quality impacts be implemented by the project sponsor. The FEIR should estimate reductions in air pollutants due to these mitigations. Any feasibility analysis required for selected mitigations should be provided in the FEIR. (See related comments below)** RR-8

24. Investments to maintain or improve the quality and capacity of transit services in the project area and adjacent areas would be likely to reduce vehicle trips use reduce single-occupancy vehicle trips and associated vehicle emissions, motor vehicle related injuries.[19] The DEIR acknowledges that residents of the project would not have direct access to mass transit and use of area mass transit services would require an associated vehicle trip. (IV.B-21) The DEIR also acknowledges that no transit service improvements are proposed or funded complimentary with the project. Proposed air quality mitigations related to transit include the construction of transit facilities adjacent to the project site, but there is no mention of actual transit service enhancements. A residential development the size of the Oak to Ninth project should be able to generate significant transit demand if convenient and quality services are provided. **The FEIR should analyze the feasibility of project funded operational support to provide AC transit services to the site.** RR-9

25. The DEIR identifies a private shuttle between the project and nearby activity as one of several air quality mitigations. This measure is specific and enforceable. **This measure should become specific condition of the project approval. The frequency, route, and** RR-10

18 Mikkelsen J. Effect of vehicular particulate matter on the lung function of asthmatic children in Fresno CA. Unupublished Manuscript.

19 Kitamura, et al., 1997

capacity of the shuttle should be specified in the FEIR. The shuttle should operate between 7 am and 11pm and serve at a minimum Lake Merritt BART station, Oakland City Center BART Station, Oakland Chinatown, and Jack London Square. The shuttle should be accessible at no cost to future employees working at the project site as well as visitors and area residents. Any feasibility analysis needed for this mitigation should be included in the FEIR.

26. The DEIR acknowledges that a comprehensive Travel Demand Reduction program has not been proposed or adopted for the project. Some Travel Demand mitigations are provided by the project including provisions for a private shuttle (see above) and pedestrian and bicycle lanes within the project. **The FEIR should include analysis of the feasibility of a comprehensive Travel Demand Reduction Program.** An effective comprehensive travel demand reduction program might include: (1) Reducing the number of on-street or off-street parking spaces provided through the Oak to Ninth development; (2) increasing parking charges within the project; (3) unbundling the sale of housing units from parking units; (4) providing a "car-share" program on site. RR-10 (CONT.)

D. Impacts on Community Environmental Noise

27. The DEIR infers that subjective effects (annoyance, nuisance, and disturbance) and interference with speech, sleep and learning are the primary effects of environmental noise. Scientific research has documented that even moderate levels of chronic environmental noise has multiple adverse health impacts. It is important to note that even if noise is constant or "in the background" significant health effects might occur. For example, high levels of traffic noise may require people to raise their voices to engage in normal conversation. Over time this phenomenon might have adverse physiological impacts. The combination of noise and poor housing in urban areas has recently been associated with higher stress and hormone levels in children.[20] Chronic exposure to moderate levels of environmental noise also results in poor quality, interrupted sleep that may cause both physical and psychological problems. [21] Noise-induced stress can cause chronic elevated blood pressure, coronary disease, ulcers, and migraine headaches. Noise can also affect safety; traffic noise may prevent pedestrians from hearing cars approaching dangerously from the side or behind. The WHO guidelines for Community Noise provide a recent overview of scientific research on noise and health. **The FEIR should reference the WHO Guidelines for Community Noise and other resources on noise to provide more contemporary documentation of the adverse health impacts of environmental noise.** RR-11

20 Evans G, Marcynyszyn LA. Environmental Justice, Cumulative Environmental Risk, and Health among Low- and Middle-Income Children in Upstate New York. American Journal of Public Health. 2004;94:1942-1944.

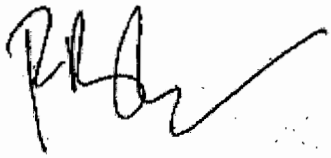
21 Guidelines for Community Noise. Geneva: World Health Organization; 1999.

28. In urban areas, environmental noise is largely a function of vehicle volume, vehicle speed, and vehicle type and road conditions. Increased vehicle trips generated by the project will cause an increase of environmental noise in all areas impacted by project generated vehicle trips. The DEIR models future noise levels and incremental changes in noise levels attributed to the project for selected areas surrounding the project. (IV.G-25) While the results indicate moderate increases in noise levels, the DEIR does not model vehicle related changes in noise levels in other sensitive areas with significant increases in vehicle traffic. Downtown Oakland and Chinatown have a significant residential population as well as a significant population (including the elderly and young children) that may be sensitive to the health effects of increased vehicle induced noise. Chinatown also has schools and childcare facilities that might be adversely impacted by higher levels of noise. Furthermore, many residential dwellings in Chinatown pre-date Title 24 requirements for interior noise levels. **The FEIR should include baseline noise analysis and model project-related increases in noise for all residential areas impacted by project-related vehicle trips.** RR-12

29. Because of roadway associated noise, the DEIR provides mitigation measures to reduce indoor noise in the project's new multi-family dwelling units. (IV.G-27) **If the FEIR determines that project-related changes in noise levels would be significant, the project sponsor should consider funding improvements in windows and other sound reduction measures in walls facing affected roadways.** RR-13

Thank you for your consideration of these comments. I look forward to reviewing further analyses of this project in the Final EIR. I would be happy to meet with City staff, the project sponsor, or EIR consultants to discuss these comments if appropriate.

Sincerely,



Rajiv Bhatia, MD, MPH

Letter RR – Rajiv Bhatia

RR-1 The DEIR includes an analysis of public health and safety risks in the Transportation, Circulation, and Parking Section of the DEIR, starting on p. IV.B-55, *Pedestrian Safety Impacts* (see also Master Response F regarding pedestrian safety related to rail crossings), and in Air Quality Section of the DEIR, starting on p. IV.C-21, *Toxic Air Contaminants*. Guidelines for preparation of environmental documentation pursuant to the National Environmental Policy Act (NEPA) requires a full analysis of the health impacts on low-income and minority populations as part of Environmental Justice. The project is not subject to environmental review under NEPA, and thus does not include the specific geo-economic analysis of the effects on these populations.

Each of the four topics of concern raised by the comment is discussed in the following responses.

RR-1 See Master Response D for a description of the Transportation Demand Management Plan for the project.

RR-3 Per Section 15125(a) of the CEQA Guidelines, an EIR shall include only enough information about setting (baseline) conditions to provide a meaningful context for the discussion of impacts and mitigation measures. It is not necessary for the DEIR to provide the detailed baseline conditions suggested by the commenter in order to provide disclosure of potential traffic safety issues and the project's potential effect on traffic safety conditions in the general project area, as well as in high pedestrian activity areas (e.g., the San Antonio and Chinatown areas).

The various documents cited by the commenter are noted, but their relevance to the analysis of potential project impacts on pedestrian conditions is limited at best. The design of the project site, augmented by DEIR mitigation measures, incorporates a circulation system that accommodates traffic streams (vehicle, bicycle, pedestrian) in an efficient and cooperative way. In the professional judgment of City staff and the EIR consultants, detailed analysis of pedestrian levels of service, in the context of pedestrian trails, sidewalks, and traffic control devices (existing or provided as part of the project) is not required.

As described on DEIR pp. IV.B-55 to IV.B-57, traffic control devices (traffic signals with pedestrian signal heads), as well as striped crosswalks, would safely accommodate the added vehicular and pedestrian traffic by controlling the flow of the traffic streams through positive guidance. Pedestrian Master Plan (PMP) Policy 1.2 recommends use of traffic signals and their associated features (e.g., pedestrian signal heads) to improve pedestrian safety. As further described on those pages, drivers and pedestrians share responsibility for pedestrian safety. While increased vehicular volumes may contribute to pedestrian collisions, there are many other factors, such as signal timing (i.e., the amount of time pedestrians have to cross the street at signalized intersections), intersection and roadway design (e.g., the presence or absence of pedestrian crossing signals, and the

prohibition or allowance of right turns on a red light), adjacent land uses, parking movements, as well as pedestrian volumes and characteristics that also affect pedestrian safety. See Response to Comment X-3 regarding the basis for the DEIR's finding of a less-than-significant impact to pedestrian safety.

The proposed project would not introduce to the project area incompatible uses or design features (e.g., sharp curves or dangerous intersections) that do not comply with Caltrans design standards. As a result, while the potential for motor vehicle or pedestrian accidents would exist under project conditions, the *rate* at which those accidents occur (i.e., accidents per number of vehicles or pedestrians) would not be expected to increase as a result of the project. Therefore, the project would have a less-than-significant impact on motor vehicle and pedestrian traffic safety.

The basis for the commenter's reference to "over 5,000 additional vehicle trips per day" through Chinatown is unclear. The project trips shown on DEIR Figure IV.B-2 traveling to and from the downtown area represent all the possible paths and routes to downtown Oakland, which includes Broadway, 7th/8th Streets and 12th/14th Streets; it is estimated less than 10 percent of all project trips would go through Chinatown. As described on DEIR p. IV.B-24, on the basis of travel time runs conducted to ascertain the relative attractiveness of each route, the 5th Avenue / 12th Street / 14th Street path would be the fastest route into the downtown area, and the 5th Avenue / 7th Street / 8th Street route would be the slowest. As discussed above (and in the DEIR), the movements of vehicles at area intersections would be controlled by traffic control devices (traffic lights and stop signs). Also, there is no basis to expect travel speeds on area streets to increase as a result of the project, and in fact, increased traffic volumes tend to slow travel speeds.

Pedestrian improvements in the Revive Chinatown Plan that address pedestrian safety issues are short-term measures, and are fully funded. The mid-term improvements are pedestrian amenity measures (e.g., widened sidewalks), not safety measures. Also, as stated on the Oakland Public Works Agency's web site (regarding City of Oakland / Alameda County Transportation Improvement Authority / Measure B Projects), the Revive Chinatown Pedestrian Oriented Improvements (G278230) is anticipated to be completed by late 2007.

The suggested mitigation measures are noted, but because the project would have a less-than-significant impact on pedestrian safety, no further mitigation measures are required. See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures.

RR-4 See Response to Comment RR-3, above, regarding the level (content) of baseline conditions necessary in an EIR, and about how because the proposed project would not introduce to the project area incompatible uses or design features that do not comply with Caltrans design standards, the rate at which motor vehicle accidents would occur (i.e., accidents per number of vehicles) would not be expected to increase as a result of the project (i.e., the project would have a less-than-significant impact on traffic safety).

The suggested mitigation measures are noted, but because the project would have a less-than-significant impact on traffic safety, no further mitigation measures are required. See Master Response D for a description of the Transportation Demand Management Plan for the project, including transit service measures.

RR-5 The analysis in the DEIR followed the Bay Area Air Quality Management District *CEQA Guidelines* recommended methodology for the calculation of project-related air pollutant generation, including emissions associated with project vehicle trips. Criteria pollutant total emissions from mobile sources were quantified by using URBEMIS2002 and project-specific vehicle trip information from the traffic study. These emissions were then compared to the respective BAAQMD Thresholds of Significance for project operations. Table IV.C-5 of the DEIR shows that, except for CO, regional emissions of ROG, NOx, and PM10 do not exceed the BAAQMD Significance Thresholds. Since CO emissions exceeded the Significance Threshold, localized air quality impacts from CO emissions were analyzed in the DEIR for key intersections and were found to be less than significant. These key intersections are located near the project site where there would be the greatest concentration of project-related vehicles. The density of project-related vehicles at distances farther from the project site, such as in Chinatown, would be less, and the CO air quality effects from project-related trips would be less than that analyzed in the DEIR. The DEIR assumes that, since regional emissions of PM10, ROG and NOx are less than the Significance Thresholds their corresponding localized air quality impacts would be less than significant. In addition, see Response 21.

RR-6 Comment noted. Additional information regarding sensitive receptors in the project area described below shall be inserted in the DEIR in the first paragraph on p. IV.C-10, before the *Air Quality and Meteorological Conditions Impact Discussion* heading (additions shown as <u>underlined</u>; deletions as ~~strikeout~~):

> The existing sensitive receptors in the <u>immediate</u> project area are part of the six-acre Fifth Avenue Point live-work artist community along 5th Avenue, south of the Embarcadero. Fifth Avenue Point includes a mix of residential, industrial, and commercial uses on privately owned parcels. Also, proposed parks and open space recreational areas to be developed as part of the project would also be considered sensitive land uses. Due to the project construction phasing, proposed residential units that would be completed during initial phases would be occupied while other parcels are under construction developed. Therefore, the nearest sensitive receptors to project-related air quality impacts include the new project residents and tenants. In addition to the sensitive receptors in the immediate project vicinity, there are also receptors offsite, including residences within the Chinatown and Downtown areas.

RR-7 See Responses to Comments RR-5 and RR-6 above. The EIR relies on analyses proposed by the *BAAQMD CEQA Guidelines* for determining analyses to be conducted. The project impact is below the significance criteria for PM-10 identified in the *BAAQMD*

CEQA Guidelines. The EIR does identify a significant unavoidable impact for the 2025 Cumulative + Project scenario. Mitigation Measures C.7(a) through C.7(k) shall be implemented if feasible to reduce this impact.

Regardless, the DEIR took a conservative approach by analyzing the health effects from emissions of the pollutant with the lowest threshold that can cause significant health outcomes, which is exposure to carcinogenic diesel exhaust. The levels that would cause adverse non-carcinogenic health effects are several orders of magnitude higher than the levels that would cause adverse carcinogenic effects. Because the DEIR determined that carcinogenic impacts from project-related PM emissions would be less than significant, the adverse non-carcinogenic impacts would also be less than significant.

RR-8 Comment noted. See the Oak to Ninth Transportation Demand Management Plan included in the FEIR for specific transportation mitigation measures and recommended actions associated with Transit, Bicycles, and Parking. The BAAQMD *CEQA Guidelines*, Table 15 and Table 16, list mitigation measures for reducing motor vehicle emissions and respective percentage effectiveness. Potential motor vehicle emission reductions from the required mitigation and recommended actions listed in the TDM Plan would include:

Mitigation/ Action	Effectiveness
• Construction of transit facilities	0.5% to 2.0% (for all trips)
• Provide shuttle service to regional transit system or multimodal center.	0.1% - 0.5% (for all trips)
• Provide bicycle lanes and/or paths, connected to community-wide network.	0.1% - 2% (for all trips)
• Provide safe, direct access for bicyclists to adjacent bicycle routes.	0.5% – 2.0% (for work trips)
• Provide secure short-term bicycle parking for retail customers and other non-commute trips.	1.0% - 2.0% (non-work trips)
• Implement parking fees for single occupancy vehicle commuters.	2%-20% (for work trips)

RR-9 Comment noted. See the Oak to Ninth Transportation Demand Management Plan included in the FEIR for specific transportation mitigation measures and recommended actions.

RR-10 See Responses to Comments RR-8 and RR-9.

RR-11 Additional information regarding the adverse health effects due to noise described below shall be inserted in the DEIR as the last paragraph before the *Noise Attenuation* heading on p. IV.G-4 (additions shown as underlined; deletions as ~~strikeout~~):

> **Noise can have significant effects on physical and mental human health and well-being. Adverse impacts and effects include interference with speech and other forms of communication such as television and radio; sleep disruption; negative mood and behavioral changes; and hearing loss (usually temporary**

and caused by occupational, rather than environmental, noise). Sleep disruption and interference with communication are the main sources of noise-related community complaints. It should be mentioned that people's tolerance to annoyance from noise is highly subjective, varying greatly among individuals (Oakland General Plan Noise Element, 2005). Also, epidemiological studies have shown that cardiovascular effects occur after long-term exposure to noise (aircraft and road traffic) with 24-hour Leq values of 65-70 dBA, but the associations are weak and more research is required to estimate the long-term cardiovascular and psychophysiological risks due to noise (WHO, 1999).

The following reference is added to p. IV.G-29 of the Draft EIR:

World Health Organization (WHO), *Guidelines for Community Noise*, 1999.

RR-12 The DEIR analysis modeled noise for roadway segments between intersections that were screened for having the highest volumes. Based on traffic data, these segments have the largest increase in peak-hour traffic volumes for the interim and buildout scenarios versus existing conditions, and thus the greatest impact on noise along the roadway network. Since the analysis was based on the most affected roadway segments and noise levels were found to be less than significant (less than 5 dBA increase), the noise levels along other roadway segments, such as in the Downtown and Chinatown areas, would also be less than significant.

RR-13 As determined in the DEIR, project-generated traffic noise would be less than significant along the screened roadway segments. As noted by the commenter, the DEIR provides mitigation measures to reduce indoor noise for the project's new multi-family residential units. Mitigation is required for these project-related dwelling units because the project would locate noise-sensitive multifamily residential uses in a noise environment where existing noise levels are above what is considered "normally acceptable" according to the City of Oakland General Plan Noise Element, not because of increased noise levels associated with project traffic (see DEIR Impact G.3 on p. IV.G-27).

Wendy L. Tinsley
Jack London District Association
Oak to 9th Project Planning Commission Speaker Comments

Good Evening Commissioners,
My name is Wendy Tinsley. I live at 247 4th Street in the Jack London neighborhood and serve as President of the Jack London District Association.

The Jack London District Association is studying the Draft EIR for Oak to 9th, and will soon issue a formal opinion. Currently our organization wishes to publicly support the goals and sentiment of the Measure DD Coalition and those community organizations aligned with the group.

Areas of concern preliminary identified by Jack London residents are traffic and parking, historical resources, open space and urban design.

- The significant and unavoidable adverse effects on traffic congestion and surface parking in the Jack London District resultant from this project as well the Jack London Square redevelopment project, four existing 6-8 story tower developments currently under construction, and three planned 8-15 story tower projects bring the neighborhood to a Level of Service category F, individually and cumulatively. SS-1

- Oak to 9th proposes to demolish up to 85% of the 9th Avenue Terminal, the last vestige of Oakland's historic port. Opportunities exist to retain the structure in its entirety and incorporate it into the development. 10% and 20% historic preservation tax credits are available to assist in the proper rehabilitation and adaptive reuse of the historically and architecturally significant structure. SS-2

- Oak to 9th is comprised of a series of towers at the waterfront surrounded by small sections of green space. From an urban design perspective, the project configuration will effectively curtain that section of the waterfront off from the existing surrounding community and all of Oakland. Although public access to the waterfront must legally be provided, the public would not likely feel welcome in the shadow of the development. SS-3

The Jack London District Association encourages new development in the area that is consistent with the City's General Plan and the Estuary Policy Plan. Tonight I respectfully request that the Planning Commission require further refinement, study and analysis of the project design, impacts, and alternatives in order to provide a project that achieves consistency with existing adopted City plans and policies, and ultimately better serves Oakland's waterfront. SS-4

Thank you.

Wendy L Tinsley

Received at City Planning Commission Hearing
Date _____ Case No. _____

LETTER SS – Wendy Tinsley

SS-1 The commenter's concern, given the best available information and the professional judgment of City staff and the EIR consultants, is adequately addressed in the DEIR.

SS-2 The comment describes the availability of historic preservation tax credits that may be used to assist with historic rehabilitation and adaptive reuse of the Ninth Avenue Terminal. This comment is noted and does not address CEQA issues pertinent to the DEIR analysis. If the City approves an alternative that retains the Terminal, pursuing the use of historic preservation tax credits would be at the project sponsor's discretion.

SS-3 The comment raises concerns with the design of the project and asserts that its configuration would "effectively curtain that section of the waterfront off from the existing surrounding community." As discussed in the DEIR and depicted in the series of visual simulations in Section IV.K (Visual Quality and Shadow) of the DEIR (Figures IV.K-2 through IV.K-16), the project would introduce new and taller buildings than what currently exists on the site, would create new open space that does not currently exist on the site, and would allow for new and expanded views of the waterfront that do not currently exist from points along public streets within and adjacent to the project site. See also Response to Comment B-8.

SS-4 The comment requested further "refinement, study, and analysis of the project design, impacts, and alternatives in order to provide a project that achieves consistency with existing adopted City plans and policies…." The DEIR contains a thorough analysis of the potential impacts pursuant to CEQA that could result from the proposed project and, where feasible, identifies adequate mitigation measures to reduce significant impacts to less-than-significant levels. This analysis is provided in Chapter IV of the DEIR (Setting and Impact Analysis) and summarized in Chapter II (Summary). Section IV.A (Land Use, Plans and Policies) presents a complete discussion of how the project relates to key policies of the General Plan (as well as other plans and policies relevant to the project). Chapter IV includes a detailed description and analysis of a range of reasonable project alternatives, including a No Project / Estuary Policy Plan development scenario. As guided by CEQA, the alternatives would reduce or avoid significant impacts identified for the project while feasibly attaining the basic objectives of the project and the overall goals and policies of the Estuary Policy Plan. As a result, the analysis presented in the DEIR, along with additional information provided in this FEIR document, is adequate to inform the City in its environmental review and consideration the project under CEQA.

Regarding adequate review of project design, the project has been developed during a four year planning process that has thus far involved numerous community meetings, including a community outreach process conducted by Circlepoint on behalf of the City, public hearings at several City boards and commissions, with input from non-City agencies as well. In addition, there have been numerous project-sponsored meetings and community discussions on all aspects of the project. Input received throughout this process has resulted in project design modifications, including those identified by the

City-sponsored urban design consultant and presented to the City Planning Commission. Both the Planning Commission and the City Council will hold additional hearings prior to acting on the project proposal and will have the discretion to further modify the project design to ensure full adherence to the City's applicable design review criteria.

COMMENT LETTER TT

RECEIVED
SEP 28 2005
City of Oakland
Planning & Zoning Division

September 25, 2005

City of Oakland, CA.

Attn: Planning Commission

RE: Oak Street to Ninth Ave. Project

After viewing the model for the Oak Street to Nine Ave Project plans on the Internet, I am submitting the following comments:

Need to consider the long term impact of the project, effects on its unique geographic area and all the surrounding communities. How does it **complement and preserve the natural scenic beauty and open unobstructed views of the Oakland hills.** TT-1

Height limits **need** to be implemented for all property along the Estuary. Low rise buildings only, the closer to the estuary the lower the building. TT-2

This project is too dense for the site. TT-3

It blocks views of the Oakland hills. Needs more open space and landscaping. It looks like most of the land is covered with concrete. TT-4

Added congestion to the 880 freeway. Noise and air pollution increase. TT-5

Five 24 story towers – **Too high. e.g. Compare** to St Paul's Towers near Lake Merritt. That building is 24 stories. It's like building **a wall** along the Estuary just like the tall condos and apartments around Lake Merritt diminish and block views of the hills – every building in competition with each other. **Another comparison** –The old Montgomery Wards building in East Oakland. It was unsightly, a wall blocking views, seen for miles as one drove on 880 Freeway into Oakland. Needs more public access. TT-6

Land Trust initiated to preserve area. Believe much of this property was originally preserved in a "Land Trust" which the City of Oakland traded for another property. Which other property involved and why? TT-7

Who's is profiting from this development. The developers? TT-8

Also compare a recent project by Signature Properties called the "Estuary". These condominiums are on Glascock St near 29th Ave. along the estuary. These buildings are four stories high. Units are on 3 and 4 levels with up to 44 stairs in one unit. This project is very dense/crowded. Not handicapped accessible. Not a single condo on a single level. Public access to the estuary is invisible and limited. TT-9

Thank you for considering these comments.

Kathleen Jensen
122 Cypress St.
Alameda, CA 94501

Public Comments Received at City Planning Commission Hearing Date 9.28.05 Case No. OAK-09

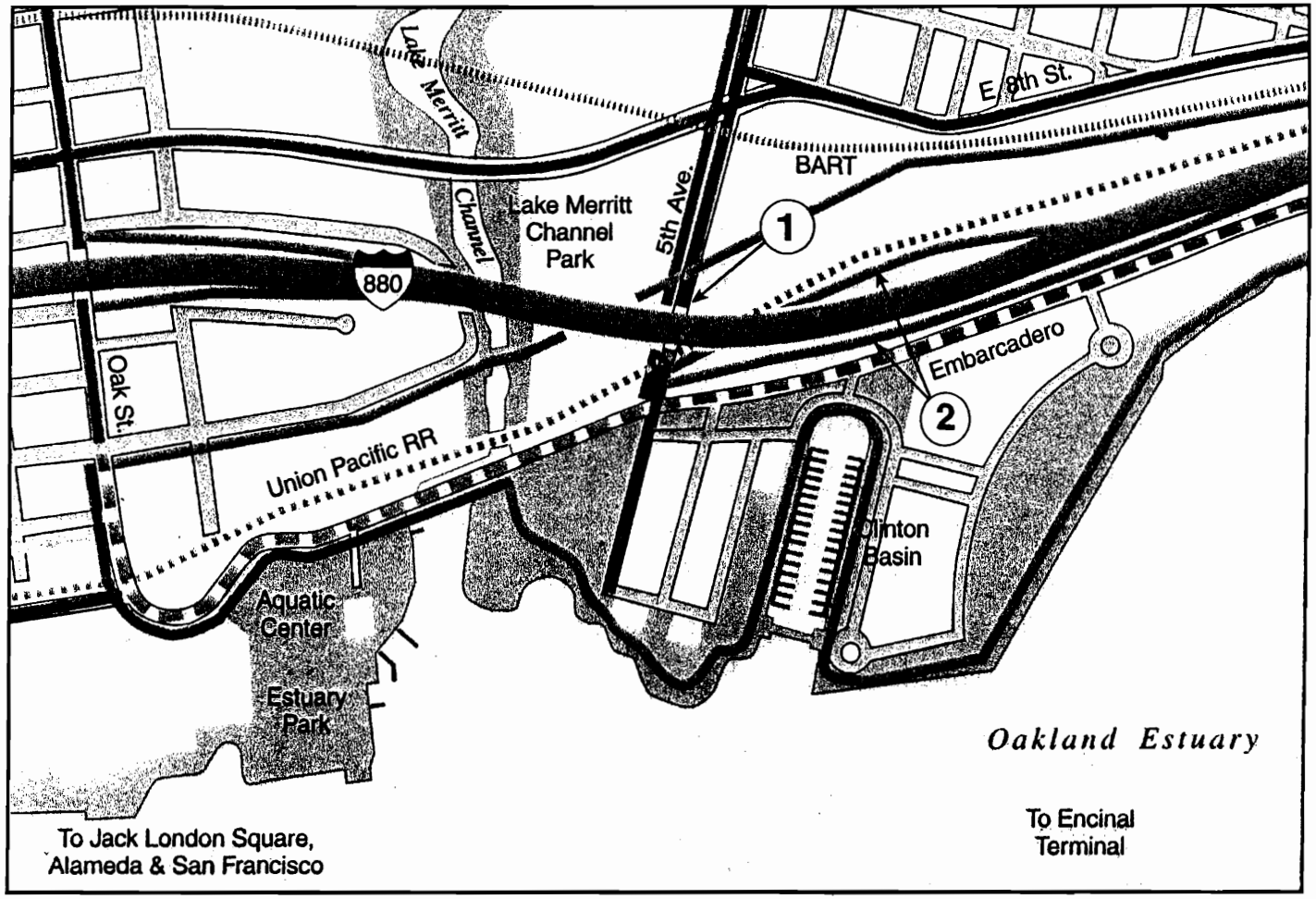


FIGURE III-14: **Oak to 9th District: Illustrative Circulation**

- (1) Realigned 5th Avenue
- (2) Rebuilt half diamond interchange at 5th Ave.
- Estuary Parkway
- Open Space and Public Access
- Interstate 880
- Major Linking Streets
- Local Streets
- Passenger/Freight Rail
- BART - Bay Area Rapid Transit
- Waterborne Transit (Ferry, Water Taxi)
- Class I Bikeways/Pathways
- Class II Bikeways/Pathways
- Class III Bikeways/Pathways

COMMENT LETTER TT

Estuary Policy Plan showing planned open space—

LETTER TT – Kathleen Jensen

TT-1 The DEIR includes a detailed analysis of the project's impact on scenic views and vistas, including those of the Oakland hills, in DEIR Section IV.K (Visual Quality and Shadows). The project impacts on visual quality would be less-than-significant as discussed on DEIR pp. IV.K-10 through IV.K-39. Overall, development of the project would improve the visibility and access to the "natural scenic beauty" of the area which is currently limited by hazardous conditions, debris, and dilapidated areas (such as Clinton Basin), industrial and warehouse type development and uses, and lack of public access and open spaces east of Lake Merritt Channel.

TT-2 As discussed on DEIR p. III-8 and depicted in Figure III-5 (Proposed Maximum Height Distribution) on p. III-15, the project proposes a mix of medium-height buildings from six to eight stories (up to 86 feet) in height. The DEIR also analyzes an increased height variant that would increase the building podium heights by 34 feet (from 86 to 120 feet maximum). Five of these medium-height buildings would include highrise tower elements of up to 24 stories (240 feet). Around Clinton Basin, a building stepback would be required at heights above 65 feet. These maximum height limits are included as development standards in the proposed Planned Waterfront Zoning District (PWD-1) summarized in Table IV.A-1 on DEIR p. IV.A-39. Except around the proposed Clinton Basin promenade, all development sites are separated from the waterfront by open spaces (and in some cases streets) and set back 200 to 400 feet shoreline.

TT-3 See Response to Comment GG-3, item 3, for discussion of lower-density alternatives to the project.

TT-4 See Response to Comment TT-1 regarding views. The project would result in approximately 37 percent of the project site as open space (unpaved area), however this acreage does not include landscaping that would occur along public streets and on residential development parcels.

TT-5 Sections IV.B through IV.D of the DEIR includes the analysis of traffic, air quality, and noise impacts associated with the project. Significant impacts are identified and, where feasible, mitigation measures to reduce or avoid significant impacts of the project are presented and discussed.

TT-6 See Response to Comment B-8 regarding proposed new buildings and effects on views and public access.

TT-7 See Responses to Comments I-1 and I-2.

TT-8 The comment poses a question regarding recipients of profit from the project. The comment is not related to the adequacy of the DEIR or impacts of the project under CEQA.

TT-9 See Response to Comment B-8 regarding proposed new buildings and effects on views and public access.

CHAPTER VII

Responses to Comments at the Planning Commission Public Hearing on the Draft EIR

The Planning Commission held a public hearing on the Draft EIR (DEIR) on September 28, 2005. The following is the transcript of the public hearing, followed by the responses to each comment. Responses provided in this section specifically focus on statements that pertain to environmental topics under CEQA and the adequacy of the analysis in the DEIR. Statements regarding the project are identified and responded to as appropriate.

Comments relevant to the DEIR start on page 16 of the transcript.

OAK TO NINTH AVENUE PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT
PUBLIC COMMENTS

OAKLAND, CALIFORNIA
WEDNESDAY, SEPTEMBER 28, 2005
PUBLIC COMMENTS

Reported by:
DANA M. FREED
CSR No. 10602

JOB No. 3-39119

OAK TO NINTH AVENUE PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT

Public Comments, taken at City Hall, 1 Frank Ogawa Plaza, Oakland, California, beginning at 7:16 p.m. and ending at 10:05 p.m. on Wednesday, September 28, 2005, before DANA M. FREED, Certified Shorthand Reporter No. 10602.

Oakland, California
Wednesday, September 28, 2005
7:16 p.m. - 10:05 p.m.

MR. KIMELBERG: Okay. Item number 2 is the Oak Street to Ninth Avenue Development Proposal comprised of approximately 64.2 acres bounded by Embarcadero Road to the Oakland Estuary, Fallon Street, and Tenth Avenue. Proposal includes this evening a public hearing on the Draft Environmental Impact Report to obtain comments regarding the environmental analysis related to a new mixed-use development which includes up to 3100 residential units, 200,000 square feet of ground-floor commercial space, up to 3950 parking spaces, 28.4 acres of parks to public open space, 2 renovated marinas, a total of 170 boat slips, and a wetlands restoration area.

The existing buildings on the site will be demolished with the exception of a portion of the Ninth Avenue Terminal shed building and the Jack London Aquatic Center.

Director Claudia Cappio will provide a brief overview.

MS. CAPPIO: Thank you.

Commissioners, members of the public:

Tonight is a public hearing on the Environmental Impact Report to the Oak to Ninth project. The Draft EIR was published on September 1st of this year and the comment period runs through October 24th next month.

The project studied under the EIR includes 3100 housing units, 200,000 square feet of commercial space, and approximately 29 acres of park space. It also includes the demolition of the Ninth Avenue Terminal building.

The Environmental Impact Report is part of the required development review process under both City code and the California Environmental Quality Act. The purpose of this document is informational. It provides decision-makers and the public with a very detailed analysis of the potential physical impacts of the project and ways in which those impacts can be reduced or eliminated through what we call mitigation measures. Some of the impact areas that were studied in this EIR include traffic, air quality, and the demolition of the historic Oak to Ninth building.

Once the comment period ends on October 24th, all comments that are being received during the comment period, including those received orally

1 tonight as well as those received by e-mail or letter
2 to our office in the Planning Department, will be
3 responded to and they will be compiled and published
4 in what we call a Final Environmental Impact Report.
5 Along with the comments and the response to comments
6 will also be revisions, corrections, or clarifications
7 that were deemed necessary in the draft document.
8 The comments that are made tonight would be
9 most useful to the City and to the Planning Commission
10 if they pertained directly to the Draft Environmental
11 Impact Report now before the City. These can be
12 comments like: Is it adequate; does it cover all
13 impacts; is it a complete analysis of the major
14 environmental issues that have been addressed; and
15 have the measures to respond to those mitigations or
16 those impacts been adequately described in the report?
17 Comments about the project itself at this
18 point will be noted, but there will be future hearings
19 where the opportunity to fully comment on the project
20 as it evolves from this point will be incorporated
21 into the public review process. These include
22 comments about the design, the massive bulk of the
23 project, the open space configuration, or other
24 aspects.
25 The staff report does contain a brief

1 explanation of the issues about the project which have
2 been identified to date and these have been included
3 as a beginning point. It is meant as an opportunity
4 to review that list as well as to make sure that
5 the Planning Commission has an opportunity to add to
6 it.
7 With that, I conclude my remarks and I'd be
8 glad to address any questions. Thank you.
9 CHAIR JANG: Do we have any questions from
10 commissioners at this point? None?
11 I actually want to make sure that those that
12 wish to speak fill out a speaker card. They're still
13 available at the front here.
14 And if you're speaking as an a group,
15 I'd like to have those people identified. Those
16 groups that want to speak together, so that, you know,
17 the cards don't get separated. I know that there's
18 one group that will speak as a group, so I know that
19 there's one.
20 With that, I'd like to have the applicant
21 come to the podium and make a presentation.
22 MR. GHIELMETTI: Mr. Chair, members of the
23 commission. I'm Mike Ghielmetti with Signature
24 Property and Oakland Harbor Partners. Oakland Harbor
25 Partners is a joint venture between Signature

1 Properties and Brown to Brown, two local developers
2 that specialize in housing and mixed use and in fill
3 opportunities in general. So it's an honor to be here
4 tonight and talk a little bit about our Oak to Ninth
5 project.
6 This is my first time actually using a
7 PowerPoint presentation, so bear with me a little bit.
8 I thought it would be helpful to go through
9 a little bit of the history before we talk about our
10 current project proposal. We have been working on
11 this project for a little over four years. The
12 Port of Oakland issued a request for qualifications
13 in the spring of 2001. We were one team that
14 submitted a response and competed against another
15 team. And we were awarded the right to negotiate with
16 the Port.
17 In November of 2003, we executed an Option
18 and Purchase Sale Agreement with the Port of Oakland
19 to acquire this property. From day one, we envisioned
20 this property to be, well, unique obviously because of
21 its waterfront setting, but we envisioned it to be
22 a new neighborhood in the City of Oakland.
23 And forgive me. I didn't bring copies for
24 the commissioners tonight. But for the general
25 public, this is the Nimitz Freeway. You have the

1 Union Pacific rail yards, you have BART maintenance
2 yard, BART tracks, East Eighth, and Embarcadero
3 that separate this project from the rest of Oakland.
4 Our job, we thought, was to help reunite it
5 basically with the City of Oakland. It's challenging,
6 because there's only a couple of access points that
7 are achievable there. Fifth Avenue along here and
8 then future access along the Lake Merritt channel.
9 The plan has evolved quite a bit in the last
10 four years. Our original plan -- well, actually,
11 maybe I'll show a little bit more of what it looks
12 like now. This is what the site currently looks like.
13 These shots were taken within the last basically
14 12 months. It is, for the most part, in a fairly
15 rundown state. The shoreline needs to be improved,
16 there's contamination on the site, there's garbage
17 on the site and most of the buildings are in pretty
18 poor condition.
19 To give some close-ups: This is existing
20 shoreline conditions on some of the existing
21 buildings. This was one of the first site plans that
22 we submitted to the Port. Yellow areas designate
23 residential. Orange and red areas designating retail.
24 And obviously, green designating open space. You can
25 see how it evolves. This plan was circa, what, 2002,

1 towards the ends of 2002.
2 This plan showed about 15 or 18 acres,
3 I'm fairly certain, of open space, wider footprints,
4 lower buildings. And in this particular project,
5 we envisioned that we would need a City subsidy and
6 said publicly that we thought we would.
7 This is the project a year later. We went
8 through many iterations, we have met with dozens of
9 community groups. Actually close to 100. And
10 hundreds if not thousands of people over the four
11 years trying to get people's input.
12 This project is certainly not a perfect
13 project nor will it meet the goals of some people.
14 We think that we're drafting a project that's going
15 to meet the broadest goals of the broadest number of
16 people. This plan shows 27 acres of open space.
17 That really hasn't changed. We've just refined it.
18 We now have areas here, these areas just for a sense
19 of scale, that's wider than the Marina Green
20 in San Francisco. It is about 9 acres. Actually,
21 it's a little bit more acreage than the Marina Green.
22 It's similar to some of the waterfront parks like
23 Riverfront along the Willamette River in Portland.
24 Harbor Green in Vancouver. Similar in width to
25 Embarcadero Pacific Park in San Diego. So these are

1 substantive parks. This is, like I said, about
2 9 acres. This is a 5-and-a-half acre park, this is
3 a 7-acre park. These are big spaces.
4 And we intend to fill them with active and
5 passive uses: dog parks, bocce ball courts, children's
6 parks, community center. And other types of uses
7 that will draw people down to the water.
8 All of the areas are separated by, most of
9 the open space areas are separated by a roadway.
10 We think that due to the fact that they're separated
11 by roadways, due to the fact that they're wide,
12 usable, accessible spaces that they will generate
13 a tremendous amount of use.
14 The Jack London Aquatic Center is also shown
15 here. We intend to enhance their facilities by
16 allowing them to grow into some of our space, so that
17 they can continue to serve youth in Oakland.
18 Residential development here basically pays
19 for all this. We are not looking for any subsidies.
20 We are looking to install this 27 acres, 28 acres,
21 I think, of open space on, at the development's
22 expense to maintain it at the development's expense
23 and yet have it be owned and run by a public entity
24 more than likely the City of Oakland. It's still
25 being determined whether it's the Port or the City.

1 Other things. So we have 3100 residential
2 units here. All the streets are public. There are
3 no gates. They all have wide sidewalks, very
4 accessible urban design. Street trees, wide
5 sidewalks. Buildings range in size generally from in
6 and around eight stories. But on exact locations,
7 one here, one here, one here, and one here up to 24
8 stories. We feel that that height and that density
9 and that critical mass is what's going to bring this
10 area to life and revitalize it, because it's fairly
11 well isolated.
12 We're also showing close to 200 marina slips
13 that right now some of them are not in the best shape,
14 so we want to revitalize that marina. Again, bring
15 people to and from this area, even from the water.
16 So that's important to consider. We think this
17 residential will activate these spaces.
18 The parks that don't have anything nearby
19 them generally fall into a state of disrepair. You
20 get bad elements and start loitering in those parks
21 because there is no one there watching them. And this
22 project we feel there will be people watching these
23 parks and they'll be active and vibrant places for
24 families from all over Oakland to use.
25 This is a little bit of a focus on the park.

1 We will have a Bay trail across the approximately
2 1-and-a-half, little less than 1-and-a-half miles of
3 shoreline there. Separate bike and pedestrian trails
4 and bike and pedestrian trails along the frontage and
5 Embarcadero.
6 This is showing some of the view quarters.
7 Now, this is an area that has been controversial,
8 quite frankly, because not in all circumstances
9 it's not visible straight through. But there's kind
10 of a dual purpose for that, because don't forget that
11 the freeway is here and when people are out enjoying
12 the park we didn't want them necessarily to smell,
13 hear, and experience the freeway, we wanted them to be
14 able to experience the water and basically be able to
15 turn in the other direction.
16 There are wide view corridors throughout
17 this area and there are view corridors once you get
18 into the project so that when you're out here you're
19 really not experiencing the experiences of the
20 underbelly of the freeway.
21 This is a little bit of a ground section.
22 The areas in pink we envision to be kind of our retail
23 areas. Certainly around the harbor here and certainly
24 down, for lack of a better term, kind of a main
25 street. It's configured like a Lakeshore or something

like that with diagonal parking on either side. Ground-floor retail on either side and ground-floor retail all along the Brooklyn Basin there.

This could be visitor-serving uses so people can come down and have, enjoy a restaurant or cafe or a bike shop or a kayak shop.

It could be neighborhood-serving uses as well: Your dry cleaners, your shoe repair, those type. Grocery store, et cetera, we envision to be there.

This is an example of some of the park-type configurations we envision. This is Tom McCall Park in Portland which is written up in Fudor's as a destination. It's almost identical configuration to some of our parks. This is that same park with the blues festival. I was just up there last week and they were setting up for. So these are spaces that can accommodate large amounts of people if that's what the public wants to use them for. They will be public spaces.

This is what we envision to be our Bay Trail section. So you have a section for pedestrians, a section for bikes, and large open spaces nearby those. This is Harbor Green in Vancouver. This is our idea for a children's, this is a children's

water park and mom and dad could relax with a cup of coffee or whatnot above or sit and watch their kids from the side. This is Marina Green in San Francisco and you can tell by the length of the shorts it was taken some time ago, and by the hairstyles.

But these are the types of spaces we have in mind. These are not small, inaccessible spaces. These are not private spaces. These are very public and it's basically some of the density that's helping make this happen.

We think this is a smart growth project. We envision retail corridors, all the streets are going to have, they'll be active streets. We're going to have awnings, we're going to have street trees, nice sidewalks, and we want to make these streets come alive with a good urban center.

Dynamic residential district: Buildings with various heights and buildings that enter off the street, so you have kind of old fashioned walk-ups so you can sit out in front. You can, you know, go next door and visit your neighbor on the street with, you know, flowers and street trees and those types of goods urban designs in there.

Smart growth: This is near jobs, this is near density. This is what my industry has been

encouraged to do for the last 5 to 10 to 15 years. Instead of continuing to build out in the suburbs to come in to in-fill areas and build smart growth that we can take people away from dependencies on cars and get them to walk around their neighborhoods a little bit more. These are taken from Portland, Vancouver, San Diego, and other locales.

And again, living on the waterfront, let's not forget these big parks that we have in mind. This is probably a little bit taller than we have in mind, a majority of our project. For example, our 24-story tower is very similar to The Essex on Lake Merritt. I think that is 22. So it's very very similar. These are not going to be big concrete blocks that were built 40 or 50 years ago. These are going to be elegant new high-rises in a select area and primarily mid-rises.

So I think that's basically it. I wanted to give you a sense of the design. We're here to listen. The City prepared an Environmental Impact Report showing potential impact this project has, showing alternatives for your and the City Council's consideration. And we would love to entertain any questions you may have.

MR. JANG: Okay. Thank you, Mr. Ghielmetti.

Do we have any questions from the commissioners?

Commissioner Lighty.

COMMISSIONER LIGHTY: Mr. Ghielmetti.

MR. GHIELMETTI: How are you?

COMMISSIONER LIGHTY: I read this article in the Montclarion recently where you said that the Estuary Policy Plan doesn't work. And in your presentation I was hoping you would elaborate on that. Since you didn't, I wanted you to have the opportunity to do that. Because I was on the commission that adopted that plan, so I have some personal interest in your view on that. PH-1

MR. GHIELMETTI: I appreciate that.

The Estuary Policy Plan, first off, I don't know that it considered some of the economic implications. For instance, I don't know that, it wasn't known what the extent of the contamination on this site was, or the cost to clean it; it didn't contemplate whether the infrastructure served on the site was adequate and it didn't contemplate some of the access issues. We want transit, for instance, to work. Transit needs a massive subsidy unless you can get enough density onto this site so that it doesn't come out of taxpayer dollars to serve it.

And because of the clean up, the infrastructure, and needing to pay basically the Port a fair market value for this property so that they could reinvest it in their mission which is airport and seaport. It's an incredibly expensive project to undertake.

That coupled with let's talk about the operations and use. The Estuary Policy Plan was a very low, low intensity development. There's nothing wrong with that in and of itself, but it's an isolated area. And in my opinion, it wouldn't have generated the activity that would have made these parks come to life.

I know there are people out there you'll hear from tonight that disagree with me on that and that's fine. But our opinion and our land planners and people on our team, our opinion is that that never would have been a very viable -- it would have been more like Middle Harbor Park, quite frankly, which is a beautiful park that is in the middle of a bustling port operation. It's not very much, it's not used very much, except for select festivals where people go and congregate there.

But on a daily basis you don't see lots of people there. Not like the parks we've been visiting

PH-1 (cont.)

in San Francisco, San Diego, Portland, and Vancouver. There are strollers, there are bikers, rollerbladers, people everywhere. And that's the type of life we want to see there.

You know, the use that is contemplated in this Estuary Plan is a convention center. Well, the Henry J. Kaiser Convention Center, if I'm not mistaken, was just shuttered because it was an operational deficit. And low-intensity hotels out there. Do we want to see Motel 6s out here? Because you're not going to get hotels I think in that location that isolated that are going to do the City proud.

So for those reasons and more, those are the basic premise behind us not agreeing with the configuration or use of the Estuary Plan.

COMMISSIONER LIGHTY: Thank you.

MR. JANG: Any further questions from commissioners?

I believe there aren't any at this time, but there may be others.

MR. GHIELMETTI: We'll sit and take our medicine.

CHAIR JANG: Okay.

MR. GHIELMETTI: Thanks.

CHAIR JANG: Let's have our first round of public speakers. I believe Oak to Ninth Coalition is coming as a group.

MR. KIMELBERG: That's correct. I have 19 speakers associated with that group, so...

CHAIR JANG: Okay. If they could organize themselves so that basically they could come up to the podium very quickly.

MR. KIMELBERG: I'll call the first five speakers.

CHAIR JANG: Okay. Why don't you read off all the names, because I believe they have a set order that they wish to speak?

MR. KIMELBERG: They do, yeah. Okay.

First speaker is Leonor Godinez followed by Andy Nelson, Muang Saechao, Chhoeuth Prak, the last two of which have translators. Antonio Varraz, Quan Tut with a translator, Gloria Lomeli with a translator, Disheng Huang with a translator, Mimi Ho, Andre Spearman, Jennifer Lin, and then David Cocashida [phonetic sp]. Jennifer Lin -- that's a repeat -- Virginia (inaudible) and Rob Smith.

CHAIR JANG: And I believe that we had negotiated 34 minutes. 34?

MR. KIMELBERG: 34 minutes.

CHAIR JANG: Set it for 34 minutes, right. Okay. Any time you're ready.

MS. GODINEZ: Thank you.

My name is Leonor Godinez. I'm a member of St. Anthony's Catholic Church and a leader in the Oakland Community Organizations. I'm a lifelong resident of Oakland. I live about a mile from the Oak to Ninth site and I'm a member of the Oak to Ninth Community Benefits Coalition. PH-2

Tonight the Coalition would like to share with you a little bit about who we are, the makeup of our members, the makeup of our Coalition, and what we are proposing for the Oak to Ninth site.

Last year residents, community leaders, and community-based organizations came together to talk about what might be possible for Oak to Ninth. We developed a process to gather input from our neighbors, churches, families, and community leaders, in order to hear and see what the community's vision would be for the project. We formed the Coalition that's here before you tonight. It's the Oak to Ninth Community Benefits Coalition.

The Coalition is co-coordinated by the Urban Strategies Council and APEN, Asian Pacific Environmental Network. The Coalition is made up of

16 organizations representing various faces and phases from the entire City of Oakland. We are spearheaded by leaders and families from our four resident-based organizations. They are APEN, the Asian Pacific Environmental Network, EBAYC, the East Bay Asian Youth Center, OCC, Oakland Coalition of Congregations, and OCO, Oakland Community Organizations.

At this time I'd like to ask the members of this coalition that are present here this evening to please stand up. PH-2 (cont.)

Thank you.

Before turning this over to Andy Nelson with Urban Strategies Council who will give you the details of our proposal, I'd like to add that our coalition is not anti-development. We simply believe that new housing developments in the City of Oakland can and should benefit the community that they're being built in. We believe new developments can benefit the community and at the same time be profitable for the developer.

Thank you very much.

CHAIR JANG: Thank you. I'd like to ask the audience to refrain from clapping after every speaker, so please.

MR. NELSON: Thank you. I'm Andy Nelson,

cochair of the Community Benefits Coalition along with Jenny Lin from Asian Pacific Environmental Network.

I want to start by building on something that Leanor said, which is simply that any projects of this size will have significant impacts of various types -- it's unavoidable -- environmental, physical, and social.

In our view, if there's impacts that out to be acceptable tradeoffs. This project needs to create significant opportunities and provide real benefits for existing Oakland residents. Oakland is undergoing a rapid change in growth and yes, we need new development. But we need to make sure that this development provides opportunities for Oakland PH-3 current residents as well.

Front page of today's Chronicle tells us a Bay Area family of four must make over $55,000 a year just to get by. Families in the Eastlake/lower San Antonio/Chinatown neighborhoods make around $30,000 a year on average. The main reasons, according to the article, for growing income inequality of the Bay Area, guess what? The high cost of housing and the lack of good paying job opportunities for people without a college degree. No surprise to our members who asked us to craft a

proposal that would address just these issues.

So let me briefly outline our proposal, which calls for 25 percent of the housing to be created by this development to be affordable to families making less than $50,000 a year. For most of these to be 3- and 4-bedroom units for working families. 100 percent of the new apprenticeship for the project construction jobs to be Oakland residents so that career opportunities are created for Oakland. Funding for a multilingual construction jobs training program so that all Oakland's residents can have access to these opportunities. Such a program does not yet exist among Oakland's otherwise stellar group of PH-3 (cont.) construction job training providers. And finally, the application of Oakland's living-wage law to retail and maintenance jobs created by this project.

In closing, let me say that our members' interest in housing and jobs are driving our thinking as we develop this proposal and our proposal represents one way to accomplish our goals. We want to say clearly we're open to hearing other ways to create real, meaningful and significant housing, employment, and other opportunities for our members. And we will work with everyone, public officials, members of the public, and the project sponsors to

accomplish these goals.

Let me now turn it over to our residents to speak to you this evening.

MS. SAECHAO: Hello, everyone. I am come from EBAYC. My name is Muang Saechao. I came from America in 1987 as I live here from Laos. But now I am a U.S. citizen and I vote. I am here to share with you the concerns that I have in the community.

My friends and relatives are moving out of Oakland because they couldn't afford to buy a home in Oakland. In the last four years 26 families have moved to Sacramento and 43 families have moved to either Redding, Mountain View, Stockton, and PH-4 Fairfield. 19 families including myself, bought our first home in Sacramento, Redding, and Mountain View, and work here in Oakland. If Oakland had affordable housing, my family wouldn't have to purchase homes elsewhere.

Oakland citizens need your leadership to fight for affordable housing so we all can stay in Oakland.

Thank you.

MS. MAE: Hi. My name's Chandu Mae and I'll be speaking on behalf of the parents from East Bay Youth Center named Chipra. PH-5

Chipra is 47-years-old and he's receiving SSI because of his health problem and he cannot work. He is interested in affordable housing because he cannot afford regular rent because of the high housing cost. He believes that there should be affordable housing for low-income people like himself.

Right now he's living from one place to another and it's hard for him. He don't have a place that he can call his home. PH-5 (cont.)

So please understand his situation and others that are like himself to support affordable housing.

Thank you.

MR. VORRUZ: Good evening. My name is Antonio Varruz. I live with my family and four children. I have lived in Oakland for the last three years. I work every day, but I work from job to job, I have worked in restaurants, I have done plumbing, I have done electrical work. I have worked as a gardener, I have worked in -- my jobs are never stable and my wages are always are very low. I barely have health benefits for myself, for my family.

I want to stay in Oakland, I want my children to grow up here in Oakland. The Oak to Ninth project is a big opportunity for my family and for many other families in Oakland. Hundreds of construction jobs

will be created by the Oak to Ninth project. These jobs should go to Oakland residents. This way hard-working Oakland people like me can learn a trade and make a good living for families. PH-6

We want you to support Oakland by making sure Oakland residents get those hundreds of jobs created by the Oak to Ninth project.

Thank you.

(Mr. Tut first says his speach in his own language, followed by the translator in English.)

INTERPRETER: This is the translation of Mr. Quan's testimony: My name is Quan Tut. I'm a parent of the East Bay Asian Youth Center. I'm a recent immigrant from Vietnam. I came to Oakland in 2004 and currently live at 1450 13th Avenue, Oakland, California. I live in this house with three other families who are also recent immigrants like me. Our family immigrant status prevent us from applying or receiving for public benefits. PH-7

Due to this reason, all of us have to work at any job that we can find to maintain our basic living necessity such as food, rent, and clothing. In Vietnam I'm an accomplished construction worker and carpenter. When I came to United States I want to continue working in this field because it is the kind

of job I can do well. However, I face many disappointment in my job search, even though I work hard and have the experience, most construction job I could find are temporary and will provide no benefits. Currently I work for a private construction business that pays me $8.00 an hour. While I'm working on the project I work from 7:00 to 9:00 p.m. every day. When the work is done, I will be unemployed until the next project comes around PH-7 (cont.)

In the meantime, my wife works in a restaurant and faces a similar situation in terms of her job stability. Most of the time I don't make enough money to support our family. I dream of having a stable job in the construction field so that that will also provide health benefit for me and my family. I'm in good health and I'm willing to work to have a better life in America.

I think the Oak to Ninth project can provide me with sustainable job training and job placement in the construction field and help me fulfill my dream.

MS. LOMELI: Good evening.

My name is Gloria Lomeli. I live on 27th Avenue. I have been living in Oakland at this same address for the past 11 years. I'm also a leader in OCO and I'm working with the St. Anthony's Parish.

I'm participating in this particular meeting because I'm worried about the impact this project will have on housing. PH-8

For example, the conditions in my apartment are very bad, but I have to stay there because the rents are high in any other places. Therefore, it's important for the City to create opportunities for housing in this project for families of low income such as my own and other families in the same situation. We want to have opportunities for housing in this project. It's important for my family to have appropriate and dignified housing with accessible, affordable prices. If this project can help families or people of other income and social levels, it will be good for the City.

(Mr. Huang first says his speach in his own language, followed by the translator in English.)

MR. HUANG: Ladies and gentlemen, good evening. PH-9

My name is Disheng Huang. I am a leader of the Power of Asian Organizing. Power is based in Oakland and we have over 300 members and quite a lot our senior members. All Power members young and senior are very involved in fighting for more affordable housing, for we have had a lack of

1 affordable housing in Oakland.
2 Whenever public housing is made available,
3 there are long waiting lines. Our members are expert
4 of waiting in those lines. Use me as an example.
5 I have lived in Oakland for over nine years and
6 applied for affordable housing five times. Now, five
7 of us are still squeezing in a 2-bedroom unit. I was
8 qualified for the first place several times and even
9 pay more than $100 for credit check, but the result is
10 endless waiting for there were not enough unit PH-9
11 available. (cont.)
12 Senior apartments are needed in Oakland as
13 well. Someone of our members Mrs. Wong, who is now
14 70 years old, live with her seven family members in
15 one-bedroom apartment in Oakland in Chinatown for over
16 seven years. She had applied for senior housing four
17 to five times. Finally, she get a senior apartment
18 unit in East Oakland last year.
19 I'm 60 years old now and I have been fighting
20 for more affordable housing with Power for three
21 years. I don't want to be like Mrs. Wong who needs to
22 wait until 70 to get an affordable housing. That is
23 why Oak to Ninth project is so important to us. It is
24 the largest project to provide more affordable housing
25 and help to solve Oakland's housing prices.

1 Thank you.
2 REVEREND HOPKINS: Good evening.
3 My name is Reverend Jim Hopkins. Since 1989,
4 I have been the pastor at Lakeshore Avenue Baptist
5 Church, corner of Lakeshore and Mandana, in Oakland.
6 Not that far from the planned development. I am also
7 a leader in the Oakland Coalition of Congregations,
8 a member of the Oak to Ninth Coalition.
9 I want to thank the planning commissioner for
10 your work, for your work involves not only the
11 implementation of law, the implementation of policy,
12 the implementation of regulations, but in many ways
13 your work is about the implementation of opportunity.
14 Your work is the implementation of justice and your
15 work is the implementation of hope.
16 You see that the Coalition that we gather and
17 represent this evening is a very diverse congregation,
18 coalition. It's a coalition that bridges language,
19 it's a coalition that bridges cultures, it's PH-10
20 a coalition that bridges neighborhoods, it's
21 a coalition that bridges agencies, it's a coalition
22 that bridges fates.
23 For instance, representatives of the
24 religious community that are here or were here or are
25 in some way supportive of the Oak to Ninth Community

1 Benefit Agreements are Reverend Brandon Reeves from
2 Center of Hope; Elder Farrell from the Church of God
3 in Christ; Willie Johnson from the Elmhurst
4 Seventh Day Adventist Church; Wanda Shannon from the
5 Faith Presbyterian Church; Reverend Ama Zenya
6 [phonetic sp] from First Congregational Church;
7 Shakir Zayid [phonetic sp] from Millenium
8 International Ministries; Reverend Louis Mueller,
9 Plymouth United Church of Christ; Reverend Jesus
10 Nieto, St. Anthony's Church; Reverend Jason Lendeza
11 [phonetic sp], St. Columba's Church; and Rabbi Steven
12 Chester, Temple Sinai. Also supportive, Reverend
13 Cheryl Elliott from Allen Temple Baptist Church;
14 Reverend Lubial Bally [phonetic sp], Bethleham
15 Lutheran Church; Reverend Mark Clifton, East Oakland
16 Church of God in Christ; Reverend Kathy Huff,
17 First Unitarian Church; the Islamic Cultural Center;
18 Reverend Kristina Williams from St. Augustine's
19 Episcopal; Reverend Scott Dim [phonetic sp],
20 St. John's Episcopal; Reverend Ron Swisher, Taylor
21 Memorial United Methodist Church. PH-10
22 We say yes to the idea of the Oak to Ninth (cont.)
23 development with, but we say that yes with a lower
24 case y, a small y. We say yes to the Oak to Ninth
25 development with a community benefits agreement,

1 with a capital Y, with a large Y, an emphatic Y.
2 For a Community Belt Benefits Agreement takes certain
3 things that are necessities. Those necessities being
4 adequate housing, opportunities to good paying jobs,
5 access to natural beauty, these are necessities of
6 life. A Community Benefits Agreement says these are
7 not only necessities, these are human rights and
8 we stand as a coalition in support of these rights
9 this evening.
10 Please hear us. A small y yes to the
11 development, a large Y yes to the Community Benefits
12 Agreement.
13 Thank you.
14 MR. SPEARMAN: Good evening.
15 My name is Andre Spearman and I'm a member of
16 SEIU Local 790, a long-term resident of Oakland; and
17 I come in support of the coalition to reach
18 a Community Benefit Agreement. PH-11
19 As we look at the use of land, particularly
20 public land, it requires us to think beyond instant
21 gratification. It requires that we sit down and think
22 about what will the long-term impact be of the
23 project. And as we look at the proposals that are
24 presented to you today, they present both challenge
25 and opportunity.

Challenge because it's such a large project and there will be many subsidies, I'm sure, from the Board or the City to make it happen.

Opportunities if the developers and the community would come together and realize their dreams of providing an opportunity to change the development of Oakland to impact the community and provide jobs that would be sustainable.

The ability to live in Oakland has risen beyond most people's ability to afford it. Current living-wage ordinance we should probably change it to just-getting-by ordinance, because $9 an hour will not really give you an opportunity to live in Oakland, you would just be getting by. But that is the foundation in which the living-wage ordinance exists, which is Port property or the City property; and so the question will be: Will this project adhere to the living-wage ordinance.

In Oakland the residents of Oakland pass a living-wage ordinance to address the issues of the lack of sustainable economics. Healthcare is rising, the cost to live in Oakland is rising, poverty is rising. And yet development that does not include a living-wage ordinance, good paying jobs, sustainable community does not benefit the community. As a matter

PH-11 cont.)

of fact, it exacerbates the problems.

And I'm quite sure, as you sit here today, as you look at land-use policy that your model is to improve the community not to exacerbate the problems.

I'm encouraged also that the developers in the Coalition brought forth some meaningful ideas meaning that they can sit down together to dialogue about the problems, about the challenges and come together with a proposal that everyone can walk away with feeling excited about it and supportive.

Again, we are not anti-development; we're about smart development. And these ideas are both smart and responsive and this proposal, the Community Benefits Agreements both an opportunity and also a challenge; and will we meet those challenges here in Oakland?

And I want to close with this thought:

When we use the public land, will it be to the benefit of a select few in the community, or will it benefit the whole community. That is the question before us as we look at this proposal.

I submit to you today but I'm excited that this development will address both long-term economics and also the ability to maintain a visual waterfront that everyone can be excited about.

The developers put forth a beautiful proposal. I think it is beautiful, but it needs an opportunity for folks to come together in dialogue. And so we want to be part of that dialogue and we're excited about that.

And will the Planning Commission play a role in facilitating those negotiations? That is the key question: Will they participate? I'm hoping that you will.

PH-11 (cont.)

Again, I've lived here for 23 years. I'm excited that something is being done, but we don't want change for change's sake. We want the change to be responsible, to not exacerbate the problems, and to provide long-term economic opportunity for our residents and our newly immigrant population. So there's a holistic approach to be able to afford and live in the community for long-term should we choose to stay here. And the majority of the people here are excited about Oakland and that's why they're here.

And I thank you for your time.

MS. LIN: Hi, my name is Jennifer Lin. I'm with the Asian Pacific Environmental Network and I'm one of the co-coordinators of the Oak to Ninth Benefits Coalition and it's my job to close out our chunk of speakers.

Tonight you've heard directly from residents from the surrounding communities some who live a mile or two away from the planned development and also people from across our beloved city. You've heard from folks in multiple languages, people who are testifying for the very first time here at the City Hall. You've heard the day-to-day things that families and residents deal with: Long lines for affordable housing, the desire and need to get a foot in the door on construction jobs that pay well and help provide family support, employments, and benefits.

PH-12

These are the issues that families and communities across Oakland face. These are the issues that have been the driving force for the Oak to Ninth Community Benefits Coalition and its residents. These are the issues that are just as important as those traditionally highlighted through the Draft Environmental Impact Report process.

We are here tonight not just to highlight the need and expose the poor conditions of housing and jobs that many of us are all too familiar with, but to present a feasible plan. We feel that can work for the public officials, for the developer, and for all of Oakland.

This is, this really is a once-in-a-lifetime opportunity and we look forward to working with you, with Signature Properties, with folks from across Oakland, to make this a development that we can truly all be proud of. PH-12 (cont.)

Thank you for your time.

UNIDENTIFIED SPEAKER: We have one more speaker who would like to speak as part of our presentation. Thanks.

(Ms. Kuan first says her speach in her own language, followed by the translator in English.)

MS. KUAN: Ladies and gentlemen, good evening. My name is Sau Chun Kuan. I'm a home care worker and a member of the SEIU Local 616. Today I speak on behalf of my union that we support Oak to Ninth Community Benefit Coalitions Proposal.

I hope that this development proposal will give us affordable housing and job opportunities. There are over 10,000 members with the SEIU Local 616 and over 1,000 of Chinese-American members. Our members get only 9 to $15 per hour and we have limited work hours. Each day we can only work 3 or 4 hours. For me, my husband, three members and our annual household income is only $20,000. It is impossible to find another job due to the work hours. PH-13

For those lower income worker like us, we work hard to make the ends meet. We could not possibly afford those expensive condo being built in the City of Oakland.

We hope that the Oak to Ninth development can bring affordable housing and job opportunities for all Oakland residents.

Thank you for your support.

CHAIR JANG: Just to make sure that we have the public report straight. Do would have a speaker card for that last?

MR. KIMELBERG: Yes, we do. Yes.

CHAIR JANG: I'd like to thank you. Thank the Oak to Ninth organization for a very well-organized presentation.

Do we need a break at this point? Anybody? No.

So how many public speaker cards do we have left?

MR. KIMELBERG: We have approximately 25. 20, 25. I haven't counted them.

CHAIR JANG: Okay. Let's just take the next five.

MR. KIMELBERG: Next five?

CHAIR JANG: Yeah.

MR. KIMELBERG: Okay. Next five speakers. First Teresita Cruz, Iliana DeLa Torres, Rod Divelbiss, Doug Block, and Lora Yatour [phonetic sp).

CHAIR JANG: You can come up in any order once you hear your name called.

MS. TORRES: Okay. Good evening.

My name is Iliana DeLa Torres. I am a teacher at Roosevelt Middle School and I'm also a former long-term resident of the San Antonio area in Oakland. I lived in the same area where I teach and I was basically forced to move out because the conditions of my apartment were deteriorating and the landlord did not want to invest any money in repairing. And I looked and looked and looked and I couldn't find affordable housing in the area. And had to move away quite a bit further. PH-14

I believe it was important for me to share my residence with the same students that I teach. I believe that because research shows that teaching and being part of the same community that you teach in results in actually increased participation from the students feeling better identified with you and you with them, better understanding their idiosyncrasies. And if I as a teacher could no longer

afford to live in this area, I wonder how does that impact my students' families? And I see that it definitely has had an impact in enrollment in the Oakland School District the way rents are going.

Therefore, I want to say that I'm very excited about the opportunity that the Oak to Ninth project presents for us to, or for this project to provide affordable housing, not to mention jobs, and to have a positive impact on our community.

Thank you.

MR. DIVELBISS: Good evening.

My name is Rod Divelbiss. I have the privilege of living in Oakland and I also work in Oakland. My business is across the Plaza in the Rotunda building. PH-15

I think we could all agree that that is a building we can walk over and say we did it right. You look in that building and it is one of the nicest buildings in Oakland, in the Bay Area, in the state. And I want to commend Ghielmetti. I've looked at his projects and I think that project is similar. It's a project where it appears that he's got it right. That it is going to be a project that as a member of Oakland we can be proud of.

And I'll briefly try and address what

Ms. Cappio indicated to try to address our comments to the Draft EIR.

First with respect to housing, my comment is very brief. The fact that 3-, over 3,000 housing units would come online can do nothing but relieve the pressure on housing prices. The fact remains that housing prices are high because there's a limited supply and this addresses, albeit somewhat in a small way, but it does address that issue. PH-15 (cont.)

Secondly, with respect to traffic, that was addressed in the Draft EIR. Certainly there is going to be some traffic issues coming and going from the project. However, there's no question that there's going to be growth in the State, there's going to be growth in this County, there's going to be growth in this City and I don't think again there's any dispute that the way to address that is to have high-density housing around jobs. And again, I believe that is exactly what this project does.

And again, as a member of and resident of Oakland and as an owner of a business in Oakland I would again commend Mr. Ghielmetti and urge that this project move forward.

Thank you very much.

MS. CRUZ: Mr. Chairman, members of the

Planning Committee:

My name is Teresita Cruz. I am vice-president of SEIU Local 247 security officers union. We represent over 5,000 private security officers in the Bay Area. I have been a resident of Oakland since 1957. Before I was elected vice president, I was a security officer right across the street at City Center. PH-16

As a single parent, I struggled for years trying to raise my family only watching the cost of living rise to what it is today. I had to pull my son out of Bishop O'Dowd in the 11th grade after so many years of robbing Peter to pay Paul, I just couldn't afford it anymore. In California workers live in families whose incomes remain under the federal poverty standards. I am one of those million, 2 million workers better known as the working poor. I attend Mass every Sunday, I work five to six days a week, I vote, I pay my taxes, I follow the rules. I cannot afford to live in this project that we are talking about tonight.

I am happy that this development is under a project labor agreement with prevailing wages. I just ask when it's all said and done, what will my security officers, will they have a prevailing

wage. I ask that the planning commission consider union security officers to protect these buildings and the tenants. Union security officers that are protected under a master agreement with health care and benefits. PH-16 (cont.)

I ask you to look around at the diversity of the members of the people here and don't forget the diversity that made the City what it is and don't forget the Oakland residents with affordable housing.

Thank you for your time.

MR. BLOCH: Good evening.

My name's Doug Block. I'm with SEIU's Property Services Division which include SEIU Local 1877 and 247. Janitors and security officers low-wage workers. I also live down on East 7th Street right near the estuary and for the last few years I have watched the neighborhood changing.

When the new lofts down the street were built my wife and I went down to take a look and I'll be the first to admit they are beautiful. Really, really beautiful housing. The -- and we thought when we walked in there we said everybody in Oakland should be able to live in housing like this; but they can't and we can't. Working people can't afford that housing. The housing that's built here needs to be

affordable to people that live in the flatlands. PH-17

The other thing I want to address is the issue of union jobs. I understand that union labor is going to be used to build this project and of course I think that's great. But I have the same question as my sister here, what about the security officers who are going to guard the construction sites while it's being built and what about the janitors who clean it after it's done? This should be 100-percent union labor on the project and nothing less.

Of course, we favor this project, but we stand in support of the Coalition and its demands tonight.

Thank you for your time and consideration.

MS. YEE: Hi there. My name is Susan Yee and David Cocashida has ceded his time to me.

So again, my name is Susan and I am a teacher at Roosevelt, or I was a teacher at Roosevelt for the last seven years and I just recently took over as the director for the Roosevelt Health Center. That's Roosevelt Middle School. And you may wonder why a teacher and a health director would be speaking about the, here in support of the Oak to Ninth Community Benefits Agreement. PH-18

And I'm going to ask you to think about

way back when you were 13 years old, maybe not way, way back, but way back to when you were 13 years old and in middle school and what it was like to go to middle school and imagine what it would be like if you are a 13-year-old student who walked in in the middle of the year possibly the third school that you were in for that year and trying to learn algebra. It's a nearly impossible situation for any of you who remember that kind of, that kind of, that era in your life. PH-18 (cont.)

They are already going through so much stuff. And we really have at the school and at the Health Center seen the impact of the rising costs of affordable housing, the rising cost of housing. So many students come through. They don't have their medical records with them, they've gone through a lot of different clinics to receive care in terms of education, they've been through, you know, a ton of teachers by the time they're just making it, you know, to middle school.

So I guess I'm here to say really that affordable housing and the jobs, all the things, the good things in the Community Benefits Agreement have a real impact on these other areas in the neighborhood in terms of healthcare and in terms of

education. And those are all the things that are really important I'm sure to every single one of us here.

So, once again, I'm here representing the health center and the school and I'm really thrilled to hear that you're thinking and considering the Community Benefits Agreement.

Thank you.

CHAIR JANG: Thank you.

Could you read five more speakers, please.

MR. KIMELBERG: Certainly. Orna Sasson, Reverend Charley Lerrigo, Naomi Schiff, Sanjiv Handa, and Ken Katz.

MS. SASSON: Hello, I'm Orna Sasson, Lakeside Apartments Neighborhood Association.

Oakland is a place of lost opportunities and this whole area could have been a park, it could have been a garden. And as we saw in the pictures, it's basically not very attractive. It's not as attractive as it should have been. And the reason for that is because we've spent our money, our, quote, redevelopment money, on some very unattractive projects instead of using it as it should have been to develop that place as park land. PH-19

Also, there's the issue of the terminal and

that is also an opportunity that has not been destroyed yet. If we cut it down, if we make it smaller, we will have something a lot less. Now, it would be very expensive to build a huge building like that today and it's really not affordable. But to use it creatively would be a real feather in our cap. And to have park land around it would be a marvelous thing. PH-19(cont.)

Now, given that the opportunity is here to have this marvelous park that we should have had and don't, we have to use it somehow. But I think as a city, we would be losing another opportunity again if we did not at least demand that the housing be affordable and available to people who actually live in our community.

So I hope that you will work more on the preservation of the Terminal Building and find a way to adaptively reuse it in a creative, wonderful way and not just compromise it by cutting it up and throwing it away like so much of Oakland gets.

And, you know, I hope that you will take that into consideration and take into consideration the needs of the community.

Thank you.

MR. LERRIGO: My name is Charles Lerrigo.

I'm a United Methodist pastor and a resident of Oakland for 17 years. I hope to live here for the rest of my life.

This is my first time to come to this commission. This is my first time to walk into this room and one of the things that I've noticed is how you're listening to all of this thing and I wish that I could see inside your hearts to know what is going on there, because you're hearing an awful lot of information.

I wish I could see inside your hearts, PH-20 because as I walked in here tonight I notice that there's a big plaque out here and it says that this room is focused on the just and equal administration of the common good. And that's very dear to my heart, because I believe in a book, the Bible, which I believe is a reliable guide to the common good. And the biblical perspective that I would like to share with you is this, that a nation, a government, and a city is judged not by how many rich people it has in it, or how well it addresses the desires of the wealthy and well off, the nation in the Bible story is judged by how well it treats what Jesus called the vistabese and you've heard those people speaking tonight. You've heard some of those people

1 speaking tonight. There are many more of them out
2 there. PH-20 (cont.)
3 And what the staff report, as I had looked
4 through it, does not seem to address adequately is
5 the issue of the inclusive housing requirements that
6 are I believe required by law. It looks like it's
7 saying we will do what is legal and perhaps what is
8 expedient or maybe reasonable. And I would like to
9 call upon you to find in your heart that place where
10 you can connects up with what would be hope. And what
11 will be not just politically right but that which is
12 just and equal.
13 I hope you do well.
14 CHAIR JANG: Commissioner McClure, did you
15 want to interject.
16 COMMISSIONER McCLURE: Yes. Mr. Lerrigo.
17 It's Mr. Lerrigo?
18 Just so you know, all of our contact
19 information is on the City website. So should you
20 want to have a conversation with one of us or me
21 personally, I'd be happy to share with you what's
22 inside here, okay?
23 MR. LERRIGO: Thank you very much.
24 MS. SCHIFF: Naomi Schiff, Oakland Heritage
25 Alliance. More than 1,000 members and recipients of

PH-21

1 this year's Preservation Award from the ever-loving
2 governor.
3 We support the EIR alternatives which
4 preserve Ninth Avenue Terminal. As far as the
5 EIR goes, it underlines it's historical status, so
6 I won't revisit that. I hope you have copies of this,
7 maybe you can take copies.
8 Other cities are doing really great reuse
9 projects on their waterfront. On this page I just
10 have a few of them. They include Arlington, Virginia;
11 Milwaukee, New York. One that's not there,
12 San Francisco and our neighbor Richmond, California.
13 We should, too. A revised Draft EIR should study
14 reuse of the terminal. I'm going to show you an
15 inexpensive architectural model that I have brought
16 that will show you how much of the terminal the
17 developer proposes to save. This loaf is about
18 the size of Ninth Avenue terminal and I didn't want
19 to bring a knife in here, because I was afraid I'd be
20 arrested by security.
21 UNIDENTIFIED SPEAKER: Thank God.
22 MS. SCHIFF: That's how much the developer
23 proposes to save. We would say that that is not
24 historic preservation, it is like saving the hood
25 ornament in attempting to imagine the Mercedes.

1 We think it would be wise to make better use of
2 our maritime history.
3 Maximize the open space that is on solid
4 land. Since after all, if you put a park on top of
5 this wharf you'll have to fix those piers anyway.
6 You're not saving anything by converting the shed to
7 park use.
8 Historically we have been barred from our
9 waterfront. This is a great opportunity.
10 Maximize affordable housing. Everyone should
11 share in a project that is based on our public land.
12 I assume that was Ron, huh?
13 MR. KIMELBERG: Two.
14 MS. SCHIFF: That wasn't two minutes.
15 CHAIR JANG: Can you -- I'll give you
16 a minute to kind of wrap it up. PH-21 (cont.)
17 MS. SCHIFF: Thank you.
18 Please study the feasibility of reusing
19 the terminal.
20 And I want to address process for one moment.
21 The exhaustive list at 325-29 demonstrates the project
22 goes against many adopted plans and policies. The
23 DEIR should be reissued with revisions that take into
24 consideration the fact that this is violating many
25 parts of the General Plan. A Specific Plan or a

1 General Plan revision should be undertaken and should
2 precede all other approvals and determinations and
3 it should accommodate a public discussion that is as
4 good as the one that brought us the Lake Merritt
5 master plan now resulting in excellent project funded
6 by the citizens supported Measure DD. We need to do
7 a Specific Plan for this area.
8 Please support the preservation of
9 Ninth Avenue Terminal. Our waterfront is our history
10 and it is the original basis for Oakland's existence.
11 Thank you.
12 If anybody needs any bread...
13 COMMISSIONER McCLURE: Did you bring any
14 sandwich meat for the bread? I didn't bring dinner.
15 MR. KATZ: My name is Ken Katz.
16 I've had the misfortune a couple of times
17 in the past of having to speak following
18 Mother Wright. This is the first time I've ever been
19 upstaged by a loaf of French bread. PH-22
20 More importantly, I feel personally
21 it's tough to come up here and talk following all
22 the people from OCO and from the Oak to Ninth
23 Coalition who spoke so eloquently about the needs for
24 affordable housing and the needs for good paying jobs.
25 But nonetheless, I think it's important to remember

1 that we want people to live in affordable housing, but
2 in a liveable city.
3 And there are a lot of problems with the
4 proposal that's on the table. The biggest of them
5 stems from the fact it does not implement the Estuary
6 Plan. The people who worked on the Estuary Plan
7 recognized that this slice of estuary land was
8 essential to the success of the City of Oakland.
9 There really isn't much open space available
10 facing the estuary. This space had tremendous
11 potential. The Estuary Plan had been implemented
12 to draw in people. The proposal that we're looking at
13 talks about a much smaller slice of space for public
14 access. A big portion of what they're talking about
15 is bicycle and pedestrian paths up to 40 feet wide.
16 If you look at them, they're not usable spaces.
17 They're thoroughfares. In a sense, there are buffer
18 spaces between the water and the community and
19 the proposed housing.
20 More importantly, the largest single parcel
21 that they're claiming for open space is coming from
22 the demolition of the Ninth Avenue Terminal, which as
23 Naomi I think pointed out has tremendous potential.
24 It can be used for retail, it could be used for
25 a restaurant, it could be used for gallery space.

PH-22 (cont.)

1 project. I think it's good for our city. It's
2 a point of destination. My family has been here over
3 100 years in the good times and in the bad and
4 we're still here. And I can tell you projects like
5 this don't come every day. The crowd of people who
6 were here today I wish they would have been here for
7 the four-city development. It received so much of
8 our money with very little of our opinion.
9 I look and I beg for businessmen that will
10 bring in their own capital and take on a project of
11 this magnitude and see it to completion. To create
12 a point of designation.

PH-23 (cont.)

13 And I will just by the fact say this, th
14 I live right next door to where this project is going
15 to end. My balcony overlooks the Cash and Carry.
16 So, you know, I'm in full support.
17 He came out and he met with the small
18 business counsel, we voted unanimously to support it.
19 He came out and met with our pastors, they're
20 supporting it; he came out and met with our homeowners
21 association. I don't know what more you can ask of
22 a developer. And I have messed with some slimy ones.
23 And I'll tell you, for whatever reason, I like this
24 plan, I like this guy, I trust him. I'm not going to
25 fight him.

1 Most importantly, I think it would be
2 a perfect location for a ferry stop, so the people
3 who do end up living in this space instead of getting
4 into their cars and trying to find their way out
5 through that small exit on Fifth Avenue can walk from
6 their units out to the Ninth Avenue Terminal where
7 there is a ferry landing. They can go to their jobs
8 and the people from the city will be attracted to
9 Oakland if it's properly developed.
10 Thank you very much.
11 CHAIR JANG: Thank you. Let's have another
12 five speakers.
13 MR. KIMELBERG: Okay.
14 The next group includes Pam Weber, Charlie
15 Wegen[sic].
16 MR. WEBER: Weber.
17 MR. KIMELBERG: Is that Weber, too? Wow,
18 I thought that was a g.
19 Helen Hutchison, Michael David Sasson, and
20 Darrel Carey.
21 MR. CAREY: Good evening, Commissioners and
22 President Jang.
23 My name is Darrel Carey, president of East
24 Bay Small Business Council.

PH-23

25 I rise in support of the Oak to Ninth

1 You know, those who know me know that I come
2 out 110 percent and, you know, I think that you guys
3 ought to loosen some of the barriers, if any, that are
4 presented.
5 I thank you for your time.
6 MS. WEBER: Good evening.
7 My name is Pamela Weber. I'm a 25-year
8 resident of the Fifth Avenue Point Community and
9 a director of the Fifth Avenue Institute.
10 After years of meetings and hundreds of
11 thousands of expended dollars, we have reached
12 a crossroads at the Oak to Ninth property. You have
13 the opportunity to facilitate the linking of Oak to
14 Ninth and Jack London Square to create the liveliest
15 and most exciting waterfront on the West Coast.
16 Or you can allow it to become the bedroom community
17 and forever doom Oakland to being the bedroom
18 community of San Francisco.

PH-24

19 If you think high-rise residential units
20 liven up an area, drive down Fourth Street or
21 Fifth Street between Oak and Jackson. The only action
22 you'll see is an occasional fight for a parking space.
23 This EIR and the developer's presentations
24 promise that parks on the water side of 3100
25 residential units will draw visitors to the water

1 when in reality these parks will be the dog runs for
2 the pets of the residents of that community. The EIR
3 promises it will be a mixed-use community when
4 in reality it proposes only 5 percent of the build out
5 will be retail. The proposed sales for that retail
6 in this EIR equal Wal-Mart and Nordstrom.
7 This land belongs to the people of Oakland,
8 it deserves to be developed in accordance with the
9 Estuary Policy Plan. PH-24 (cont.)
10 Thank you.
11 MR. WEBER: Good evening. My name is
12 Charles Weber and I also live at the Fifth Avenue
13 community. I have been there the same length of time
14 as my wife Pam.
15 The EIR speaks to the Specific Plan of this
16 project. In response to the RFQ, which mentions the
17 Specific Plan 71 times, the developer mentioned the
18 Specific Plan 17 times and said that they commissioned
19 ROMA to do a Specific Plan on the 60-acre project and
20 an additional 60 acres surrounding the project.
21 In addition to leasing the property,
22 they said they would follow the Estuary Policy Plan.
23 Now, however, after they were selected to negotiate
24 for the final contract, the plan changed. Behind
25 closed doors, the lease became a sale, the PH-25

1 Specific Plan was scrapped and the Estuary Policy Plan
2 is to be dumped.
3 There are a number of people that are very
4 suspicious about the activities and negotiations
5 behind closed doors that led to this removal of the
6 land from the process and the citizens of Oakland.
7 Thank you very much.
8 MS. HUTCHISON: Hi. I'm Helen Hutchison
9 and I'm president of the League of Women Voters of
10 Oakland. The League is preparing a formal response
11 for the Draft EIR.
12 For tonight I have what is mostly a series of
13 questions. The first is a process question.
14 While the Draft EIR is posted online, it is very hard
15 to find. It requires multiple clicks that is not
16 particularly intuitive. And additionally, there is
17 no link from the agenda for tonight nor was there
18 a link to the staff report. Most of us thought there
19 was no staff report until earlier today when somebody
20 pointed out that it was posted elsewhere.
21 Because of all of this, we request an PH-26
22 extension on the comments period.
23 I said I was going to have a lot of
24 questions, the next thing is a statement of position.
25 The League of Women Voters of Oakland

1 supports full compliance with the Estuary Policy Plan.
2 The plan was developed through a process that included
3 lengthy public discussion, debate, and compromise and
4 that process should be respected. Further, I would
5 say by "full compliance" we mean just that not most of
6 the elements of or in the spirit of or many principles
7 of, but full compliance.
8 On to more questions. The Estuary Policy
9 Plan calls for a Specific Plan for this site prior to
10 development. There's a statement in the Draft EIR
11 that the City and Port have elected not to prepare
12 a Specific Plan with the rationale that the process
13 that we are now in is essentially equivalent to
14 a Specific Plan. PH-26 (cont.)
15 We ask that the Planning Commiss
16 that decision and ensure to the public that
17 essentially equivalent doesn't leave anything out
18 especially the chance for back and forth public
19 discussion.
20 My final question is a somewhat technical one
21 about regarding the open space in the plan. Would
22 an assessment district work better than CC&Rs to
23 protect the public use and access to that space?
24 By using an assessment district, the City would
25 maintain more long-term control over that open space.

1 By using CC&Rs the private homeowners group has
2 more control over the open space and potentially would
3 allow them to place restrictions on the public access
4 to that space.
5 Thank you very much.
6 CHAIR JANG: How many more speakers do we
7 have?
8 MR. KIMELBERG: We have eight speakers.
9 CHAIR JANG: Okay. Next five.
10 MR. KIMELBERG: Okay. Joyce Roy,
11 Phil Takomi [phonetic sp], Pamela Drake, Wendy L.
12 Tinslay, and Sandra Threlfall.
13 MS. ROY: My name is Joyce Roy and
14 I'm speaking on behalf of the Sierra Club. PH-27
15 The Sierra Club supports the open-space
16 aspect of the Estuary Policy Plan and is concerned
17 that the proposed project does not meet it. The main
18 purpose of the EIR was to provide for publicly
19 oriented -- and I'm quoting -- for publicly oriented
20 activities and enhanced public access. The goal
21 for the development of the estuary is to provide
22 the community benefit for the whole of Oakland.
23 For in-fill development, we support at least
24 20 percent of affordable housing. But this site
25 we have concerns about a lack of transit accessibility

and air quality. We would like to point out two ways that the E- -- Draft EIR is inadequate.

The traffic impacts and resultant air pollution are even more horrendous than claimed. The project proposes 3,534 on-site parking spaces for 3100 units. That is 1.14 spaces per unit. That can possibly be adequate at a transit node, but is totally unrealistic at this transit-challenged site. Most families will have to have two cars. PH-27 (cont.)

The air quality data is irrelevan it is not based on monitoring at this site adjacent to the I-880 freeway. The data is taken from the Alice Street and West Oakland monitoring stations.

And there is no analysis of a possible adverse effect of the airborne pollution on the health of residents living so near the I-880 freeway.

I have passed out to you an article, a recent article on a study that showed that children who lived a quarter mile from freeway had 89-percent higher risk of asthma than children living about a mile from a freeway. And this whole site is within a quarter of a mile.

And lastly, but most importantly, a Specific Plan public process as called for in the Estuary Policy Plan must be conducted before the

approval of any project.

Thank you.

MS. TINSLEY: Good evening, Commissioners.

My name is Wendy Tinsley. I live at 247 4th Street in the Jack London neighborhood and serve as president of the Jack London District Association. I provided you a handout that is verbatim with what I'm reading to you this evening.

The Jack London District Association is studying the Draft EIR for the Oak to Ninth project and will soon issue a formal opinion. Currently our organization wishes to publicly support the goals and sentiment of the Measure DD coalition and those community organizations aligned with the group. Areas of concern preliminarily identified by Jack London residents are traffic and parking, historical resources, open space, and urban design.

The significant and unavoidable adverse affects on traffic congestion and surface parking in the Jack London district resultant from this project as well as the Jack London Square PH-28 Redevelopment Project, 4 existing 6- to 8-story tower development currently under construction, and 3 planned 8 to 15 story tower projects bring the neighborhood level of service category to that of F.

Individually and competitively.

Oak to Ninth proposes to demolish up to 85 percent of the Ninth Avenue Terminal. The last vestige of Oakland's historic port. Opportunities exist to retain the structure in its entirety and incorporate into the development 10 percent and 20 percent historic preservation tax credits are available to assist the project sponsors in the proper rehabilitation and adaptive reuse of this historically and architecturally significant structure.

Oak to Ninth is comprised of a series of towers at the waterfront surrounded by small sections of green space. From an urban design perspective, the project configuration will effectively curtain that section of the waterfront off from the rest of the surrounding community and all of Oakland. Although public access to the waterfront must legally be provided, the public would not likely feel welcome in the shadow of the development.

The Jack London District Association encourages new development in the area that is consistent with the City's General Plan and the Estuary Policy Plan. PH-28 (cont.)

Tonight I respectfully request that Planning Commission require further refinement, study,

and analysis of the project design, impact, and alternatives in order to provide a project that achieves consistency with the existing adopted city plans and policies and ultimately better serves Oakland's waterfront.

Thank you.

MS. DRAKE: Good evening. I'm Pamela Drake and I, I've got to start by saying there's so many things wrong with this project that I probably need a lot longer than two minutes to get started on it.

First of all, the idea that people come here asking for community benefits for a project that's based on public land and public money is very sad to me. We shouldn't be even asking for benefits that something that should be benefiting the community. It's too bad that we're now asking for crumbs. If we look back at the Cypress project, we see what happened there and how few jobs and what kind of crumbs were left for the community. So I think that's kind kind of a sad way to start. PH-29

But I did want to reference an article in the Montclarion in which the developer Mike Ghielmetti of the Signature Properties stated that the mix will be similar to Grand or Lakeshore Avenues serving to help link the area to Lake Merritt. I think it could

in some way link it to Lake Merritt by a long line of traffic that will not move sort of just look at Houston what happened and we kind of get an idea. Anyway, maybe that's a bit of an exaggeration but the traffic is a real problem.

It's kind of sad to think that this is the last of our waterfront and we do have a policy and I realize that you guys aren't our leaders in terms of our governmental body that decided that policy and it's not really, it's down to them whether we follow that policy. But it would be sad to see a policy junked that the community worked so hard on.

But in any way to compare this to Lakeshore and Grand Avenue areas. First of all, we don't conceive of ourselves as waterfront. We're near the lake but we're not on the lake. Any successful waterfront project is not exactly right on the waterfront, but is close to the waterfront and when you get close to the waterfront you want to have waterfront retail. You don't want to overwhelm it with housing where people feel then prevented from using the waterfront. If you look at the way it's designed, the retail is down a dark corridor in the middle of the project not designed to bring people down to the waterfront and it's incredibly overly

PH-29 (cont.)

dense.

It's not historic like Lakeshore is. Lakeshore the buildings range from 2 to 4 stories. So we're not talking 28 to 24 stories, we're talking historic buildings with local retailers who serve the local area. So to compare it is kind of sad and also to say that it will enhance the City of Oakland and bring people more projects to downtown. If we keep building around the lake and around the wharf with the idea that somehow this is going to end up with a 10,000 K downtown project we're going to have a way overbuilt waterfront area and still not have anything downtown. So downtown is where we want the skyscrapers, we don't want them down where we're trying to bring people, attract tourists, attract neighborhood residents down to the waterfront and overwhelm it with residences. I would like to see it be more public space, performance-art space, more retail waterfront retail-oriented kind of thing and so I really think we need to go back to the drawing board. This project sort of hurts our last economic development engine that we have which is our last large parcel of waterfront property and it's just a bad project.

Thank you.

MS. THRELFALL: Good evening. My name is Sandra Threlfall. I represent Waterfront Action and it looks like you all could use a seven-inning stretch.

Good. This is good.

Okay. Waterfront Action is an organization that is dedicated to the implementation of the Estuary Policy Plan and the Lake Merritt Master Plan. We basically believe that people's opportunity to touch the water has a way of reviving them. I'll share with you my favorite quote:

PH-30

A lifeness of a city depends on the bond between its water and its flow of dreams. I think that says it very well. In 1994 there was a public /SHER /RET over 60 people from all over the community met in a room with no air conditioning for two days designing our dream waterfront. Out of that came the move to get the General Plan to set up a specific area which became the Estuary Policy Plan.

The policy plan was our waterfront dream and we hired ROMA, thanks to the funds from the City and the Port, to help us create a dream that was functional. That could potentially work. The Council passed that plan unanimously in June of 1999. The plan is our vision. ROMA helped us to make it what

we thought would be a practical vision.

Our position here is again support of the Estuary Plan, because that access, that ability for our citizens to actually see the water is a very important part in order to get them to access it. Estuary Park is a living example of nobody's been there because nobody knows how to get there. There is that huge Jethro park and shop building and once you pass that it's over. But Estuary Park is there. That to me signifies the importance of the people being able to see the open space. Open space is what we need. The EPP was our vision, ROMA helped us turn it into a dream, and we'd like your support at this point.

Thank you very much.

COMMISSIONER McCLURE: Commissioner Lighty like to support us in a verse of Take Me Out to the Ballgame?

COMMISSIONER LIGHTY: After last night, I can't do that. I'm sorry.

MR. KIMELBERG: Three remaining cards.

John Sutter, Chris Durazo, and James Vonn.

MR. SUTTER: Good evening.

My name is John Sutter. I have been interested in waterfront for many years and been

PH-31

1 involved in trying to develop parks and open space on
2 our waterfront for many years. I think the major
3 problem, at least one of the major problems, with this
4 project is what it has done to the proposed open space
5 in the Estuary Policy Plan.
6 I've distributed a copy of the one page out
7 of the Estuary Policy Plan which shows the open space
8 in shaded, in the shaded material. And I think you
9 need to compare that with the project. Maybe I can
10 put one here. Will it show? As Sandra Threlfall just
11 pointed out, will still be a hidden park. It will
12 still be a park that you can't see because it will be
13 hidden behind buildings. Although the Jethro Cash and
14 Carry building would be demolished it would be
15 replaced by condos and apartments under the project's
16 proposal.
17 Similarly, if you go to the area west of,
18 west of Fifth Avenue in the Estuary Policy Plan that
19 was called for to be all open space. But the
20 developer has proposed instead to build condos and
21 apartments there as well.
22 If you go to the area near the Ninth Avenue
23 Terminal, you will notice that there was an 11-acre
24 park proposed, the so-called Crescent Park. That
25 disappears in this project. What you have instead is

PH-31 (cont.)

1 So this process is backwards. There should
2 be a Specific Plan and you as planning commissioners
3 should have input in that Specific Plan and so should
4 the City Council. And once that plan is adopted then
5 it should be shopped out to find the developer who
6 will build it. Not the reverse, which is what we have
7 today.
8 Any questions?
9 COMMISSIONER McCLURE: I do have a question.
10 CHAIR JANG: Okay. Commissioner McClure?
11 COMMISSIONER McCLURE: Mr. Sutter, thank you
12 for coming down tonight.
13 In the illustration you put up the Crescent
14 Park does not show the Ninth Avenue Terminal.
15 MR. SUTTER: That's true.
16 COMMISSIONER McCLURE: Is -- PH-31 (cont.)
17 MR. SUTTER: That's true, because in the
18 Estuary Policy Plan the issue of what to do with
19 the Ninth Avenue terminal was left undecided.
20 COMMISSIONER McCLURE: Okay.
21 MR. SUTTER: It doesn't show it.
22 COMMISSIONER McCLURE: So am I to understand
23 that the vision of the Estuary Policy Plan was to not
24 have it there or you just didn't come to any
25 conclusion over the --

1 about, is the demolition of the Ninth Avenue Terminal
2 and grass planted on top of most of that.
3 So we've lost very significant open space.
4 And I would like to remind the members of this board
5 that the Estuary Policy Plan was a compromise. There
6 was a 27-member citizen group. There were two years
7 of meetings. There were a lot of people who thought
8 there should be more open space. That we should
9 open up our waterfront and provide the public benefit
10 that would benefit the most people in Oakland and that
11 is to have a very large, usable area that, of open
12 space on our waterfront. That vision is lost in this
13 project.
14 And finally, I would say as a member of the
15 Planning Commission I would wonder why was an end run
16 pulled on me. Estuary Policy Plan says, as others
17 have said, there's got to be a Specific Plan. State
18 law says a Specific Plan is treated like an amendment
19 to the general plan. It comes to you and you have
20 public hearings and you hear from the public and then
21 it goes to the City Council and the same thing occurs.
22 That has all been avoided. Somebody has pulled an end
23 run on you, somebody has decided oh, the city, not
24 you, and I don't think the City Council has, quote,
25 elected not to have a Specific Plan.

1 MR. SUTTER: Well, the Estuary Policy Plan
2 shows the Crescent Park which is there.
3 COMMISSIONER McCLURE: Right.
4 MR. SUTTER: What to do with the
5 Ninth Avenue terminal was not decided. That was put
6 off for further study.
7 COMMISSIONER McCLURE: Okay. One might draw
8 the conclusion from the illustration, though, that it
9 advocates the demolition of the Ninth Avenue terminal.
10 MR. SUTTER: Well, the early draft did say
11 that. And then I think when it got to the
12 City Council they changed their mind but they didn't
13 change the graphics.
14 COMMISSIONER McCLURE: Okay. Thank you.
15 By the way, I enjoy the East Bay Park
16 Districts very often. I'm a born and raised Oakland
17 guy, so thank you very much for your work on that.
18 MR. SUTTER: Thank you.
19 CHAIR JANG: Next speaker, please.
20 MS. DURAZO: Good evening.
21 My name is Chris Durazo. I'm an Oakland
22 resident here.
23 I came actually to, because I was concerned PH-32
24 about the Oak to Ninth project. I was concerned about
25 the impacts on affordable housing, about jobs, about

1 the loss of the PDR, the industrial land and that
2 conversion without any what I thought were very
3 realistic community benefits in exchange.
4 However, after watching the presentation and
5 actually listening to a lot of people, I am concerned
6 that you might have the wrong impression of
7 San Francisco's waterfront and I'd like to actually
8 give testimony on what's been going on on the other
9 side of the bay.
10 My job, my day job is actually a community
11 planning director over at the South of Market
12 Community Action Network in San Francisco. And one of
13 the major campaigns that we just recently worked on
14 was the Rincon Hill project area. They actually
15 proposed -- well, all of South of Market is proposing
16 40,000 condominiums over the next 10 years. I don't
17 know, some of you might be aware of that.
18 And the particular Rincon Hill was packaged
19 into being at very high density, very large towers,
20 it was going to be coming in, it was actually going
21 for approval for its planning process, and our concern
22 at that time was, of course, the rising land costs and
23 the impacts on the affordable housing stock or
24 potential land for affordable housing. It was very
25 significant. You're going to see significant land

PH-32 (cont.)

1 changes in this from industrial to these condominiums
2 which are usually steel-based structures and stuff.
3 The most expensive types of development you can
4 create. You're going to have to have the rising lands
5 cost just because of that purpose alone.
6 However, because of the views, because of the
7 proximity to the beautiful waterfront, it is a premium
8 and not to give away that I really don't want the City
9 to give away for no real good exchange. So I want to
10 share with you what we did in South of Market.
11 We actually worked with the developers in the
12 area unanimously they all agreed with us as well as
13 the supervisors, majority of the supervisors and
14 we were able to get a mitigation fee of $17 a square
15 foot for their towers. And the $17 a square foot was
16 provided into a community stabilization fund to
17 support the most vulnerable residents in the South of
18 Market from being displaced through gentrification and
19 through the land costs. This includes residents,
20 poor residents as well as small businesses that can't
21 compete to get into those larger buildings. They
22 can't afford the rent which as well as looking at the
23 issues which, you know, they show the parks and these
24 open spaces and actually the speaker before I think
25 Ms. Weber, was mentioning that there's, these are just

1 dog runs and I adamantly agree. They are dog runs.
2 They are not conducive to families, they're not
3 conducive to any activity. They're just walkable
4 areas that look pretty.
5 So I really urge you to look at the Community
6 Benefits Agreement that's Oak to Ninth people put
7 together, Coalition put together, and really work
8 strongly with them, because they are the leaders of
9 Oakland. PH-32 (cont.)
10 In terms of coming up with strategies that
11 will really support a lot of the problems that Oakland
12 faces around land using and planning, around immigrant
13 rights, around jobs. I mean, you know, when you pull
14 together that team you have to take it seriously and
15 really think about those as real, viable solutions.
16 $17 a square foot actually came out to be $20 million
17 that's going to be going to support the vulnerable
18 communities in South of Market, as well as we also
19 were able to get 50 percent of all the inclusionary
20 housing from that to remain in the immediate
21 neighborhood. So that when the land costs do go up,
22 people will be able to access potential new affordable
23 housing opportunities in that area and not be
24 displaced from what their, you know, their lifeline of
25 the community.

1 So I just urge you to look at other aspects
2 of waterfront opportunities.
3 Thank you.
4 CHAIR JANG: Okay. Mr. Vonn.
5 MR. VONN: Good evening, Commissioners, and
6 thank you for the opportunity to address you this
7 evening. James Vonn at 251 Wayne Avenue, Oakland.
8 I come to you tonight to speak on behalf of
9 the Coalition of Advocates for Lake Merritt, CALM,
10 CALM is a multiorganizational line of groups and
11 individuals who hold an endearing interest in the
12 general betterment of the gem of Oakland Lake Merritt
13 and its environs. Four years ago CALM developed
14 the redesign plan, cost estimates, and development
15 strategies, which was adopted essentially in its
16 entirety by the City Council and which plan became
17 the basis for the reconstruction of 12th Street at the
18 south terminus of the lake soon to be Lake Merritt
19 Boulevard. PH-33
20 CALM is an active measure of the Measure DD
21 coalition, a community coalition of broadly
22 represented coalition sanctioned and charged by the
23 City Council to provide planning and physical
24 oversight of projects being carried out under the
25 198 million bond referendum that was approved in 2002

1 by 80 percent of Oakland voters. In fact, the
2 Measure DD budget allocates $22 million for the Oak to
3 Ninth developer and we will be overseeing that money.
4 The statement that I'm presenting tonight
5 from CALM is, actually is an introduction to a
6 statement that was passed without opposition by the
7 Measure DD Community Coalition and I will be
8 submitting this statement of the Coalition in writing
9 to the Commission tomorrow. As a diligent member of
10 the DD coalition, CALM strongly endorses the Coalition
11 position statement on the proposed Oak to Ninth
12 developed a statement that was adopted after
13 an extended period of dialogue and consideration and
14 meetings with the developer without opposition at
15 the Coalitions meeting of July 28th. In particular,
16 CALM endorses the three recommendations in the
17 Coalition, in the Measure DD Coalition statements and
18 adds two others.
19 CALM urges the Planning Commission and the
20 City to assure that any development of the precious,
21 priceless, and irreplaceable Oak to Ninth parcel will,
22 (A), provide the maximum of open space, a minimum of
23 45 percent with development perhaps focused in
24 strategically sited point tower.
25 (B), assure maximum vistas directly through

1 and to the estuary from the Embarcadero and accessible
2 to bicycle, pedestrian, and vehicleways adjacent to
3 the development. In fact, CALM strongly encourages
4 that the vistas defined in the Estuary Policy Plan be
5 a mandated provision of any Oak to Ninth development
6 project.
7 (C), that the amenities, furnishings, and
8 appurtenances of the development shall be world class
9 in quality, adequately befitting the beauty and
10 irreplaceability of Oakland's rare and last
11 possibility to salvage its long neglected waterfront
12 for the use and enjoyment of Oaklanders for
13 generations to come.
14 (D), we endorse the jobs and housing
15 provisions of the Community Benefits Coalition and
16 urge your careful attention.
17 And finally, we endorse the historic
18 objectives of the Oakland Heritage Alliance in the
19 retention of the Ninth Avenue pier at least the
20 original, the initial part of the Ninth Avenue pier.
21 Thank you very much.
22 I will be submitting a statement in addition
23 to the statement from the Measure DD Coalition in
24 writing.
25 CHAIR JANG: Okay. Thank you.

1 MR. HANDA: For the record, I'm Sanjiv Handa,
2 East Bay News Service and I have six points I want to
3 make.
4 First one is on the Estuary Plan. You can
5 thank the Estuary Plan process ultimately in part for
6 the enactment of the Sunshine Ordinance in Oakland.
7 When that advisory committee started meeting it was
8 convened by the Oakland Chair Division in cooperation
9 with the Port of Oakland the meetings were not
10 noticed, were not publicized, they were not open to
11 the public. And there was a threat of litigation
12 shortly before the work was concluded (inaudible)
13 those meetings. The Port and OSP at that point opined
14 that the advisory committee of the citizens was
15 actually not advisory to the Port or the City but
16 rather to the consult of them that was declaring the
17 plan or developing the plan.
18 Ultimately the City Attorney's Office had to
19 reject that notion because it was clearly under the
20 Brown Act publicly constituted body to avoid all
21 the delays that would have been associated with
22 reconvening of the Estuary Plan process a number of
23 safeguards were supposed to have been implemented.
24 Some of those have been followed, some have been not.
25 But one of the things to keep in mind is

1 this. You heard from a number of people today issues
2 related to the Estuary Plan and the fact that that
3 plan has not been followed. I would urge you in
4 particular to listen very carefully to what
5 Judge Sutter said related to the state law, because
6 you now have the necessary information you need to
7 know that litigation could ensue if the state process
8 is not followed.
9 And I should also point out that the last
10 meeting that you held just last week when
11 Bob Schwartz, representing the Oakland Strategies
12 Council, spoke to you keep in mind the words that
13 he uttered which is in the short term developers and
14 politicians and organized labor have developed a
15 relationship to create the immediate development,
16 the immediate jobs, the immediate revenue, that
17 the long-term consequences and the price of that
18 involvement have not been calculated in.
19 As you well know from the last two sets of
20 budget hearings over the last three years that
21 the Oakland City Council has conducted, the City lacks
22 the resources according to the words of the
23 City Council members, to maintain its parks, provide
24 adequate police services and a whole host of other
25 requirements that are part of the quality of life.

The citizens of Oakland have taxed themselves over and over and over to pay for additional services, to pay for open space, to pay for landscape lighting assessment district, to pay for libraries. It goes on and on and on.

This has also not been said here but City staff is looking at the feasibility and the idea of imposing a surcharge for new development that won't affect this project obviously if and when it goes through, but it is important consideration that in many communities new developers have to buy their way in by paying for the amenities and services.

As you know from Council meetings and other testimony, no new development in Oakland, residential development ever pays even 50 percent of the cost of providing those services. That's something that California League of Cities and others have pointed out.

My final two points real quickly.

First one is simply that as you're looking at this the website has come up again. The City's website continues to be a problem and if citizens cannot find the information on that website it is the same as not having that information out there. Somehow Ms. Cappio and her staff are unable to

PH-34 (cont.)

communicate with the Web team. It ultimately falls on the Mayor or the City Manager to do something about it. She and her staff have done their job, they've prepared the materials but the City has not done their job in making it available to the public. That is a very serious repercussion, I'm sorry, it's a very serious issue with a lot of repercussion.

What Ms. Hutchison said on comments of Women League of Voters is actually on the mark which is that if the materials are not available then clearly they're not available and I also agree that the comments period should be extended.

And the final point is simply this: There are only so many times people are going to come down here with the same points development after development after development. What you were hearing nine years ago none of you were here on this Planning Commission nine years ago, but the exact same points were being made by many of these same citizen activists. The same issues were being raised in terms of process, the same kinds of concerns being raised about the quality-of-life issues and taking shortcuts; and I would just caution you because you're sitting here now that you have the opportunity to correct those things.

In about three weeks you will see in your e-mail communication from me that will list some of the problems that have happened in the last few years from as simple as variance that was run into a gas station that resulted in two murders at the site. We opposed that and I'll list for the names of the Planning Commissioners who voted for each of those projects so for history they can be held accountable for the actions they took.

PH-34 (cont.)

So I would urge you to revisit these issues point by point that people raised tonight and extend the comment period as well as address all these issues in the final EIR in a detailed basis not in a summary fashion or the limited manner that the City has responded in the last nine years.

Thank you.

COMMISSIONER McCLURE: Commissioner Lighty, you have been here nine years, haven't you? Close.

COMMISSIONER LIGHTY: It just seems like it.

CHAIR JANG: Does that do it for public speakers?

MR. KIMELBERG: It does. There are no remaining cards.

CHAIR JANG: All right. I'd like to take a five-minute break before we go into commissioner

comments.

(Recess taken.)

CHAIR JANG: First of all, I want to express my appreciation for all those that stayed for the whole meeting so far.

So anyway, I'd like to have -- one of the Commissioners want to start with comments? Any takers?

COMMISSIONER McCLURE: I'll start.

CHAIR JANG: In other words, I'll have Mr. Lighty start.

COMMISSIONER McCLURE: Then none of us will have anything to say because he will already have stated it. I want to make myself irrelevant here.

Actually, this is directed to you. I recall not too long ago I requested that we have someone come to this meeting from the Web department or the website department from the City and I, that hasn't happened and this discussion reminded me that I had asked for that.

MS. CAPPIO: That's right.

COMMISSIONER McCLURE: We tend to be the sounding board for the complaints regarding the website, so it would be nice to actually have someone come here and explain why we're having such

1 difficulties in providing the information on the
2 site.
3 MS. CAPPIO: Okay. And I also want to make
4 sure that the public knows, both the public who's here
5 and the reviewing audience, that we have made some
6 improvements in the last week. And I'll have Margaret
7 Stanzione, the project planner, explain the Web links
8 to the Oak to Ninth project and make sure people know
9 how to link up.
10 COMMISSIONER McCLURE: Thank you.
11 Then I just have a couple questions.
12 MS. CAPPIO: Could we do that now?
13 COMMISSIONER McCLURE: Oh, sure.
14 MS. STANZIONE: The front page of the city's
15 website Oaklandnet.com right on the central column
16 very last item on the central column says Oak to Ninth
17 EIR. And if you click on that, it takes you right to
18 the Oak to Ninth page, Web page that we created.
19 It is -- this is a direct way to get to all
20 the information and documents that have been prepared
21 for this project. But normally you would have to go
22 into our Planning and Zoning page and then scroll down
23 to our Planning Department to find some of these,
24 the staff reports and the items. But for this project
25 there's a direct link and it was just put up last

1 Friday or Monday, just in the last couple of days.
2 UNIDENTIFIED SPEAKER: Commissioner, the
3 column is called Events. The central column
4 doesn't -- it's Events. How many people would go to
5 Events?
6 COMMISSIONER McCLURE: This is kind of an
7 event really. I look at it is an event.
8 MS. STANZIONE: That decision was made by our
9 Web team.
10 COMMISSIONER McCLURE: They should come down
11 and give us some feedback on how they list these
12 things, so they can benefit from our experience.
13 MS. CAPPIO: I'll follow up on that.
14 CHAIR JANG: Mr. Handa seems to be able to
15 enlighten us on this.
16 COMMISSIONER McCLURE: Mr. Handa, let me just
17 finish my question and answer here.
18 Thank you.
19 MR. HANDA: That's all right.
20 COMMISSIONER McCLURE: Ms. Cappio, the public
21 testimony confused me a little bit. Is this project
22 receiving any City subsidies? PH-35
23 MS. CAPPIO: At this time the developer has
24 not requested any City subsidies, so I --
25 COMMISSIONER McCLURE: So the way you phrased

1 that, are we anticipating it or is the answer just
2 simply no, they are not getting any subsidies.
3 MS. CAPPIO: At this time the developer, the
4 development team have not asked for any subsidies.
5 That doesn't mean that during the course of project
6 review to come there will not be those discussions.
7 Particularly in the area of providing affordable
8 housing, because as you know, a portion of this
9 project is within the Central City East Development
10 Area and we have increment that is potentially coming
11 to the city from development of this site should it
12 occur, that must be used to provide housing affordable
13 to people of low and moderate income or below moderate
14 income.
15 COMMISSIONER McCLURE: I did notice in the
16 staff report that there is part of proposal is to set
17 aside 6 acres; is that correct.
18 MS. CAPPIO: No, it's not that specific yet.
19 But we are in discussions with the development team
20 again about how the redevelopment agency's obligations
21 under the redevelopment plan concerning affordable
22 housing will be fulfilled and we will bring you those
23 specific recommendations during the merits of the
24 project phase.
25 COMMISSIONER McCLURE: Okay. So the comments

PH-35 (cont.)

1 about this being public land and public money
2 supporting this project aren't necessarily accurate at
3 this point?
4 MS. CAPPIO: Well, the land is --
5 COMMISSIONER McCLURE: Can I talk now,
6 please? Thank you.
7 MS. CAPPIO: The land is currently owned by
8 the Port of Oakland.
9 COMMISSIONER McCLURE: Okay.
10 MS. CAPPIO: That is a public entity.
11 Part of the City of Oakland.
12 COMMISSIONER McCLURE: No, I understand.
13 But would it be sold to the developer or...
14 MS. CAPPIO: That is also not, at this point
15 that has not been, those negotiations and how that
16 will finally be concluded has not been finalized yet
17 simply because again there are issues complicates
18 this, as you may know, as I'm sure you've got through
19 the EIR pertaining to the state public trust lands.
20 That some portions of these lands are encumbered by
21 the public trusts and that has certain complexities
22 associated with it with regard to stuff that must be
23 traded out if those lands are to be used for housing
24 and other kind of complications concerning long-term
25 ownership by a private entity. So again --

1 COMMISSIONER McCLURE: So it's a work in
2 progress? PH-35 (cont.)
3 MS. CAPPIO: It's a moving target, work in
4 progress. Whatever you want to call it.
5 COMMISSIONER McCLURE: Thank you for that
6 clarification.
7 MS. CAPPIO: You're welcome.
8 COMMISSIONER McCLURE: And I do understand
9 that they have adopted a PLA for the project?
10 MS. CAPPIO: That's my understanding.
11 COMMISSIONER McCLURE: Okay. And it's to the
12 Port of Oakland standard, so I can say personally I'm
13 very sympathetic to all the testimony about affordable
14 housing and inclusive labor and union jobs. And I
15 think it's as incumbent on the unions that are going
16 to benefit from this and the general labor counsel to
17 work with the developer and the community to make sure
18 that we have the kinds of apprenticeship programs and
19 the kind of local hiring that has been suggested by
20 the coalition.
21 I also think that, having been through this
22 process partially through the Four City project, which
23 was approved and we're waiting for movement on that,
24 and the Wood Street project that all of these, all of
25 these projects are moving targets and they go through

1 an adoption of a Specific Plan and there was some
2 further suggestion that that might open the City up to
3 litigation on this matter if for some reason we did
4 not require a Specific Plan being adopted. And so
5 I would just ask you, is that an accurate statement on
6 the part of the public or not?
7 MS. LEE: I would refer to Director Cappio on
8 that.
9 MS. CAPPIO: It's a policy matter rather than
10 a legal matter at this point.
11 The Estuary Policy Plan does include the
12 recommendation to prepare a Specific Plan for the
13 entire Oak to Ninth area. And we at staff level,
14 working with the developer during the last couple of
15 years, decided that the process that we were entering
16 into were pertaining to the degree of policy changes
17 that would need to be considered by this body and the
18 City Council would be equivalent to if not more than
19 the preparation of the Specific Plan.
20 I need to tell you my personal bias is that
21 the plan now before the city represents a very
22 specific development proposal and that offers us
23 a consideration at a level of detail that normally we
24 don't get with a Specific Plan. So the public
25 hearings, the general plan amendments that are

1 a negotiations process. PH-36
2 And I think it's important that the Planning
3 Commission take a leadership role in not just instruct
4 the developer to negotiate with community groups and
5 come back with a solution that we can then approve.
6 I think it's important that we stay involved through
7 the whole process and consider all the community
8 comments not just those communities, those community
9 organizations that have come together and give
10 themselves a name. We need to pay attention to the
11 individuals as well as those groups.
12 And I think that in the past on Wood Street
13 we I think we did an okay job, but I think that myself
14 included the suggestion came that hey, look, let's
15 send the developer out of the room and, you know,
16 negotiate with the community and then come back.
17 I think we need to take a more active role in this
18 project because of its significance.
19 Thank you.
20 CHAIR JANG: Thank you, Commissioner McClure.
21 Well, let's start with on the other end with
22 Commissioner Boxer.
23 COMMISSIONER BOXER: Actually, I have a
24 question for the City Attorney. It was in testimony
25 there was a reference made to the requirement of PH-37

PH-37 (cont.)
1 required, as you would a Specific Plan, are also
2 required as part of this process as well.
3 COMMISSIONER BOXER: Thank you.
4 You know, I'm relatively new to this process.
5 I'm sure a lot of you in the audience haven't seen me,
6 so I must say that watching the public, the folks in
7 the room once again reminds me kind of why I chose to
8 live in Oakland. The diversity represented working
9 people. It really is a testament to this City and one
10 I think to echo Commissioner McClure's comments it's
11 one that is eye-opening at least to this Commissioner
12 that makes us I think really need to take a look at
13 this project as a whole.
14 Obviously, Mr. Handa has stated that these
15 comments have been going on for some time and there
16 are these large projects that come before us and I
17 think that Mr. Ghielmetti of course is here hearing
18 these comments. They're not unique to the Oak to
19 Ninth project.
20 That being said, my understanding of what
21 we're doing here tonight is reviewing a Draft EIR
22 with specific impacts, with specific mitigations.
23 Obviously, the folks from the community wanted to talk
24 about the project and how it's been put together. And
25 I am hopeful that we'll have the opportunity to do

that just with the specific impacts of the project in and of itself. PH-37 (cont.)

I heard some discussion of preservation and cultural resources and things like that and I just want the public to know that I do listen and I do hear the comments generally about, about what's happening in Oakland. And I take those into account as I view this specific project and further projects, future projects that come at least to me.

Thanks.

CHAIR JANG: Thank, you.

Commissioner Lee.

COMMISSIONER LEE: When I decided to accept the encouragement to come to on this Planning Commission, I had thought about, a lot about what I'm doing. I'm going to do, I'm trying to do when I accepted this opportunity to so-called pay my dues to serve as a social responsibility, to serve on this commission.

And my consideration is very complex, because part of it is my effort to be here in the commission meetings, you know, twice a month to listen. To listen not only to testimonies that people come here and I always, I always look further than just what we are looking at, we're considering here and what

PH-38

we heard is to look way beyond. And in other words, not just to collectively hear what we, you know, we heard in this, like in this chamber in a hearing room normally. But it's also to consider, take into consideration the voice that was not presented here.

And there's another component that I always like to put into my consideration is that what if this project is going on or what if this project is not going on. So the consideration often becomes very broad. For instance, this project is not -- you know, many people have said this is the last project on the waterfront. And I don't look at it in that specific, but I do look at it as one of a very rare opportunity for the Oakland people.

And I remember this, passing by this area many, many, many times over the last 25 years of myself living in this Oakland. I always felt like because we used to live in Baltimore and we had seen the transformation of Oakland waterfront. Of course, back then there's a lot of time and money and then being close to Washington D.C. and they had a different, a very unique opportunity to develop the waterfront in Baltimore.

But I often feel sad that Oakland did not have the leadership, did not have the opportunity, did

not have the money to develop our waterfront, precious waterfront side.

So by saying all that, and I do feel strongly that we do have a very unique opportunity here to do something. And as much as I have said that I thought so much about it, I do agree with Commissioner McClure whole heartedly and I think we, not only we wanted to look at, listen to what we have heard tonight, we have to look at a much broader sense and even look at it in five years, ten years from now and what if. And only if we have done that and I think we will have done our responsibility. PH-38 (cont.)

And so not going to a whole lot of specific things and I think a lot of things have been said. And I just wanted to put in this element and this is what we need to go into this project and think about it thoroughly.

CHAIR JANG: Okay. Thank you, Commissioner Lee.

Commissioner Lighty.

COMMISSIONER LIGHTY: Thank you, Chair Chang.

As the other Commissioner comments, I think that we need to take very seriously not only the merits of this proposal but also what we think the best development is for this site. Because there are two competing visions at stake: The Estuary Policy

Plan has a fundamentally different vision than this development proposal. We see things like the Tidelands Trust as kind of, we may see that as kind of an obstacle to what we take as a common sense development, which is well, yeah, it's near water so let's put some apartments. That kind of just makes sense because that's done in a lot of places. But there is a reason that the Tidelands Trust does prohibit long-term private ownership and requires maritime related uses. There is an underlying policy assumption there that that land needs to relate to the water it's next to and that views in and of themselves of long-term ownership, residential use is not what they mean by related. PH-39

Secondly, the parks and the open space that the Estuary Plan vision, they're not being achieved by this project, so. And they're not, it's not close. It's not really close. 42 acres, 24 acres is one thing. I visited those sites that the applicants and others have talked about. The Marina Green isn't close to high rises. The Willamette River that goes through Portland is separated from high rise building by a lot of space. That's a park along the river. There are not high-rises along that park to take two examples. I'm not saying that the residential

1 isn't legitimate here.
2 I'm not saying the project isn't legitimate.
3 What I'm saying is it's fundamentally different from
4 what has been approved for that site. And so we have
5 competing, I think fundamentally competing different
6 approaches. And the Commission has to ask itself
7 what's best.
8 The alternative is not between nothing and
9 this project. The alternative is fulfilling the
10 Estuary Policy Plan or radically amending it? And if
11 we -- some of us believed that high-rises belonged in
12 uptown not along the estuary. Okay. There are mid-
13 rises in uptown. But there's still that legitimate
14 question about whether high-rises belong here.
15 The, in the Environmental Impact Report the,
16 one of the significant impacts that can be reduced to
17 less than significant with mitigation is the project
18 would not be consistent with the current existing
19 Estuary Plan land use classification, zoning districts
20 for the project site. Is that an environmental impact
21 under the EIR? It's cited A2 page 216.
22 We can evaluate whether the mitigation
23 measure, which is the proposed zoning for the site and
24 the amendments to the Estuary Policy Plan are an
25 appropriate mitigation measure. We can decide that.

PH-39 (cont.)

1 We can say no, that's not appropriate mitigation
2 measure and, in fact, the policy objectives of the
3 EPP, the Estuary Policy Plan are superior. That's
4 a legitimate, under the EIR that is a legitimate and
5 appropriate determination. It's not, it's not
6 separate. It's not a project evaluation separate from
7 the EIR.
8 I think the EIR should study project
9 alternatives that were submitted by Naomi Schiff and
10 commented by others known as Alternative A and B.
11 I think that the small-lot development on Fifth Avenue
12 is more appropriate. I think -- and it should be
13 considered.
14 I think that the Community Benefit Program is
15 important and the affordable housing.
16 And I think on the cultural resource
17 question, it's, you know, and again, I understand
18 where the project's going and I don't want to be
19 overtly critical at that point. But it is hard to
20 understand how the achievement of open space is
21 dependent upon the destruction of a Class A historic
22 landmark. That's a little hard to take. And
23 I don't -- and again, I don't mean disrespect because
24 I voted for Signature Properties' projects. I think
25 you've done great work. But I just think, that it's

1 a little cynical to me, that's all. And that's just
2 my personal read of it.
3 So we should not be faced with that choice,
4 because I think, again, I think the OHA proposal
5 should be considered. The '50s portion of the
6 building, okay, it's doesn't have the same
7 significance. Open it up, right. Open it up to,
8 you know, an open-air pavilion, save the '20s portion,
9 live/work. PH-39 (cont.)
10 Those are things that should seriously be
11 considered. And I think if we approach it in those
12 terms, then I think we get at what vision, what type
13 of development is best for the site. If it turns out
14 that economics are purely the driver, say Hey, we
15 can't do anything else, we can't have 42 acres of
16 open space, we can't make it the major recreational
17 destination in Oakland, which is what the Estuary
18 Policy Plan as Mr. Sutter pointed out says.
19 We say Hey, we can't afford that, we can't do
20 it. We don't have the money. The only thing we can
21 do is let a private developer maximize density and
22 create a small park on the water's edge. And if
23 that's the decision, let it not be because we think
24 that's the best project for the site. Let us not fool
25 ourselves that that's consistent with the Estuary

1 Policy Plan or that provides a great community benefit
2 to Oakland. Let's just recognize it for what it is
3 which is Hey, we'll take what we can get.
4 I personally don't think that's good enough.
5 CHAIR JANG: Following Michael Lighty,
6 you also have to end up being a counterpoint, I think.
7 I think this project, you know, has been
8 a tough one to evaluate because we do have an
9 Estuary Plan that had a very long public process. But
10 I really see it as a vision. And it's not a recipe
11 for success, you know, it's not such a formula that if
12 you have X number of acres of open space that will be
13 successful. I think that what we have here is
14 a proposal to build a project, you know, admittedly
15 a very dense project, but what it does is it pays for
16 the amenities that are the core of the Estuary Plan
17 and that is having open space, having connections
18 along the waterfront as well as connections back
19 inland. PH-40
20 And I think those are really kind of the core
21 concepts that Estuary Plan has and with that,
22 you know, we have a project before us that can achieve
23 that and it's a real project. And so, you know,
24 I recognize that the Estuary Plan is kind of a,
25 you know, sacred cow, but by the same token I think

1 that, you know, we have a project here and so the
2 question is do we, you know, do we look at it as a
3 project that can achieve those goals? And I believe
4 that they are.
5 And I think that we're kind of given the task
6 of determining, okay, if we don't get the acreage,
7 you know, whatever those numbers are, then I think
8 the emphasis should be on quality, you know,
9 are we getting the quality of parks, open space,
10 connections that the Estuary Plan calls out for?
11 And so I can't say yes, we have them yet, but I think
12 that we're heading in that direction.
13 As far as the Class A historical building,
14 you know, I'm very interested in preserving buildings
15 in Oakland, but I often feel that historical
16 preservation of buildings is such that if you let them
17 sit around long enough somebody will come along and
18 renovate it and then they will be applauded for having
19 the foresight of saving it. But, you know, it's
20 contingent on need and time just like real estate is
21 related to location, I think historical buildings
22 there's that element of time that buildings can stay
23 vacant for 20 years.
24 Well, in some situations it, you know,
25 20 years there might never be a use. But all of a

PH-40(cont.)

1 sudden the surrounding areas, economics, make it
2 feasible to, you know, rehab it and so all of a
3 sudden, you know, people who do that become heroes
4 because they came along and saved a building.
5 So I think there's this time pressure of
6 whether this building, which is Class A, can be saved
7 in time, you know, as part of the development.
8 Which kind of brings me to the EIR, because
9 in it it talks about phasing maybe perhaps either
10 the staff or the applicant can tell me about. Are
11 we looking at phasing in such a way that's already
12 set, because it does indicate proposed phasing?
13 MS. CAPPIO: The developer has proposed
14 a phasing of the project that we have taken in the
15 EIR and adapted to make sure that the impacts
16 associated with certain levels of development are
17 studied appropriately. So at the end of a particular
18 phase we knew we were at a particular level of impact,
19 particularly with traffic and air quality. The noise
20 impacts, because of the long construction period or
21 conceivably long construction period is another set of
22 impacts.
23 So we've basically taken the developer's
24 basic phase-in program and had to turn it into worst-
25 case with regard to what level of development was most

1 feasible within the shortest amount of time. So we
2 were able to measure those impacts in the worst-case
3 way as required by CEQA. Does that make sense?
4 I guess the short story is, we've studied the
5 worst case under CEQA and therefore, have a lot of
6 flexibility in how we choose to work with the PH-40
7 developer for phasing of the project. (cont.)
8 CHAIR JANG: Okay. Because I think,
9 actually, when I look at the phasing I thought that
10 the most appropriate phasing would be to develop
11 Clinton basin from, in my view, because I think that
12 you're going to do a project like this you don't start
13 in the corner, you know, where, you know, everything
14 else is still industrial, run down, and dilapidated,
15 but you develop something that's very visible in the
16 very beginning and then you make a bold statement that
17 this is a project here, here's the open space which is
18 a lot of people are talking about as far as is it
19 visible from the freeway, is it visible from the
20 neighborhoods?
21 And I think that if you start kind of in the
22 area that gives you that immediate impact in the first
23 phase then, you know, I think it kind of snow balls as
24 far as a project that can be successful.
25 MS. CAPPIO: If I can just respond quickly?

PH-41

1 CHAIR JANG: Okay.
2 MS. CAPPIO: The comment is well taken and
3 noted. We must overlay that comment on the degree of
4 toxic contamination at this site and what must be done
5 to remediate it and that has to be overlaid on any
6 practical phasing program given the dirt removal and
7 heavy equipment that is required in certain areas of
8 the site.
9 So I certainly will take that comment and we
10 can bring you back the information during the merits
11 of the project's consideration pertaining to what the
12 regional agencies, the Department of Toxic Substance
13 Control and other agencies are requiring of the
14 developer with regard to the sequencing of remediation
15 of the site pertaining to ground, I think it's mostly
16 soil contamination.
17 CHAIR JANG: Okay. And then kind of an off
18 subject or maybe on subject, but, you know, I have a
19 strong interest in pedestrian safety and I know that
20 CEQA doesn't address that. PH-42
21 However, you know, in looking at the EIR, and
22 I not so unrandomly picked the intersection that
23 interested me which is Eighth and Webster. I noted, I
24 noticed one in chart figure C2(b) that the, let's see,
25 there's a double right turn from Webster into H Street

1 and it's noted incorrectly it is a single turn.
2 And that leads me to another section where it
3 talks about level service and it talks about how
4 having a scramble phase, which is a 3-phase at an
5 intersection, where pedestrians are allowed to cross
6 the middle of the street. According to the EIR, that
7 seems to come up as being a bad thing, because it
8 reduces the green time that, you know, autos are
9 allowed to travel, but in fact if you take into
10 consideration the double-right turns, the double-left
11 turns there's an immediate conflict green light
12 between autos and pedestrian.
13 And so when you look at EIRs, you know,
14 you're dealing with the attitude that because it
15 doesn't facilitate autos therefore there's congestion.
16 So I advocate, if not for this EIR but for future
17 ones, that pedestrian safety become an important
18 element. So that is kind of an off subject.
19 Commissioner McClure?
20 COMMISSIONER McCLURE: Actually, I have
21 a question for staff. You talk a lot about the
22 Ninth Avenue Terminal, but what is the accessibility
23 to that facility? Can we arrange a --
24 MS. CAPPIO: Tour?
25 COMMISSIONER McCLURE: A tour, yeah.

PH-42 (cont.)

1 MS. CAPPIO: I think a site tour including
2 the Ninth Avenue terminal would be a great idea and
3 I can do that with the developer and the Port.
4 COMMISSIONER McLURE: Okay, great. I don't
5 want to just go out there and, you know, perhaps
6 create a security issue if that's still being used as
7 a Port facility.
8 MS. CAPPIO: There is, I think there is some
9 warehousing activities, but I have been out there and
10 we can provide the necessary equipment to assure your
11 safety.
12 Commissioner McClure.
13 COMMISSIONER McCLURE: I don't want to
14 disrupt anything.
15 MS. CAPPIO: No, I know. It's actually very
16 big out there.
17 COMMISSIONER McCLURE: I thought I would have
18 an official tour.
19 MS. CAPPIO: We are. We would do that.
20 COMMISSIONER McCLURE: Okay. And I actually
21 have a question for Commissioner Lighty. You were
22 part of the estuary policy process; is that correct?
23 COMMISSIONER LIGHTY: I think actually it
24 came, there was some discussion when I first got on
25 the Commission. It may actually have been formally

1 approved prior to that. It was June '91 and I don't
2 think I started until after that.

PH-42 (cont.)

3 COMMISSIONER McLURE: To your recollection,
4 what was the rationale behind the amount of acres
5 that was set aside as open space? Was there a lot of
6 discussion about why that number was the right number?
7 In the context of the, of this whole?
8 COMMISSIONER LIGHTY: I think it was just
9 someone alluded to it. I think it was the fact that
10 it was a Tidelands Trust. The perception was it was
11 Tidelands Trust land so the open space was going to be
12 sort of the easiest and most consistent thing to do
13 with that, that chunk of the acreage. I mean, I think
14 that was pretty much it, as I understand it.
15 MS. CAPPIO: Compatible with increased public
16 access, because obviously some maritime uses you don't
17 want the public nearby, you know, dropping containers
18 on them and stuff.
19 COMMISSIONER LIGHTY: Exactly. So you figure
20 how do you have public access still the commercial
21 uses are allowed by Tidelands?
22 COMMISSIONER LEE: It was never a
23 consideration for anybody to live there.
24 COMMISSIONER McCLURE: So now we're
25 considering people living there.

PH-43

1 MS. CAPPIO: Well, actually, it's not that
2 clear.
3 Mark, the land-use designations in the plan
4 right now don't completely prohibit; is that right?
5 The PWD-1? The actual adopted Estuary Policy Plan
6 land-use destination right now does not completely
7 prohibit housing?
8 MS. STANZIONE: It doesn't specifically say
9 "housing" in it. It refers to live/work and it has,
10 the designation has a density standard, a residential
11 density standard.
12 So I'm thinking that live/work and there's
13 a policy expanding the live/work is probably what was
14 considered residential.
15 COMMISSIONER LIGHTY: Potentially compatible
16 with its legal status, yeah.
17 COMMISSIONER McCLURE: I'm just trying to
18 understand if there was any, is there a specific
19 formula that they allowed this acreage?
20 COMMISSIONER LIGHTY: Not that I know of.
21 COMMISSIONER McCLURE: Or I think what's
22 going to happen probably in this process is we're
23 going to arrive at a number.
24 Do you have an answer?
25 UNIDENTIFIED SPEAKER: I have the answer.

COMMISSIONER McCLURE: You do?
UNIDENTIFIED SPEAKER: I do. Having sat through all those meetings, yes.

PH-43 (cont.)

Mr. Lighty said it very well. We saw that the land was designated as Tidelands Trust. Roughly 80 percent of it is Tidelands Trust, which prohibits privatization, so we said what else can we do with it? So we did mixed use and the hotel on the nontrust and then the trust for the parks.

So what we were working from is an assumption that we have found not to be necessarily true, that the Tideland Trust is forever.

COMMISSIONER McCLURE: Okay. Thank you for the clarification.

COMMISSIONER LIGHTY: In politics nothing is forever.

Can I ask a question of Sam?

Are you done? I'm sorry.

COMMISSIONER McCLURE: Yeah, I'm done.

Thank you.

COMMISSIONER LIGHTY: Just on the Specific Plan question, is the same amount of space being considered under all the review that we're in the midst of here, is the full 120 acres with the Specific Plan anticipated under review under the

processes you described?

MS. CAPPIO: No.

COMMISSIONER McCLURE: 120 acres.

COMMISSIONER LIGHTY: That's what the Specific Plan required 120 acres.

MS. CAPPIO: The Estuary Policy Plan now outlines a recommendation that the Oak to Ninth as a district be studied as a Specific Plan and the decision was made that the area that was under the control of the Port and obviously the development entity that was interested in developing it would be a focus, because we didn't really have the, the ability to work with other property owners at that time. And we still don't. I mean, there's complications there, too.

PH-44

COMMISSIONER LIGHTY: I mean, just from a planning perspective, it would be ideal if we studied the whole area that's contiguous? I mean, that's at least one loss in not doing the full Specific Plan.

MS. CAPPIO: I don't think it's a loss so much as obviously you could, you could consider a larger area making sure the decisions that you make pertaining to this particular area of the Oak to Ninth district does not preclude access.

I mean, I think that we're talking account of

those kinds of issues, particularly the access issues with the other side of, you know, the estuary and the connections to Lake Merritt and the division that's created by the highway and the Embarcadero and the railroad now. So I'm, our planning, because of Measure DD and some of the Lake Merritt master planning issues is not, I don't think I can present you with the equivalent of looking all the those larger issues as you consider the specific decisions pertaining to this particular part of Oak to Ninth.

COMMISSIONER LIGHTY: And do you think that the community involvement and the process has been equivalent in this review as it would be under the Specific Plan? Because certainly some community members feel the Specific Plan would have offered them more opportunity for a kind of workshop engagement as opposed to a comment-type engagement?

MS. CAPPIO: Right. Certainly those participation requirements as listed in the Government Code are clearly equivalent. A public hearing or public hearings before both the Commission and the City Council prior to adoption. A Specific Plan is really the equivalent of a General Plan amendment.

And you can incorporate other planning and participation methods in what you do. And we did do

PH-44 (cont.)

that actually earlier this spring with the report that you have from circle point as one point of beginning. And you may build off of that, too.

We've included in your staff report what we considered to be sort of a process, a development review process including Landmarks Advisory Board, Park and Recreation Commission, yourself, and the City Council. And if you want to comment on other kinds of opportunities or forums that we could build into that, I would be glad to take your suggestions.

COMMISSIONER LIGHTY: Thank you.

CHAIR JANG: Okay. Are there any additional comments from Commissioners? Okay.

COMMISSIONER McCLURE: So you will e-mail us with the date for the tour of the Terminal?

MS. CAPPIO: I guess I'm thinking that I'm going have to get a couple of dates and make sure that we poll you and see what the best one is. In the next -- and we'll have to notice it up as a public meeting, because the entire Commission will be invited. So the members of the public can come as well.

COMMISSIONER McCLURE: Great.

Thank you.

MR. BOXER: I don't want to prolong this any

1 longer, but I do have a question for my edification,
2 was there not a process when the property went through
3 its determination as to whether or not to obviously
4 put out an RFQ, search for qualified developers, make
5 some, have some public hearings with regard to that,
6 or am I incorrect in that?
7 MS. CAPPIO: Yes. The port followed a
8 request for qualifications, and I believe a request
9 for proposal process, that occurred about three or
10 four years ago and that did have a public, the ability
11 for the public to review and consider proposals that
12 were submitted to the Board.
13 CHAIR JANG: Okay. Perhaps Director Cappio
14 can kind of recap what we've, the process that
15 we've gone through today and the next steps.
16 MS. CAPPIO: Sure. I would be glad to do
17 that.
18 At this point the public comment period for
19 the EIR will continue until October the 24th at 4:00
20 in the afternoon. Just to make sure there's a date
21 and time. Comments should be directed to Margaret
22 Stanzione at either 3315, excuse, me, 150 Frank Ogawa
23 Plaza, Suite 3315 in Oakland, California, 94612, or
24 mstanzione, S-t-a-n-z-i-o-n-e, at Oaklandnet.com.
25 After that, the comments will be reviewed and

1 compiled and then each comment will be responded to
2 in a final EIR document and any revisions,
3 corrections, and clarifications to the Draft EIR will
4 also be included. And that will be presented to the
5 Planning Commission prior to any formal
6 recommendations or actions on the project itself.
7 In the meantime, as outlined in the staff
8 report, we have estimated and sort of put forth a
9 schedule of review including review by the Landmarks
10 Preservation Advisory Board, the Public Park and
11 Recreation Commission, and the Design Review Committee
12 about aspects of the project and the applicant is
13 proposing to formally submit a revised or embellished
14 proposal of the project sometime in November.
15 So we will get back to you with that as we
16 are preparing, as we are preparticipating the final
17 comments on the EIR or responses to comments on the
18 EIR we will be coming back to you with specific issues
19 on the merits of the project itself and our
20 recommendations concerning them.
21 CHAIR JANG: Okay. Great. I believe we are
22 going to wrap up the business today for this item?
23 MS. CAPPIO: I believe so.
24
25

1
2 STATE OF CALIFORNIA)
: ss
3 COUNTY OF ALAMEDA)
4
5 I, the undersigned, a Certified Shorthand
6 Reporter of the State of California, do hereby
7 certify:
8 That the foregoing proceedings were taken
9 before me at the time and place herein set forth; that
10 any witnesses in the foregoing proceedings, prior to
11 testifying, were placed under oath; that a verbatim
12 record of the proceedings was made by me using machine
13 shorthand which was thereafter transcribed under my
14 direction; further, that the foregoing is an accurate
15 transcription thereof.
16 I further certify that I am neither
17 financially interested in the action nor a relative or
18 employee of any attorney of any of the parties.
19 IN WITNESS WHEREOF, I have this date
20 subscribed my name.
21
22 Dated:_____
23
24
25 _____
DANA M. FREED
CSR No. 10602

Comments from the Planning Commission

PH-1 **Commissioner Lighty** asks Mr. Ghielmetti, representative of the project sponsor, to elaborate on why the Estuary Policy Plan does not work for the proposed project. In response, Mr. Ghielmetti outlines information about the project site and requirements for development that may not have been considered fully, and relevant information that may not have been available, during the Estuary Policy Plan process. Specifically, these include the extent of site contamination, cost of environmental cleanup, infrastructure needs, access issues (including transit), expense to demolish existing structures, including the Ninth Avenue Terminal and acquire the property from the Port of Oakland. Mr. Ghielmetti discusses his opinion that the project includes an appropriate high-intensity development necessary for the currently isolated site. He also comments on the questionable economic viability of uses envisioned in the Estuary Policy Plan and the relatively newer commercial development on adjacent properties (low-intensity hotels).

Comments from Members of the Public

PH-2 **Leonor Godinez** states her position on the project and desired benefits is should provide the community. No specifics are stated. The comment is noted.

PH-3 **Andy Nelson** states that if the project has impacts that there should be acceptable tradeoffs – benefits for existing Oakland residents. Where feasible, mitigation measures are identified to reduce significant impacts that would result with the project to less-than-significant levels. For impacts are significant and unavoidable, and the City elects to approve the project (or an alternative) with these unmitigable impacts, it must adopt a statement of overriding considerations that states how benefits of the project outweigh the environmental impacts. As adopted in the City's statement of overriding consideration required for adoption of the Estuary Policy Plan, benefits include the development or expansion of publicly-accessible open spaces on the waterfront revitalization and the creation of new housing and jobs. Additional and more specific (tangible) benefits resulting from the project are not related to the environmental review under CEQA and would be considered by the City as part of the conditions of approval for the project and/or a Development Agreement between the City and the project sponsor.

Mr. Nelson points out issues of high housing costs and lack of good paying jobs facing the Bay Area and the need for the project to address these issues. These are not issues relevant to the project impacts under CEQA, as discussed in Master Response H, nor does the comment address the adequacy of the DEIR analysis and is noted.

PH-4 **Muang Saechoa** mentions the need for affordable housing in Oakland, which would prevent existing residents from purchasing homes elsewhere. Starting on page IV.J-41, the DEIR discusses the potential for indirect impacts on housing market effects (additions to housing supply, development of affordable housing, improvement to job/housing relationship, potential effects on rents and prices in Oakland and vicinity). This

discussion concludes that the project would not lead to significant indirect physical impacts (DEIR p. IV.J-46). See also Master Response H, which describes the project's current proposals for the provision of affordable housing.

PH-5 **Chandu Mae** comments on the need for affordable housing. The topic is not relevant to the project impacts under CEQA, as discussed in Master Response H. The DEIR discusses affordable housing on page IV.J-42, and Master Response H also discusses the project's current proposal for the provision of affordable housing. The comment does not address the adequacy of the DEIR analysis and is noted.

PH-6 **Antonio Varruz** states that the construction jobs created by the project should go to Oakland residents. The topic is not relevant to the project impacts under CEQA, as discussed in Master Response H, which also discusses the project's current proposal for local hiring. The comment does not address the adequacy of the DEIR analysis and is noted.

PH-7 **Quan Tut** speaks to the need for a stable job in the construction field and sustainable job training and job placement. The topic is not relevant to the project impacts under CEQA, as discussed in Master Response H, which also discusses the project's current proposal for local hiring. The comment does not address the adequacy of the DEIR analysis and is noted.

PH-8 **Gloria Lomeli** states concerns about project impacts on housing. See Response to Comment PH-4 regarding potential indirect impacts on housing.

PH-9 **Disheng Huang** speaks to the need for the project to provide more affordable housing. The topic is not relevant to the project impacts under CEQA, as discussed in Master Response H, which also discusses the project's current proposal for the provision of affordable housing. The DEIR discusses affordable housing on page IV.J-42. The comment does not address the adequacy of the DEIR analysis and is noted.

PH-10 **Reverend Jim Hopkins** speaks to the merits of a Community Benefits Agreement that addresses adequate housing, opportunities to good paying jobs, access to natural beauty. Regarding adequate housing, the project would create 3,100 new high-quality housing units in Oakland. The topic of job opportunities is not relevant to the project impacts under CEQA, as discussed in Master Response H, which also discusses the project's current proposal for local hiring. Regarding access to natural beauty, the project will transform an area along that water that is not accessible to the public into a location where the water can be accessed, viewed, and enjoyed. The comment is noted.

PH-11 **Andre Spearman** speaks to the need for sustainable jobs. The topic is not relevant to the project impacts under CEQA, as discussed in Master Response H. See Response to Comment KK-30 regarding the use of public land for the project, part of which would be private development.

PH-12 **Jennifer Lin** speaks to the need for good paying construction jobs and affordable housing. These topics are not relevant to the project impacts under CEQA, as discussed in Master Response H. The DEIR discusses affordable housing on page IV.J-42, and Master Response H discusses the project's current proposal for the provision of affordable housing.

PH-13 **Ms. Kuan** speaks to desire for the project to provide affordable housing and job opportunities. These topics are not relevant to the project impacts under CEQA, as discussed in Master Response H. The DEIR discusses affordable housing on page IV.J-42, and Master Response H discusses the project's current proposal for the provision of affordable housing and local hiring.

PH-14 **Iliana DeLa Torres** speaks to the opportunity for the project to provide affordable housing and job opportunities. These topics are not relevant to the project impacts under CEQA, as discussed in Master Response H. The DEIR discusses affordable housing on page IV.J-42, and Master Response H discusses the project's current proposal for the provision of affordable housing and local hiring.

PH-15 **Rod Divelbliss** speaks acknowledges that the development project will contribute to Oakland's housing supply and thereby help relieve the pressure the increases housing prices. The speaker also recognizes traffic issues with the project and supports the project locating housing near jobs. The comment is noted.

PH-16 **Tersita Cruz** supports a project labor agreement that addresses prevailing wages and also calls for the project to provide affordable housing. This topic is not relevant to the project impacts under CEQA, as discussed in Master Response H. The DEIR discusses affordable housing on page IV.J-42, and Master Response H discusses the project's current proposal for the provision of affordable housing.

PH-17 **Doug Block** states that the project should provide housing that is affordable to people that live in the flatlands and that jobs created by the project should be 100 percent union labor. These topics are not relevant to the project impacts under CEQA, as discussed in Master Response H. The DEIR discusses affordable housing on page IV.J-42, and Master Response H discusses the project's current proposal for the provision of affordable housing and local hiring.

PH-18 **Susan Yee** comments that the project should provide affordable housing and job opportunities, both of which have impacts on public health care and education. These topics are not relevant to the project impacts under CEQA. The DEIR discusses affordable housing on page IV.J-42, and Master Response H discusses the project's current proposal for the provision of affordable housing and local hiring.

PH-19 **Orna Sasson** suggests that the project site could have been developed as a park or a garden. The project would create 28.4 acres of new public parks and open space where none currently exists. Development of the entire site as a park or garden is not consistent

with the vision in the Estuary Policy Plan. The comment states, "…it's not very attractive. It's not as attractive as is should have been." It is not clear if the comment refers to the existing condition of the project site or the proposed project. These comments likely address the design aspects of the project, which are not relevant to the project impacts under CEQA as discussed in Master Response H. The comment also calls for more preservation of the Ninth Avenue Terminal and potential creative reuses. See Response to Comment Q-2 regarding preservation alternatives and Master Response B regarding further analysis of reuse alternatives for the Ninth Avenue Terminal.

PH-20 **Charles Lerrigo** states that the project's report has not adequately addressed inclusive housing requirements. There is no inclusive housing requirement for the project. As stated in Response to Comment S-45, the DEIR discusses affordable housing on pages IV.A-28 and IV.A-29 within the context of the *Central City East Redevelopment Plan* and the *Central City Urban Renewal Plan*. Additional detail is provided on page IV.J-42 within the detailed analysis of Potential for Indirect Physical Impacts (*Development of Affordable Housing*).

PH-21 **Naomi Schiff** states that a revised Draft EIR should study reuse of the Terminal. Master Response B addresses the matter of further analysis regarding potential reuses for the Terminal. The comment describes alternative project options that maximize open space and affordable housing. See the second paragraph of Response to Comment S-5 regarding open space alternatives analyzed in the DEIR. The DEIR discusses affordable housing requirements on pages IV.A-28 and IV.A-29, however this is not a project impact under CEQA, as discussed in Master Response H, which also discusses the project's current proposal for the provision of affordable housing. The comment states that a specific plan should be prepared, and Master Response A addresses this issue.

PH-22 **Ken Katz** states that the project does not implement the Estuary Plan. Section IV.A (Land Use, Plans, and Policies) of the DEIR includes a detailed discussion of the project's relationship to the Estuary Policy Plan's policies starting on page IV.A-13 and concludes that the project would not conflict with the Plan. The comment also states that the proposed open spaces and trails are not "usable spaces, but thoroughfares that buffer spaces between the water and the community and propose housing. The project would create a series of waterfront open spaces ranging from 2.3 to 9.7 acres and between 200 to 400 feet in depth set back from the shoreline. Pedestrian and bicycle paths are primarily proposed along the shoreline and likely as internal access to certain open spaces or parks. The comment also outlines additional potential reuses for the Ninth Avenue Terminal, which is addressed in Master Response B.

PH-23 **Darrel Carey** states his support of the project of the proposed magnitude being done with private capital and that will replace the Cash and Carry building that is visible from adjacent existing residences. The comment also speaks to outreach efforts by the project sponsor. The comment does not address issues relevant to CEQA of the project's impacts and is noted.

PH-24 **Pamela Weber** suggests that the proposed parks would not be used by the public but by residents of the project. The comment is speculative and does not provide specific justification. The park and open spaces proposed by the project would be public areas. The comment also describes the retail percentage of the project and projected sales, which is addressed in response to Ms. Weber's Comment KK-21. The comment also states that the project should be developed in accordance with the Estuary Policy Plan. As stated in Response to Comment PH-22, above, the DEIR includes a detailed discussion of the project's relationship to the Estuary Policy Plan's policies starting on page IV.A-13 and concludes that the project would not conflict with the Plan.

PH-25 **Charles Weber** comments that, with the project, "the specific plan was scrapped and the Estuary Policy Plan is to be dumped." See Master Response A regarding preparation of a specific plan. As stated in Response to Comment PH-22, above, the DEIR includes a detailed discussion of the project's relationship to the Estuary Policy Plan's policies starting on page IV.A-13 and concludes that the project would not conflict with the Plan.

PH-26 **Helen Hutchison** addresses the need for preparation of a specific plan, which is responded to in Master Response A. The comment also suggests preferable methods for long-term maintenance of open spaces. See Response to Comment R-9 regarding maintenance mechanisms being considered by the project sponsor and the City.

PH-27 **Joyce Roy, speaking on behalf of the Sierra Club**, states concern that the project does not meet the open space aspect of the Estuary Policy Plan. This response assumes that the comment refers to the total acreage proposed, which is less than that analyzed in the Estuary Policy Plan EIR. See Response to Comment S-5 regarding the comparative open space acreage of the project and the Estuary Policy Plan EIR.

PH-28 **Windy Tinsley** identifies concerns regarding project and cumulative significant and unavoidable adverse affects on traffic congestion and surface parking in the Jack London District. See Master Response C that describes the nature of the significant and unavoidable transportation impacts being related to physical constraints or jurisdictional issues. The DEIR does not identify impacts that would affect surface parking.

The comment also mentions opportunities to retain the entire Ninth Avenue Terminal and the use of historic preservation tax credits for rehabilitation and adaptive reuse of the structure; see response to Ms. Tinsley's Comment S-2.

The comment describes the project as a "series of towers at the waterfront surrounded by small sections of green space," and states that this configuration will "effectively curtain that section of the waterfront off from the existing surrounding community." As described on DEIR page III-8 and depicted in Figure III-5 (DEIR p. III-13), the project proposes a mix of medium-height buildings from six to eight stories (up to 86 feet) in height, and five of these medium-height buildings would include highrise tower elements of up to 24 stories (240 feet). The project would create a series of waterfront open spaces

ranging from 2.3 to 9.7 acres. See response to Ms. Tinsley's comment at Response to Comment S-3.

The comment requested further "refinement, study and analysis of the project design, impacts, and alternatives in order to provide a project that achieve consistent with existing adopted City plans and policies…." See response to Ms. Tinsley's Comment SS-4.

PH-29 **Pamela Drake** comments that "the traffic is a real problem." As stated in Master Response G, for each significant traffic impact, the DEIR identifies feasible mitigation measures to achieve acceptable levels of service. The exceptions are intersections for which impacts are significant and unavoidable because physical constraints make mitigation infeasible or jurisdictional issues make mitigation infeasible because its implementation is beyond the City of Oakland's sole control.

The comment states concert with the proposed proximity of development to the waterfront, the internal location of retail, and the density of housing. The comment offers alternative scenarios for the project (more public space, performance-art space, more retail, including waterfront-oriented retail). These topics pertain to the project's design and program which are not environmental impacts under CEQA, as discussed in Master Response H. City decisionmakers will evaluate the appropriateness of the proposal as it considers the merits of the project.

The comment asserts that the proposed development of the project site would have adverse economic effects. DEIR Section IV.J (Population, Housing, and Employment) includes a detailed discussion of the project's potential direct and indirect impacts on businesses and jobs. Impact J.2 (DEIR p. IV.J-28) identifies and discusses the less-than-significant impact that the project would have regarding the displacement of existing businesses and jobs. As stated in Response to Comment S-46, starting on DEIR page IV.J-33, the DEIR discusses the potential indirect impacts of the proposed retail development and concludes on page IV.J-40 that the project would not lead to significant indirect physical impacts related to retail markets. Starting on DEIR page IV.J-41 the DEIR discusses the potential indirect impacts on housing markets from the proposed residential development and concludes on page IV.J-46 that the project would not lead to significant indirect physical impacts related to housing markets.

PH-30 **Sandra Threlfall, representing Waterfront Action**, discusses support of the Estuary Policy Plan vision, specifically that of waterfront access and the visibility of open spaces. Existing structures on the project site (Jack London Aquatic Center, Jethro Cash and Carry) limit visibility of the existing Estuary Park, as noted by the comment, and the project proposes a new building (Parcel N) on the location of one of the existing structures. A Parcel N Variant is described in Chapter II of this FEIR that provides opportunities for additional open space between the Aquatic Center and Parcel N development. Also, each of the alternatives (except Alternative 1A: No Project) presented in Chapter V of the DEIR includes a scenario in which Parcel N would be redeveloped as

open space. See also Response to Comment B-8 and U-17 regarding impacts on views of new open space areas and the waterfront. Prior to its action on the project, City decisionmakers will evaluate the project alternatives and ultimately reject the alternatives and adopted the proposed project, or alternatively elect one or a combination of the alternatives analyzed, instead of the project.

PH-31 **John Sutter** addresses the comparative open space of the Estuary Policy Plan to that of the proposed project. The DEIR provides this analysis starting on page IV.L-15.

The Estuary Policy Plan depicts Crescent Park on land created by demolition of the Ninth Avenue Terminal. The comment mistakenly suggests that Crescent Park is not located on the site of the demolished Ninth Avenue Terminal, and that only the project proposes to demolish the Terminal to create the comparable Shoreline Park. Alternatives that retain all or parts of the Ninth Avenue Terminal, and thus provide varied open space configurations and acreage, are described and analyzed in DEIR Chapter V (Alternatives) for consideration by City decisionmakers on the project.

Also, Mr. Sutter provides the following inaccurate response to the Commission: "The early draft [of the Estuary Policy Plan] did say that [advocate demolition of the Terminal], and then I think when it got to the City Council changed their mind but they didn't change the graphics." The adopted Estuary Policy Plan (June 1999) includes the following policy statement on page 90:

> ***OAK-2.4: Establish a large park in the area of the existing Ninth Avenue Terminal to establish a location for large civic events and cultural activities.***

The policy discussion that follows onto page 91 of the Estuary Policy Plan includes the following:

> *Recognize that the Ninth Avenue Terminal shed, or portions thereof, may be suitable for rehabilitation and adaptive reuse. However, the terminal building impedes public access to and views of a key area of the Estuary.*
>
> *The Port and City should investigate the feasibility of keeping and reusing the building (or portions thereof). A Specific Plan for the entire District should be initiated prior to development.*

This adopted text reflects revisions outlined in the February 10, 1999 staff report to the City Planning Commission regarding "Consideration of Draft Estuary Policy Plan" (Case File NO. GP98-114 / ER98-12). on June 8, 1999, the City Council approved City Resolution 75037 C.M.S. to adopt the Estuary Policy Plan as revised by the Planning Commission and with no further revisions to Policy OAK-2.4, its supporting text, or illustrations related to the depiction of the Ninth Avenue Terminal.

Illustrations in the Estuary Policy Plan consistently show the Ninth Avenue Terminal removed. These specifically include Estuary Policy Plan Figure III-10 (Oak to 9th District Illustrative Open Space Key Map on p. 97), Figure III-11 (Oak to 9th Bird's-eye Perspective on p.89), and Figure III-14: Oak to 9th District Illustrative Circulation on p. 99). Additionally, Resolution No. 75037 C.M.S. included confirmation of the certification of the Estuary Policy Plan EIR that included the following mitigation to address the significant and unavoidable impact that would result from demolition of the historic resource:

> **Mitigation Measure 4: Analyze alternative configurations of the park proposed for the Ninth Avenue Terminal Shed area. Prior to issuance of demolition permits, the lead agency for the project will complete an analysis of alternative configurations of the park to determine if an alternative configuration could result in the preservation of the Ninth Avenue Terminal Shed or portions thereof.**

The resolution also approved the City's statement of overriding considerations of why the benefits of the project (Estuary Policy Plan with Terminal potentially demolished) would outweigh the significant and unavoidable impact.

PH-32 **Chris Durazo** states concerns regarding project impacts on affordable housing and jobs. The comment specifically outlines considerations and opportunities that may facilitate accessible affordable housing opportunities and avoid displacement. City decisionmakers will consider this information in addition to the DEIR analysis of affordable housing (DEIR p. IV.J-42), the displacement of existing housing units/population (Impact J.1) and businesses/jobs (Impact J.2) on DEIR p. IV.J-28.

The comment also states concern with industrial land conversion, which is a policy issue that the City of Oakland is currently deliberating at a citywide level. Its decision on the proposed project would reflect the City's policy position on this issue for the Oak to Ninth Avenue project site. The existing General Plan land use designations on the project site do not envision industrial uses.

PH-33 **James Vann, on behalf of the Coalition of Advocates for Lake Merritt (CALM),** calls for the City to ensure that the project provides minimum 45 percent open space; maximum views of the Estuary as defined in the Estuary Policy Plan; quality amenities; jobs and housing provisions outlined by the Community Benefits Coalition; and preservation of all or part of the Ninth Avenue Terminal. See response to CALM's Comment AA-2 that restates these issues.

PH-34 **Sanjiv Handa** urges the Commission to consider previous comments regarding the project not following the Estuary Policy Plan and issues of long-term consequences of the project in light of its consideration of non-CEQA related matters (labor-related). The comment acknowledges the City's stated lack of resources for public services (park maintenance, police service, etc.), mentions the City's consideration of a future surcharge

for new development, and the City's responsibility to ensure that public information is consistently accessible on the City's website. Last, Mr. Handa states his intention to provide information regarding problems that have resulted from past Planning Commission actions. These issues are not relevant to the project impacts under CEQA and do not address the adequacy of the DEIR analysis. The comment is noted.

Resumed Comments from the Planning Commission

PH-35 **Commissioner McClure** asks if the project is receiving any City subsidy or set-aside areas for affordable housing. Claudia Cappio, Development Director, responds that the developer has not, at this time, requested subsidies and recognizes the potential for subsidies to be discussed during the course of project review, particularly related to affordable housing. The comment is not relevant to the project impacts under CEQA and does not address the adequacy of the DEIR analysis. However, as stated in Master Response H, since publication of the DEIR, Development Agreement discussions among the City, the Oakland Redevelopment Agency, and the project sponsor are underway and include negotiations on a number of affordable housing units to be provided within the Oak to Ninth Avenue Project site and a number within the Central City East Redevelopment Plan Area in an effort to help the City meet its requirements under state law.

PH-36 **Commissioner McClure** provides comments that do not address project impacts under CEQA, the adequacy of the DEIR analysis, or any aspect of the project. The comment is noted.

PH-37 **Commissioner Boxer** asks for direction regarding potential litigation on the matter of a requirement to adopt a specific plan. See Master Response A regarding the direction in the Estuary Policy Plan regarding preparation of a specific plan and legal context of the issue.

PH-38 **Commissioner Lee** provides comments that do not address project impacts under CEQA, the adequacy of the DEIR analysis, or any aspect of the project. The comment is noted.

PH-39 **Commissioner Lighty** provides comments regarding the fundamental different visions in the Estuary Policy Plan and the project and discusses the underlying policy assumptions associated with the Tidelands Trust designation on the site that prohibit "long-term private ownership" and require "maritime related uses." The DEIR describes and evaluates the Estuary Policy Plan vision and the project in DEIR Section IV.A (Land Use Plans, and Policies) starting on page IV.A-11 and throughout the impact analysis starting on DEIR page IV.A-35. The Estuary Policy Plan scenario is also described and evaluated starting on DEIR page V-10 as Alternative 1B (No Project / Estuary Policy Plan). See Response to Comment GG-18 that discusses considerations related to the Tidelands Trust designation on the site and the separate land exchange transaction that is not a part of the proposed project.

The comment acknowledges the fundamental difference in the amount of open space proposed by the project and that analyzed in the Estuary Plan EIR and illustrated in the Estuary Policy Plan (DEIR p. IV.L-16 and Table IV.L-2), which the Commission must consider.

The comment asks if the project's inconsistency with the Estuary Plan land use classification and zoning district is an environmental impact. Consistent with the City of Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines provided on DEIR page IV.A-34, the project would result in a significant impact is it would "fundamentally conflict with any applicable land use plan…" However CEQA acknowledges that conflict with a General Plan does not inherently result in a significant effect on the environment. Section 15358(b) states that "effects analyzed under CEQA must be related to a physical change." The City has, as is within its discretion, elected to identify the project's inconsistency with the existing Planned Waterfront Development (PWD-1) Estuary Plan land use classification and existing M-40 Heavy Industrial Zone a potentially significant impact (Impact A.2) in the DEIR. The proposal for a General Plan Amendment and Planning Code Amendment (and subsequent City approval of each) constitute mitigation measures (Mitigation Measures A.2a and A.2b on DEIR p. IV.A-38) that will effectively reduce this impact to less than significant. To the extent that the project's General Plan conflict or inconsistency could result in a physical impact, those impacts are identified and fully analyzed in the relevant sections of Chapter IV (Setting and Impact Analysis).

The comment states that the EIR should study project alternatives specifically put forward by Naomi Schiff (Oakland Heritage Alliance) and alternative development along 5th Avenue. Key aspects of these alternatives, and several other alternatives put forward by the community that include preservation of all or larger parts of the Ninth Avenue Terminal, are incorporated in the alternatives analyzed in Chapter V (Alternatives) of the DEIR. The approach and specifics regarding this effort is discussed under *Suggestions Incorporated into the Selected Alternatives*, starting on DEIR page V-2.

The comment also questions the idea that the achievement of open space is dependent on the demolition of the landmark Terminal, which is an issue the City must consider during its deliberations on the project. The comment does not address the adequacy of the DEIR analysis and is noted

PH-40 **Commissioner Jang** comments on the core concepts of the Estuary Policy Plan vision and the City's charge to evaluate the proposed specific regarding residential development, parks, open space, and connections therein. The comment also addresses considerations of historic preservation in light of a development proposal and economic considerations. These comments do not address the adequacy of the DEIR analysis and re noted.

PH-41 **Commissioner Jang** also opines that the project should consider alternative phasing that might put initial development and open space in the most visible section of the project site. Developer Cappio responds consistent with Master Response G, which discusses the

phasing of open space and the key consideration of the required site cleanup that must occur and drives the proposed project phasing.

PH-42 **Commissioner Jang** notes a typographical error in the DEIR Appendix Figure C.2b regarding the lane configuration at the intersection of Webster Street and 8th Street, and the corrected figure is included as **Figure III-2** in Chapter III (Changes to the Draft EIR) of this FEIR. The comment also states concern with pedestrian safety issues. Impact B.6 addresses pedestrian safety and is discussed in detail in the context of existing traffic control devices and the relationship of vehicular traffic volumes and pedestrian safety starting on DEIR p. IV.B-55.

PH-43 **Commissioner McClure** asks if there was a specific formula or rational used for the amount of open space envisioned in the Estuary Policy Plan. Commission discussion and an unidentified public speaker offered that the existence of the Tidelands Trust designation on the site essentially limited these areas to park use. The comment does not address the adequacy of the DEIR analysis and is noted.

PH-44 **Commissioner McClure** asks if the 120-acre Oak to 9th District that would have been addressed by a specific plan is considered in the project. Director Cappio responds that the proposed project addresses approximately 62 acres of the Oak to 9th District south of the Embarcadero and under Port control. She discusses that aspects of the project and other unrelated efforts (i.e., Measure DD, Lake Merritt Master Plan) that address issues in the area north of the Embarcadero, and area not controlled by the Port (and thus not part of the proposed project).

The comment also asks about the community involvement process for the project and whether it is equivalent to wheat would be under a specific plan process. See Master Response A, which addresses this topic in detail.

CHAPTER VIII

Responses to Comments at the Parks and Recreation Commission Public Hearing on the Draft EIR

The Parks and Recreation Commission (PRAC) held a public hearing on the Draft EIR (DEIR) on October 12, 2005. The following is the transcript of the public hearing, and responses to each comment are provided following the transcript. Responses provided in this section specifically focus on statements that pertain to environmental topics under CEQA and the adequacy of the analysis in the DEIR. Statements regarding the project are identified and responded to as appropriate.

Comments relevant to the DEIR start on page 15 of the transcript.

OAK TO NINTH AVENUE PROJECT

DRAFT ENVIRONMENTAL IMPACT REPORT

PARKS AND RECREATION ADVISORY COMMISSION

PUBLIC COMMENTS

OAKLAND, CALIFORNIA

WEDNESDAY, OCTOBER 12, 2005

PUBLIC COMMENTS

Reported by:
DANA M. FREED
CSR No. 10602

JOB No. 39388

OAK TO NINTH AVENUE PROJECT

DRAFT ENVIRONMENTAL IMPACT REPORT

PARKS AND RECREATION ADVISORY COMMISSION

PUBLIC COMMENTS, taken at Lakeside Park Garden Center, Vista Room, 666 Bellevue Avenue, Oakland, California, beginning at 5:12 p.m. and ending at 6:46 p.m. on Wednesday, October 12, 2005, before DANA M. FREED, Certified Shorthand Reporter No. 10602.

Oakland, California

Wednesday, October 12, 2005

5:12 p.m. - 6:46 p.m.

CHAIR WEBB: Moving on to 12C. We have several speakers. If you have not filled out a speaker card, if you could please fill out the card before you speak.

And what we're going to do, I guess we're going to have a staff presentation.

MS. JONES-TAYLOR: Yes, are you ready?

You have before you a huge file and information that was sent to you prior to regarding the Oak to Ninth Street Project. And Claudia Cappio is the director for that and she certainly is ready to answer any questions and to make a report.

MS. CAPPIO: Thank you, Commissioners and members of the public.

This is a public hearing to allow the public and the Commission to review and comment on the Draft Environmental Impact Report for the Oak to Ninth Project. The key purpose of this meeting is to provide comments on the actual report in front of you which I know is rather intimidating but you've probably only read parts germane to your topic area

and also allow the public to review and comment as well. The purpose of an EIR is an information base, an appropriate and adequate information base in order to determine, identify, and mitigate environmental impacts of the proposed project. With that information base, the public and the decision makers will then be better informed and they must review and comment on the document prior to taking final action on it.

The project entails residential, commercial, and recreational uses on a 64-acre site called the Oak to Ninth site. It's in the City's Estuary Policy Plan as a specific area for change and redevelopment and also the inclusion of new park and recreational areas. The PRAC by local ordinance is charged with reviewing new recreational facilities and making recommendations to the Planning Commission.

So in terms of your role here, we're bringing you the Environmental Impact Report in an effort to introduce you to the project and then so you're better ready to make actual recommendations. You don't have to do that today, but you do have to do that in the future.

At this time again we request, our practice is to request to take public testimony, give public

comments to me and to the developer. And, thereafter, all the comments that are received will be compiled in the Final Environmental Impact Report and that will, that report will be brought back to you in time for you to make recommendations and spot any other comments you wish to make to the Planning Commission during consideration of the actual project.

With that, I'd like to introduce Michael Ghielmetti of Signature Properties. He is one of the development team.

CHAIR WEBB: So what we will do is that we will have the developer give a 10-minute presentation, open it up to the public, and then we'll give the developer up to 10 minutes to respond.

And again, just to remind everyone, if you want to speak at today's, at today's hearing including the developer to sign a speaker card and give that to Mary.

MR. GHIELMETTI: Is this working?

CHAIR WEBB: It's working fine.

MR. GHIELMETTI: So I just want to introduce myself, Mr. Chair, members of the Commission. I'm Michael Ghielmetti with Signature Properties.

We are a mixed use and residential developer. We've done several projects in Oakland. We're here

today to talk to you about the Oak to Ninth area. I don't know if everyone can see.

A little about the project. We got involved in it about 2001, so we have been working with the Port of Oakland for about four years, owned by the Port. The Port is selling it to us and -- well, the project area is, the project area is this roughly 64 acres with the exception of an area in the middle of the Fifth Avenue area. As you can see, the site is fairly well isolated from most of the city (indicating). It is by the freeway, the train tracks, et cetera. The site is very contaminated so we had a distinct challenge here.

Maybe we can do a couple other.

These are pictures taken from various vantage points. This again is the shoreline conditions.

And the next one. This is our slide that somehow got whited out, but we have parkland on about 28 acres of the site; and Boris Bramov from ROMA is going to talk more about the parks. I know that's the emphasis for today.

But just to give you a little update on the rest of it. There's 3100 units. We're proposing roughly 200,000 square feet of retail commercial uses and a little under 200 marina slips in this 28-acre

park. We saw it as our task not only to obviously make a financially viable project but to make a project that could contribute to Oakland's welfare by cleaning up the contaminated site, by generating the typical amount of tax revenue, by market rating affordable housing, and being able to produce jobs for the city.

The parks -- here again Boris will get into -- these are indicative of some of the shapes and scale of the parks. And this is what we have in mind for retail, wide sidewalks, some these are Oak to Ninth. That's the Market Hall in Oakland. Some of these are from various cities around California and the West Coast. We want to create these dynamic residential districts, so that all the sidewalks feel friendly with front doors or retail that face them so you don't have dead streets.

Again, wide sidewalks, street tree programs. This is a big park in Vancouver that is separated by a street from some very tall residential buildings.

And again, the (inaudible) smart growth density being able to serve the site with transit, being able to be close to transit and jobs and other retail like Jack London Square helps support its development. That was a goal of ours.

And I'll turn it over to Boris in half a second.

One other thing I did want to point out is we have been working with the public for a little over four years now. I've met with dozens of community groups, business groups, civic groups, and neighborhood associations around Oakland to try and make this project what it is today. And we've learned a lot in the process and met a lot of nice people.

So Boris is going to talk about the parks in a little bit more detail, then obviously we'll be available after to answer questions.

CHAIR WEBB: And for the benefit of the court reporter, if you could state your name and spell your name and speak slowly and distinctly, that would be appreciated.

MR. BRAMOV: My name's Boris Bramov, B-o-r-i-s, B-r-a-m-o-v. I did a pretty good job of spelling that. And I'm president of ROMA Decision Group.

One of the things -- I'm going to try to do this really fairly quickly so that we keep to our time frame. But I did want to point out a few of the things that we have learned as a context for the Oak to Ninth area.

We spent about 25 years working on the transformation of urban waterfronts and the real issue is how do we make them a sustainable place, how do we bring activity? How do we reconnect them back to the City?

A great example of one that we worked on almost 20 some years ago was the Northeast waterfront. This industrial area here as it is today. And we learned a lot about what it really takes. That balance between activities and the right scale of open space in order to really make them a meaningful part of the city that serves the community.

I know in San Francisco they really didn't want this piece of downtown waterfront to just be a tourist attraction. They wanted it to be part of the community as a whole.

Go on.

You know, similarly in smaller scale, this is Suisun up in the Delta, the transformation of this area. And again, making it work for that community. And this is one of the parks that we built right on the waterfront area and we cleaned that entire shoreline.

Next one.

Portland South Downtown Waterfront, an old

plywood factory. Here it is today. And with a significant amount of open space directly adjacent that work in a whole variety of ways. Similar sizes of open space, by the way, that we're talking about here in the Oak to Ninth area.

Next one.

And Vancouver. Much higher density. Again, this was a rail yard when we began the master plan. And here it is being built today, still a few high-rises to go.

Wait a second. Oh, there it is. Sorry. Still a few high-rises to go. So really, you know, major open space area in conjunction with a significant amount of residential development that goes with it.

Next one, please.

Let's look at, let's look at Oak to Ninth very quickly. One of the big things we found here right from the beginning and we looked at this as part of the estuary plan and then subsequently continuing on with Michael and his group and the Port to develop a plan. But we've got a very significant barrier here, very significant barrier that's not going to go away (indicating).

So one of the major considerations is how do

we reconnect Oakland to the estuary? How do we create enough activities there? How do we create open space that's sustainable, you know, that can be maintained over a period of time feeling comfortable, safe, usable, that doesn't become a drain onto the community. And our feeling right from the beginning was that we needed to have a new neighborhood here in order to bring Oakland to the waterfront and reconnect it.

One of the problems at the time of the Estuary Plan was that there was not a desire to look at the constraints of the Tidelands Trust which was on this property, which subsequently has been agreed to be looked at. And therefore, the opportunity for making that neighborhood happen has been opened up since the development of that plan.

Next one.

So part of what we really work very hard is how do we create a viable neighborhood here that brings Oakland to the waterfront and then puts enough activity so that the open spaces that we create here, which is a significant goal of the area, can be really successful and meaningful to the city.

Next one.

Very quickly. Again, I'm sorry, all the

slides seem to get washed out in this environment of life. But one of the things right from the beginning was to create a structure for all of the public ways that would enhance both views to the waterfront and access to the waterfront area.

So one of the first things you do in making a neighborhood that really improves the accessibility to the estuary is to really connect it in a variety of ways. But not only connect it from the point of view if I'm driving down the Embarcadero I have a view, but really creating the vistas to the waterfront from the areas and not deteriorating those vistas with some of the barriers that already exist here as well. So all streets connect to the waterfront, all streets connect and open up views to the waterfront, and all streets create public access to the public open space along the shoreline.

One of the key things in terms of waterfront open space is, how do you make it enhance aquatic resources and recreational boating? I mean, this is a case of where we want the open space to create an immediacy to the waterfront and the opportunities for recreational use.

The plan very quickly. We move some covered areas, dredges other areas, improves other areas for

boating. So the significant goal is really not only make open space on land, but create the open space and recreational activities associated with the estuary as a whole.

Next one.

So examples, you know, the kind of boating activities that exists here now that can be enhanced even further.

Same thing. Improving the quality of the shoreline. You saw in one of the slides that Michael was showing you of the existing conditions what it's like now. But this plan enhances the entire shoreline in the area and enhances public accessibility at the same time in the waterfront environment and certainly prevent flooding.

So just very quickly some different conditions here a soft green edge that improves the habitat value of that shoreline.

Next one.

Other areas where there might be more of a riffraff edge. And in all of these, which are hard to see on the slide, are the bikeways and trails, the extension of the Bay Trail along the entire edge of the project as a whole.

Next one.

Again, different kinds of conditions along the shoreline.

Next.

Here in Clinton Basin a much more urban edge with a bulkheaded wall really creating a different sense of the waterfront looking directly down to it and to the boating activities. And an example of that kind of condition (indicating). So not only the more natural setting, but also the kind of urban recreational opportunities that Clinton Basin provide.

Next one.

The existing bulkhead wall improved. This is an existing wall improved with public access and shoreline trails along the edge.

Next one.

And even the piles-supported structure of the Ninth Avenue Terminal being used for recreation and open space. And one of the things people ask, well, can you do recreation on a pile-supported structure? Here's an example. Battery Park City. The entire area is on a pile supported structure. Great green and accessible park created that way.

Next.

So, you know, a whole series of open spaces.

We have 28-and-a-half acres approximately of open space here with 20.7 of new open space. The remainder are in the existing Estuary Park, which is also being enhanced and made a part of this area. So you can see each one of these along the area.

Flexible open spaces, more of a natural environment of wetlands that are being restored here. Opportunity for children's play areas, bocce ball, informal gatherings, et cetera, all along the shoreline and more urban experiences right here in Clinton Basin (indicating). You know, this is going to be one of the unique places not only in all the Bay Area, but probably in the world.

Next.

Just some quick examples of what happens when we enhance the recreational experience, that immediacy to the water's edge that is so critical.

Next.

The promenade. Some of these are from Vancouver, these are from other places. But again, enhancing these --

Oops. I forgot to turn off the phone. Sorry about that.

Enhancing the accessibility but also connecting all of these different park areas. Again,

examples of how some of these open spaces -- this would be an example of the kind of open space that might be located closer to the Lake Merritt area.

Next one.

These are examples of the more flexible kind of open spaces. These are all from the Marina Green area, the kinds of activity that could take place in some of these.

We would definitely be connecting to the Bay Trail along the entire shoreline and providing future connections along the Lake Merritt Channel to Lake Merritt itself as those are being developed.

Basically, a program that creates a sustainable and vibrant estuary and brings Oakland to the waterfront, brings activities and a sense of neighborhood to the waterfront and creates the kind of publicly accessible open space that is, enhances the immediacy and the activities along the waterfront.

Thank you.

CHAIR WEBB: All right. Thank you.

Do any Commissioners have questions?

I notice in the plan that you have a, you state that 43 percent of the project is for other than open space and 60 percent is open space. How do you define "open space" and what does that 43 percent

PR-1

comprise? 43 percent open space and proposed project is 43 percent.

MR. GHIELMETTI: The open space I think is 44 percent or probably 44 percent. It was a little over 28 acres, and so that's what --

CHAIR WEBB: I'm sorry?

MR. GHIELMETTI: The Estuary Plan called for more. I think it was closer to 60 percent.

PR-1 cont.

CHAIR WEBB: Okay.

COMMISSIONER MAGID: Do we have some questions now?

CHAIR WEBB: Yeah, the Commissioners have a few questions then we'll open it up.

Commissioner Abad.

COMMISSIONER ABAD: Yeah. I'm not sure whether you want to just kind of list these and if they aren't asked again then we pick them up again, but I've got quite a few questions.

Number one is the park-maintenance issue and, you know, how that's going to be maintained. Are there going to be condo or residential fees, you know, a lot of times these are going to be supposedly public, you know, areas. However, when you build these kind of residential there's usually some kind of a fee that goes along with the upkeep of the

PR-2

area. You know, who -- really is this just strictly a private developer who's benefiting by the sales or whatever's happening with these residences? PR-2 cont.

Parking spaces, you know, for 3100 spaces of 200,000, you know, feet of retail they plan to provide parking. Is this going to infringe upon existing recreational facilities there? PR-3

And whether there's been any thought about recreational sitters since you're going to have 28 acres of recreational space. Is there going to be a place where something can happen with that? What's going to happen with park patrol? If these are all public park areas, will there be additional park patrol? PR-4

CHAIR WEBB: I don't want to go through these questions one at a time. Why don't we do this?

COMMISSIONER ABAD: That's why I thought I'd give them all to him.

CHAIR WEBB: I think some of these, some of these questions are going to be raised by members of the public.

COMMISSIONER ABAD: Exactly. That's why I'm just going through testimony and I'm not asking him for an answer now. But if anything is not answered in the end, I'd like to make sure we have them answered.

MR. GHIELMETTI: Would you like me to wait?

COMMISSIONER ABAD: Yeah. The last one thing is just, you know, if you are bringing in 3,000 residential units, you're going to need to have a school in that area because there are not schools in that area to absorb 1500 to 3000 students. PR-5

So anyway, that's my list.

MR. GHIELMETTI: What's the academics plan to do.

CHAIR WEBB: Why don't we do this? Why don't we open it up to public comment and then if the Commissioners have any specific questions.

What we're going to do -- again, if you have not filled in a speaker card and you want to have something to say, please do so and turn that in to Mary.

We're going to just start with Keith Miller. And each speaker is going to be limited to two minutes. So we have Keith Miller, Helen Hutchison, and Sandy Threlfall.

MR. MILLER: Should I use this?

CHAIR WEBB: Yes.

MR. MILLER: Keith Miller, K-e-i-t-h, M-i-l-l-e-r.

My name is Keith Miller. I'm the president PR-6

of California Canoe and Kayak, Jack London Square. I'm a resident of Oakland and 90-plus percent of my employees live in Oakland. I'm on the board of directors of the Jack London Aquatic Center, although I don't speak for the Board. I have a degree in Recreation. I'm a big parks fan. My company over the last 12 years has raised and donated close to $20,000 and donated to Friends of Oakland Parks and Rec and that money has gone to the Lake Merritt and day camp programs and also to JLAC.

When I first heard about this project years ago, I wrote a frightening e-mail to several people scarily thinking that the Port of Oakland was selling off our beloved Aquatic Center and our Aquatic Center was going to disappear under this huge development. PR-6 cont.

Since then I'm liking this project more and more. I need to know, I need to learn more about it and listen to more comments. But from a business perspective, you know, I have a vested interest in what goes on on the waterfront. Having a kayak shop without water access is like having an airplane shop without a runway nearby.

So I'm liking what I see, I like the number of people that are going to be there. From what I'm seeing, it's a very thoughtful project. It

started out with I believe less than 18 acres of open space and now it has upward of 28 acres, so I'm, I'm liking what I see. PR-6 cont.

And I'll stop my comments here. There will be plenty of time later.

CHAIR WEBB: Okay. Thank you.

Helen Hutchison.

MS. HUTCHISON: I'm Helen Hutchison, it's H-e-l-e-n, H-u-t-c-h-i-s-o-n. And I am president of the League of Women Voters of Oakland.

The League is preparing a formal response to the Draft EIR. But for today I would just have the statement of position and a series of questions. The first is just a statement of position.

The League supports full compliance with the Estuary Policy Plan. The Estuary Policy Plan was developed through a process that included lengthy public decision, debate, and compromise with representation from developers as well as the community at large and that process should be respected. PR-7

And then I have a series of questions that because this is, we're focusing on parks today focus on the parks phase. And so we ask when you evaluate this proposal you pay attention to some of these

questions, some of which you've already raised. Just the total amount of open space in the area as compared to what was recommended there, what was stated in the Estuary Policy Plan.

Parking.

Visual access to the open space, the varieties of usage within the development and how it balances within that development and also with the rest of the waterfront. The ability of homeowners around the park to limit public access or use of that land. The Estuary Policy Plan calls for the development in Oak to Ninth area to create a strong tie between Lake Merritt and the estuary. And then we'll just ask, does this plan facilitate that?

Finally, we request that you look at the maintenance issues. If homeowners are paying for the maintenance, how do we insure that the full public has access to that land over the long-term? And does the guarantee of maintenance costs include maintenance for that wooden pier over the long haul?

Thanks very much.

PR-7 cont.

CHAIR WEBB: Thank you.

We have Sandy Threlfall. And then after that we're going to have John Sutter, Marina Carlson, and Margaret Elizares.

MS. THRELFALL: Good afternoon, Commissioners. Thank you for this opportunity to speak. My name is Sandra, S-a-n-d-r-a, Threlfall, T-h-r-e-l-f, as in Frank, a-l-l. I am the executive director of Waterfront Action and part of our mission is support of the Estuary Policy Plan.

PR-8

I would like to make clear that the Waterfront Action does not have a position on housing. We are looking at it from a land use point of view, open space, access to the water. So we are in support of the original 41.5 acres that the Estuary Plan set up as opposed to the 28.4 that is offered in the Oakland Harbor Partners.

There are a couple of things I would like to share with you, given that you are park commissioners.

Over 120 years ago Frederick Wall Homestead made a proposal for a chain of parks throughout the City of Oakland. And as a result, Lake Merritt, which is one of our true gems, was realized. One of the real draws of Lake Merritt is that it's easily visible. You can drive by, you can see it, you can see people there, people feel safe there because of its visibility.

PR-9

Later in the 1900s Mayor Mott engaged planner

Charles Mulford Robinson to a plan of the city. And his comment was that residents had no access to their glorious waterfront and part of that, speaking about planner, is Estuary Park to me is a very good example of a park that does not work. It's on the west side of the channel, it has a large concrete building, Jethro Park and Shop or something. Anyway, you can't see it so people don't use it. PR-9 cont.

This park was designed by Lawrence Halpern. I mean, where are the whistles and bows? People need to see open space in order to know that it belongs to them. When we put impediment into their visual landscape then it privatizes the plan by default.

Thank you.

CHAIR WEBB: Thank you.

John Sutter.

MR. SUTTER: I'm going to distribute some maps.

My name is John Sutter. I'm the member of the Board of the East Bay Regional Park District representing most of Oakland on the Park District Board, but I come here as an Oakland citizen. PR-10

I have been concerned about the waterfront for many years. This is our property. One thing that needs to be emphasized. This is our public land and

this land was acquired only after a long, bitter fight. The first layer of the City of Oakland basically robbed the waterfront and it took 60 years of litigation to get it back. The Port of Oakland has been operating it since then, but this is a program to privatize our waterfront and I'm not saying that's a bad thing to do on the part of Oakland, but this is our one chance and by golly we better do it right.

PR-10 cont.

So I hope you take the time it needs to look at this important project. It may be the most important thing you do when you serve on the PRAC. This is our last opportunity on the waterfront.

Now others have looked at it. The Estuary Policy Plan was developed by the City after a two-year study. There was a 27-member advisory committee. This City spent a million dollars on this plan. It was adopted by the Planning Commission and by the City Council. It is part of the General Plan. It was also adopted by the Port.

PR-11

It calls for a lot more open space than the developer's plan provides for. In fact, there's about a 40-percent reduction of the new open space which was called for by the Estuary Policy Plan as compared to this developer. If you look at that map, that will show you, the shaded areas show you the open space

which was provided by the Estuary Policy Plan. It opened up Estuary Park. Sandy Threlfall has just explained how it's a stealth park, you can't see it from the Embarcadero. The policy plan would open it up by removing the big warehouse there. The developer's plan, however, would keep it a stealth park by building condos where the warehouse is now located.

PR-11 cont.

Now, then if you look on the other side of the Lake Merritt Channel, there is the, what is shown as the open meadow. All of the property west of Fifth Avenue was to be open space. Under the developer's plan there was going to be condos as part of that space. At the Ninth Avenue Terminal there was going to be an 11-acre Crescent Park. That disappears in the waterfront, in the developer's park.

And what the developer proposes is to demolish the Ninth Avenue Terminal and put a park on top of it. Well that, of course, puts park advocates in a conflict position with the preservationists, because the preservationists want to preserve the Ninth Avenue Terminal and if they prevail there goes maybe 2 to 4 more acres of parkland.

PR-12

So you are dealing with a great loss of the potential and I think you have to look at what can

PR-13

we do? What is potential for this area? And I hope that you take the time to study it, to tour it, and maybe to have additional meetings so we can have additional input. PR-13 cont.

And I would like to show you what finally --

CHAIR WEBB: Quickly.

MR. SUTTER: A map. I don't have a fancy draft, but these show you the -- the yellow on this map shows you the areas that were open space under the Estuary Policy Plan but disappeared and become condos or some other buildings under the developer's plan. PR-14

I'm not saying that there's anything wrong with some developer or anything wrong with Signature Properties, but we have a tremendous opportunity here and let's not screw it up.

And I just want to say something about some organizations who have looked at this. The, the DD Coalition, which is all the organizations that were involved in Measure DD, have had excessive meetings on this. They've passed a motion which expressed concern about the loss of open space. It also expressed support of the idea of public/private partnerships. The Sierra Club you'll probably hear from and a number of other environmental organizations have said PR-15

PR-15 cont.

don't let us lose our open space.

CHAIR WEBB: All right. Thank you.

And for the record, Sutter is S-u-t-t-e-r.

Again, when you come up to speak, please spell your name for the court reporter.

MR. SUTTER: Sorry.

CHAIR WEBB: Marina.

MS. CARLSON: Yes, my name is Marina Carlson, M-a-r-i-n-a, Carlson, C-a-r-l-s-o-n. I'm a resident of Oakland and live on Tenth Avenue not far from the proposed Oak to Ninth mixed-use development. The people of Oakland who work long and hard to bring good planning policies to Oakland.

Our open-space plan and the land-use plan, both which have received awards, and our Estuary Plan specifically call for our public shoreline to be made more accessible to the neighborhoods. It was a major accomplishment to pass those plans and to bring consensus around the need of Oakland.

PR-16

We have also passed by a wide margin the Measure DD money in order to pay to clean up and improve the estuary area. The people of Oakland did this for themselves. It was not done to strip away our public shore and sell it off for private use. I feel betrayed.

I urge you to vote today and advise the Planning Commission to choose the no-project alternative. At least and until we have implemented better accessibility for the public from the neighborhood. Right now the project gives us some leftover space. The project proposes a high rise that will block views of the water's edge.

We should not alter our well thought out General Plan just because a private developer wants to grab the views to condos. I'm very upset that this document would try to pit preservations against open-space advocates. We are one and the same. Advise the Planning Commission to retain the terminal and dock. The highest and best use of the terminal is industrial and could be a jobs-generator. It would be foolish to tear it down. Require an adaptive reuse study before any demolition takes place. PR-17

I am sure that some of you have heard many complaints from the people living near Estuary Park. They think of the park as their private yard space. We should not repeat the mistakes of the past. Have the EIR include any records of complaints to the City after an event at the park or complaints received of excessive noise from trains.

I'd also like to draw your attention to PR-18

the section of the document entitled Geologic Hazards. Erosion, settlement, imperfection are all important issues that cannot be adequately mitigated. What this document infers is that the City Building Department would have standard and code requirements that would protect future residents from such hazards.
Would this make the City liable in the event we pull out?

The streets lightings and utility would all be damaged when there was a seismic event. The City would be responsible for repairing the infrastructure. How much would this cost? Would we depend on FEMA for help? Will the developer take on that responsibility? The cure for this problems is vague. PR-18 cont.

The DEIR states that the developer will do some studies and extra foundation work to make these buildings sound. Would the buildings be built to withstand the seismic event and remain habitable, or are the standards simply to keep the buildings from total collapse and save lives?

We've gone to a meet -- I've gone to meetings on a new Bay Bridge -- just one more sentence. I've gone to meetings on the new Bay Bridge and have watched the engineers struggle with the engineering problems associated with building on fill and bay mud

that is 100 feet deep. Do we have any information on the depth of mud in this location?

PR-18 cont.

Please protect the public trust, protect the public from a private taking of these public lands.

Thank you.

CHAIR WEBB: Thank you.

Margaret Elizares. And then after her we have Joyce Roy, Caroline Kim, and Charles Weber.

MS. ELIZARES: My name is Margaret Elizares, M-a-r-g-a-r-e-t, E-l-i-z-a-r-e-s. I'm a retired court reporter.

I live out by the Leona Quarry and I invite everyone to come out there and take a look at what's being done there and ask yourself how long it's going to be before that whole thing comes down in the deluge or in an earthquake. That's really good planning. Thank you, Ms. Cappio, our neighbors love you.

PR-19

This Oak to Ninth project is a questionable legality, a specific plan is required and should be done as promised. This project does not comply with the General Plan and the General Plan amendment must be done and it shouldn't be folded into the EIR, CEQA process.

I worked as a volunteer on the Estuary Policy

Plan, spent many hours. The Port and City hired people to thwart the public interest at every turn. Our dream has turned into this nightmare. PR-19 cont.

I will make written comments on the EIR specifically, but for today, I want to say there's insufficient open space, there's lousy access to this area only through narrow Oak Street and Ninth Avenue. There is insufficient parking and no public transit. This is way too dense and too tall. Any good geologist will tell you not to build dense and high housing on bay fill muds. The next big earthquake will liquify those soils, snapping piles, and more dangerously gas maintenance bringing conflagration. PR-20

Oakland has wonderful neighborhoods. We don't need another neighborhood down there.

Thank you.

CHAIR WEBB: Joyce Roy.

MS. ROY: Joyce Roy, J-o-y-c-e, R-o-y. Probably one of the easier ones.

I'm speaking on behalf of the Sierra Club. And I passed this out to you, so I don't think I'll read the whole thing except to make a point. PR-21

Sierra Club supports the open-space aspect of the Estuary Policy Plan that was adopted by the City of Oakland after years of public input and they

are concerned that this project does not meet it. The main purpose of the plan is to provide for publicly oriented activity and enhance public access. This is a major destination park for the whole city. It's a place where large events should take place. PR-21 cont.

And now I'll put on my Oakland Heritage Alliance hat and speak for them.

We are very concerned particularly about the Ninth Avenue Terminal and it's not true that the EPP, the Estuary Policy Plan said they could just be demolished. That's where the graphics are very important. In your graphics you see it gone, but in the text that says that is yet to be studied.

So the Port and the City should investigate the feasibility of keeping and reusing the building or portions thereof. A specific plan for the entire district should be initiated prior to development. PR-22

Now, this, you know, as it's proposed here, this would be torn down and we would have about 3- to 4-acres of open space on the piling. I don't know whether it would be Astroturf on top of that or what. This would be much more useful if it became a Fort Mason type use. And in fact, this was where I think the Sierra Club would be happy we should have solar panels on the top of that. It could be really

well used.

And the, the BCDC and the State Lands Commissions have indicated that, because it's a historic building, uses that are normally not, could not be located at this site could be located there. So I, you know, this is I think an important resource we don't want to lose. Public resource.

PR-22 cont.

Thank you.

CHAIR WEBB: Thank you.

Caroline Kim.

MS. KIM: Good afternoon. Good afternoon. My name is Caroline, C-a-r-o-l-i-n-e, Kim, K-i-m. And even though I'm a member of numerous groups, I'm here today as a private individual and resident of Oakland.

I have several points first and most of them have been made by other people more eloquently than I'm going to do.

The 3100-unit project doesn't meet the Estuary Plan and is contrary to what Signature presented for its RFP. The correct process has not been followed.

PR-23

Two, the developer is not exactly up front in presenting the project. I've heard him present it before and on the KPFA Morning Show of October 6th, Michael Ghielmetti said the project is near public

transportation. At other meetings Michael has downplayed or not mentioned the traffic problems from the railroad which comes, the train comes maybe 2 to 4 times a day can stop traffic for 20 minutes at a time or the limited access to the roads and freeway and impact on the residents and businesses of Fifth Avenue.

Signature's proposal to tear down most of an end-use historic building and put the last bulk brake cargo in Oakland out of business seems contrary to Oakland's wanting to help small business.

The Signature want to turn part of that site into a park, but the building is tangentially over water and in the long-term this site is not good for a park.

PR-23 cont.

This development will not help Jack London Square as the developer claims. There is only minor consideration for wildlife and habitat, and the developer seems to be playing the citizens by offering the promise of affordable housing.

The development with three high-rises would bring in perhaps 6,000 people. The City of Oakland does not have the public schools, transportation, or infrastructure to accommodate them. The development has no design features that make it fit into the

waterfront. It could be put anywhere.

The people of Oakland worked hard to prepare the Estuary Plan. Community groups such as COM work to create a wonderful street reconfiguration around the 12th Street dam that added land to Lakeside Park. This plan was adopted for Measure DD and I suggest that Signature Properties, because of the City's failure to follow the correct process, resubmit a proposal that is in line with the Estuary Policy Plan and work in conjunction with COM to create something beautiful.

PR-23 cont.

It's time the City of Oakland started taking the needs of its residents into consideration and listening to our voices.

Thank you.

CHAIR WEBB: Thank you.

We have Charles Weber and then after him Steve Lowe. And that's the last speaker we have signed up.

If you wish to speak, please feel out a speaker card and give that to Mary Perisic.

MR. WEBER: Ladies and gentlemen, good afternoon. My name is Charles Weber, C-h-a-r-l-e-s, W-e-b-e-r.

I'm here to do a couple of things. (A), to

PR-24

support Alternate Plan 3, which reuses all of Ninth Avenue Terminal and greatly reduces the number of units.

The thing about Ninth Avenue Terminal it could be our most specific use of having a Fort Mason of the East Bay. We have been talking about that now for about three years and it's been kind of brushed under the carpet, put off and on. And in tearing it down we lose the ability to maintain the pier underneath the structure. But if you keep it, it will provide an income stream. The developer wants to tear it down and he expects the condo association to maintain that pier. And it is the kind of thing if you have to do measured structures, you're talking about millions of dollars. So it will either fall down or it will be reverted back to the City to maintain it. PR-24 cont.

Also, the developer says he is not going to take possession of the parks. That's going to be retained by the Port of Oakland. Including the Estuary Park, the Aquatic Center. And they seem to be using that Aquatic Center and Estuary Park as all part of their parkland that they use as their acreage. PR-25

In the original proposal they asked to purchase, if you look at the original units they are PR-26

buying everything and they will maintain possession of all of the land, take fee-simple right to all of the land. After the Tidelands Trust issue came up, the Port and CEDA said well, we've move things around so that the land under the parks will take all the, as much as possible the Tidelands Trust, but they say we'll maintain and keep it.

But now it's gotten, it's gotten mushy. In the proposals you see all this and nothing is clear. Are they going to own it? Are they going to manage it? And if they're going to manage it, are they going to pay for it out of condo association? And if they do, it will be their dog walks. It will not be -- it will not be in any way welcoming to the City. Any of this. It will be their private dog-walk parks, no matter what they tell you.

PR-26 cont.

We had a meeting the other night, a person from San Francisco who's a planner stepped up and talked about this. The South of Market the same thing you have these and it doesn't turn into friendly. It turns into private parks for the people who live there. And this will be a travesty to lose all this.

PR-27

I have lots of other things that I will address in the EIR, but thank you for your time.

I am, by the way, from the Fifth Avenue

Institute. We are a 501(3)(c). We're the people who sued the City and the Port and won.

CHAIR WEBB: Thank you.

Steve Lowe.

MR. LOWE: Steve Lowe, L-o-w-e.

The trouble with going last is that everybody steals all your lines. So I don't know what to say here. I agree a lot about the idea of --

MR. TAYLOR: Use the handheld, please.

THE WITNESS: Sorry. L o-w-e.

I agree with all the things about Fort Mason with the East Bay. I think that's a valuable use that we ought to take a look at. The building is unique in the East Bay and probably the last thing like it that we could stage an academic development kind of strategy by using that as the center of this project.

There is another building that we haven't talked about and it's the torpedo factory in Alexandria, Virginia which can be downloaded. I don't have with me the website information, but it's I think on the, on the Heritage Alliance website. It might be. So that --

PR-28

CHAIR WEBB: Naomi Schiff [phonetic sp] has all that.

MR. LOWE: Okay. So anyway, that is

something to take a look at. It is amazing when you do download it that the, the facade of the building looks a whole lot like the Ninth Avenue Terminal, the torpedo factory. I believe that the visitors to the torpedo factory on any given weekend are a tremendous amount of people who have energized Alexandria, which was an industrial town. It is kind of nowhere. Maybe Judge Sutter knows more about that, because he's also been there.

PR-28 cont.

So anyway, that's about all I was going to say. We need a study, a reuse study to take a look at whether or not this terminal should be kept.

And thank you very much.

CHAIR WEBB: Okay. That is the final speaker. What I'm going to do is I did mention that I would give the developer up to 10 minutes to respond. However, since they have, they went over their initial 10 minutes, I'm going to limit this to 5 minutes' response. And then we will open it up to the specific questions from the Commissioners to ask of the developer.

Do you want to go 5 minutes?

MR. GHIELMETTI: Sure.

Is this on?

Just want to make sure I understand. So you

want me to make a response to the comments, or do you want me to take questions from you?

CHAIR WEBB: If you want to respond to the specific, respond to the comments of the audience and then we'll open up for questions from the Commissioners.

MR. GHIELMETTI: There are too many comments.

Maybe we'll just take questions.

MS. CAPPIO: You're going to get a response to all of that.

MR. GHIELMETTI: I think some of it may come from questions anyway, so I'll be happy to just take questions.

CHAIR WEBB: That's fine.

Commissioner Abad had some specific questions.

COMMISSIONER ABAD: What I also brought up was the park-maintenance issue and how the open space that you were intending on having is going to be maintained.

MR. GHIELMETTI: Well, that's a great question. And just a half of a step back from that, we are anticipating to pay for this open space versus taking any city money, DD money, or anything like that. There was some 20-some-odd million dollars

PR-29

allocated to this site that we said we don't want, or don't need to use until -- so we'll go ahead and solve it ourselves. The second thing we said was we will maintain it ourselves through the community facility district, community service district which basically goes on your tax bill like an assessment district basically, or through homeowners association dues and whatnot.

The 3100 units will be able to support this amount of open space. And we will enter into a maintenance agreement with the City to make sure that it's maintained at a certain standard.

PR-29 cont.

And so to clarify that the open space will need to be owned by the City or the Port. It's to be determined. But will be owned by the public, will be maintained by our project and installed by our project, maintained by our project but managed by either, you know, the Oakland Parks and Rec or whatnot so that people can, that our people can't limit hours of when they're open or what type of activity can be allowed there.

COMMISSIONER ABAD: Could I? Could you explain a little bit of what you just said? I heard assessment district in there, so although you are intending on being responsible for maintenance, you're

intending on taking money in from city and --

MR. GHIELMETTI: Just from this area. We'd set up a specific community service or community facilities district to this area. It's a quite common practice in California.

COMMISSIONER ABAD: And once the public is paying, once your tenants or, you know, residents are paying for this, is there going to be, do you see an expectation on their part as they're paying for this area therefore it's their area?

MR. GHIELMETTI: Well, several things. I think we showed some examples of other areas. I mean, Portland, Vancouver, et cetera, where these types of parks are in close proximity to residents' use, Marina Green is another example. They're not as tall as we have but there's a residential neighborhood right next door and there's lots of activity that happen there.

PR-29 cont.

I live in San Francisco near where they start the Bay to Breakers. I'm aware of that every year. They have parades and festivals there all the time.

COMMISSIONER ABAD: Are they paying an assessment district in your area?

MR. GHIELMETTI: No, they're not. But our people would here and they would know they were public

parks. It would be fully disclosed in their deed, recorded in their deed and on file at the City so that everyone would know they're paying for park maintenance. They know up front before they sign a contract for a rental unit here that they would be city parks. And we would talk about up front in our marketing process the various events that happen.

Like I said, over in the Blues Festival in Portland in the same type of park configuration.

PR-29 cont.

CHAIR WEBB: Commissioner Ricards.

We'll just go around.

COMMISSIONER RICARDS: You expressed one of your goals was to overcome the barriers of the dividing freeway and the railroad. Yet in your proposal I see no sort of other connections, pedestrian connections particularly, that would, you know, facilitate people from Lake Merritt getting to what is called regional recreational space of the waterfront here.

PR-30

Can you explain why you are not including an over-the-railroad connection to Lake Merritt in your proposal? After all, this is a substantial development proposal.

MR. GHIELMETTI: We are basically providing connections to the property boundary. Beyond that,

for one, we don't control the land. In cases there, the City doesn't even control the land. Union Pacific Railroad has this piece, Caltrans has this piece. I shouldn't be a surgeon because I can't get this straight. East Bay Mud has lines here, Union Pacific has lines here. The City and Laney College own these pieces in here (indicating). So I can't force someone to provide access, for one. But the other thing is there's engineering issues.

First of all, that freeway is undergoing a retrofit plan right now and will be somewhere between 25 and 30 feet taller than it is now. That construction project has been slated to start every year for the last three or four, but now we're told it will start next year.

PR-30 cont.

So the pure logistics to make an ADA-complaint ramp, you know, you'd have to start way over here and you'd have to end up way over here by the time you made that work. And it's tens of millions of dollars to do what I know the City had been planning on doing through it's Measure DD efforts was improving under the freeway in these areas.

MS. CAPPIO: It's being designed right now?

MR. GHIELMETTI: It's being designed right now, so...

MR. RICARDS: But it stops short, I guess, of getting to your property. And it just seems to me that it's only fair that the request be made to the freeway, to the East Bay Mud, to Laney College that some kind of joint effort or contribution of funds go towards making that happen and these buildings have to bridge, for example. I would like to encourage those pedestrian connections along the Lake Merritt Channel. PR-30 cont.

MR. GHIELMETTI: Okay.

Was there any questions?

COMMISSIONER McCLURE: Can I ask two questions or do we only get one?

CHAIR WEBB: You can ask two questions.

COMMISSIONER McCLURE: The first question a lot of people expressed a lot of concern about parking. I wasn't really sure if it was for residents there or people coming there. And I just wondered how you can address parking of people who live here and people coming to these public areas? PR-31

MR. GHIELMETTI: I don't think there's a differentiation. I think there's just a concern overall of parking. All the streets will be public streets which there will be no gates, publicly owned, publicly maintained streets, and they'll be markings

along each one of the streets. Parallel parking in some cases. In certain areas where we have more intensive use like some of the retail there will be diagonal parking. And I pointed out like Lakeshore that type of parking allows for more parking.

Last one. More intensive uses like a program for children's park. We have a little parking lot near there next to the portion of Ninth Avenue Terminal that we proposed to save where we would like to put a maritime museum. There's extra parking there, et cetera. We also have structured parking in, actually, that's a bigger one in this building here because we plan on having retail down there. And we've been working with Caltrans for the notion of being able to do parking underneath the freeway. Again, like they do by the Farmers Market and Lakeshore on Saturdays.

PR-31 cont.

And all the parking that we have in there was minimum parking. There weren't maximum. And so each one of the parking, each one of the residential buildings will have parking within the podium unit.

We'll, I'm sure, work with BCDC and the City to make sure that certain amounts of that parking are say two-hour only or something like that so people can't use them overall. We can work on a parking

program for meters or zones, et cetera.

COMMISSIONER McCLURE: It's a code? It's not up to Signature to decide how many spaces? Is it code-driven?

MR. GHIELMETTI: There's a minimum code and we exceed the minimum code.

COMMISSIONER McCLURE: My second question, I'm similarly concerned about the seismic. That's not something you have either, in terms of the seismic protection of the building and foundation, that's also a code driven?

MR. GHIELMETTI: That's a code. UBC, is it unified, Uniform, excuse me, Building Code and --

PR-31 cont.

COMMISSIONER McCLURE: That exists anywhere in California?

MR. GHIELMETTI: Anywhere in California. Quite frankly, there are large sections of California for instance Mission Bay, that's a huge development in San Francisco that is all built on conditions that are similar or worse than this.

COMMISSIONER ABAD: Can I just clarify on the parking?

CHAIR WEBB: Yeah.

COMMISSIONER ABAD: What I just kind of heard you say, maybe I'm wrong, is that there is going to be

no unit parking, that you're going to rely on street parking?

MR. GHIELMETTI: No, each one of the buildings will have parking within the building, so all the residents of the individual buildings will have parking within that building. They drive up, push their clicker, opens up, and they go inside the building.

COMMISSIONER ABAD: It will be like a parking garage at the bottom?

MR. GHIELMETTI: Yes, that's exactly right.

COMMISSIONER ABAD: So how many, you're planning on, what, one space per --

PR-31 cont.

MR. GHIELMETTI: A minimum of one per unit.

COMMISSIONER ABAD: How does that work, a minimum of one per unit?

MR. GHIELMETTI: Well, within one unit you get one and a half. You could get one and a half, you could get two, depending on what the market accepts. In our experience in various developments in Oakland and San Francisco of similar size and scale, similar unit type, that's been a sufficient amount.

We're working with A.C. Transit on bus service to the area, we are not that far, BART is right here (indicating) and our project -- I mean, at

this point it's 8 blocks and, you know, it's anywhere from 8 to 16 blocks.

COMMISSIONER TAYLOR: Long blocks.

MR. GHIELMETTI: We also are working on with private shuttle service between us and Jack London Square and BART and Amtrak. So we're working on kind of a multimodal transit plan.

PR-31 cont.

COMMISSIONER MAGID: Two questions. The first question is what BCDC review has taken place and what still is pending and what kind of comment you've gotten from BCDC staff.

PR-32

The second question very specific to the Aquatic Center. We heard from some of the public comment concerns about the Aquatic Center and I understand that it's something like 6 of the 28 acres is already the existing Aquatic Center.

What changes do you propose to make to that acreage or the immediate adjacent acreage of the Aquatic Center?

Those are my questions.

MR. GHIELMETTI: Okay, so. Let's see, the Aquatic Center is here (indicating). Our plan is to obviously leave it there and we'd like to build a building next door to it where the current Cash and Carry building is. Our building footprint is

PR-33

a smaller footprint than the Cash and Carry footprint is. We'll also have ground-floor retail. We have talked to the Jack London Aquatic Center about letting them expand into a charitable right like a dollar-a-year type thing so they can come in and expand their operations.

So in terms of the footprint of the existing Estuary Park, it wouldn't change. But the existing Estuary Park is in not the best shape and we would propose to rehabilitate it along with the building of the rest of the parks in the rest of the development.

PR-33 cont.

COMMISSIONER ABAD: The other question was about BCDC.

MR. GHIELMETTI: Sorry. BCDC. We took it to BCDC Design Review Commission, I guess they're called, as a courtesy to say: Hey, this project is out there. We have a lot more to do in Oakland. Oakland needs to decide whether it wants the project, whether it wants the uses, whether it wants to amend the General Plan, but we wanted to get some initial thoughts and comments from you. We'll be back after Oakland gives us its blessings. If it doesn't, well, then we won't come back.

resume PR-32

COMMISSIONER MAGID: Have you gotten any feedback from DCBC?

MR. GHIELMETTI: We just had that one hearing and we had comments all over the board, so... Some folks said: Hey, it would be great to allow portions of it to stay industrial. We heard some of the same comments you heard today. Some were more sympathetic to those comments.

I did hear sympathetic to the project is that the critical mass and the density of the project is what helps connect it to the City because it is so isolated. But the people, they were sympathetic, in fairness, to some of the open-space concerns. They wanted to have a better understanding why we align the street various ways, which we said we could bring back and explain to them why we did that.

PR-32 cont.

So there were not really a total comment. There were just kind of cursory ones.

COMMISSIONER MAGID: But ultimately would you have to get the permits from BCDC?

MR. GHIELMETTI: Yes, BCDC. It's contaminated, so. BCDC regional water board more than likely on the clean-up issues. State Lands Commission needs to approve a final exchange that the Port wants to undertake.

MS. CAPPIO: Army Corps.

MR. GHIELMETTI: Army Corps of Engineers

more than likely, and, obviously, the City of Oakland to name a few. PR-32 cont.

CHAIR WEBB: Commissioner Nelson.

COMMISSIONER NELSON: I have a number of questions and comments, so maybe I'll just run through these and you can respond rather than doing them one by one.

MR. GHIELMETTI: Okay.

COMMISSIONER NELSON: My overriding concern is privatizing of public land at public expense. I was on the Commission when we heard many people testify about this plan (indicating). And finally gave, give our recommendation that it be supported, which it was. And it called for 60 percent of this development to be open space. We now see a proposal for 43 percent. Primarily because of the addition of an enormous amount of housing it is not a perfect plan. PR-34

I don't see the justification, other than it obviously is financially better for you guys, for the citizens to accept the delivery of this public asset for private gain without getting a whole lot back in return. I think 43 percent is inadequate, number one.

Number two, I'd like to ask the staff to PR-35

address why no specific plan has been done for this project that was promised. Page 95 of the Estuary Plan it was promised. We've had six years. It should have been done by now. And whatever the conclusion of it was it should have been done and I think it probably would have addressed a lot of the concerns we have now. PR-35 cont.

I also have a question around traffic impacts. One space per unit, two spaces, whatever it is, we're also talking about trying to open this up to the public and having the public get there. It doesn't have good public access. And, frankly, very few people are certainly ever going to walk to this area from a BART station. It's just too darn far and we know there's no A.C. Transit at this point. A lot of people will drive there. PR-36

I don't see how we can accommodate the public given the demand you will have from the housing development. There may be one space per unit but a lot of those people will have two cars. They're going to take whatever public parking there is means the public won't have any access, so I'd like to know how you're going to solve that. Make sure that the public has access.

Third, I'd like to know why you cannot move PR-37

the housing, the building from Estuary Park down to the Ninth Street area. People will walk to Estuary Park. They do now a little bit. Although all kinds of things block it. Part of the addition to this is to have this open to Estuary Park so people will actually get there. I've heard a lot of people say nobody uses it. Some people do. Anybody that's got a kid that plays soccer has probably been there. You go there and you say great views, but it sure feels weird. You can't even tell it's there. And you're not even sure when you go down that street if you're going the right way. You can't even see it.

PR-37 cont.

That encapsulates the next. I'd like to know why you located it there and why not cluster it further towards Ninth, so that this would be more open and more connected to Jack London Square that the City has put so much money into?

The next question is, really has to do for around the whole aspect of visual and view access which I think has been addressed a little bit. But you almost really can't see the waterfront from much of this project. Almost every street or other access is cut off by a building.

Now I'm sure you guys could have designed this in a way that there's visual access, because

people will not go to parks that they can't see. And we know that from many parks in Oakland that have been designed in a spot that was left over from some project by Caltrans or whatever but nobody knows it's there. And then what happens is that inappropriate use of the park and then we have some giant, you know, illegal dumping or crime problem.

If people don't know it's there, the public won't use it and the perceptions will become a reality: that it's a private playground for the homeowners nearby and that's not acceptable to me. This has to have public view, public access, public availability for public land and public parks. Now, that said, so I'd like to know why you can't realign these so that we have that kind of public access?

PR-37 cont.

And finally, and I know you may be surprised at this, I don't have a problem with the idea of greater density than what was called for in some of the earlier discussions in order to maintain better views and better access and more open space. When I look at what was done in Farantino (phonetic sp), some of that actually looks pretty good and it's much higher than what we're talking about here. I'd like to see us preserve and meet that 60-percent requirement for the Estuary Plan.

PR-38

And I also think the City should be reconsidering why this land should be sold instead of being leased like most of what was done by the Embarcadero San Francisco.

PR-39

So those are my questions.

MR. GHIELMETTI: Wow.

COMMISSIONER NELSON: I read the report.

MR. GHIELMETTI: Okay.

COMMISSIONER NELSON: And I was here when we did this whole thing, so I remember what was discussed.

MR. GHIELMETTI: The traffic impacts. Certainly any time you get people in a population there are traffic impacts. And there are traffic impacts in this project. We think we will be successful in getting AC Transit to serve this site before Planning Commission or Council votes on a yeah or nay on an EIR.

resume PR-36

We will commission ourselves to do private shuttle service. And this may get some shuffle, but when you add density like this, it actually reduces traffic because you allow more retail and other types of uses; like, you could have a dentist office could come in here and there's one less trip that someone takes.

You go to Vancouver, which was just voted the most liveable city in the world, you can find a place to park rather easily and there's not as much traffic because it's a denser type of park relation based and more of those services are nearby. That's not exactly what this is going to be but it's more toward it than other portions of Oakland are.

So between the transit that we envision for the site, the shuttle and the parking --

CHAIR WEBB: Would you please turn off all cell phones? Turn it off.

PR-36 cont.

MR. GHIELMETTI: So I lost my train of thought.

Anyway, there are some traffic, there's some existing traffic problems that are bad that this project makes a little worse and there's some ones that are okay that this makes bad.

Hopefully the Planning Commission and Council and this Board here will like the benefit of the project and think they will outweigh some of the negatives with regard to some traffic congestion in that area.

COMMISSIONER NELSON: So what about housing for Estuary Park so Estuary Park really is an open space?

resume PR-37

MR. GHIELMETTI: I think you're referring to the housing we have here (indicating)?

COMMISSIONER NELSON: Yeah.

MR. GHIELMETTI: Well, the reason we put it there was again to help activate that park. Parks, yes, parks want to be seen. There is no question about that. But this park here in Harbor Green, which you saw an aerial view of, is surrounded by high-rises and it is one of the more popular parks in Vancouver because not only does it have a critical mass that makes it feel friendly and inviting but they can actually program it. There's a restaurant here, a children's water park (indicating). These are the types of amenities we want to put down here.

PR-37 cont.

If we wanted this to be private we wouldn't put any amenities down there: dogs park, children's park, maritime museum. All these types of amenities are some of the signals we're sending that this is going to be public. There's going to be a lot of things out here.

Part of our reuse idea for Ninth Avenue Terminal again the community center like the building we're standing in, a maritime museum, and an outdoor area where, you know, a band or something could come play and it could be programmed so people can go watch

it. Just like they're doing here in the blues festival. And this park right here has festivals and there are thousand of units all around it. They have festivals all the time. As a matter of fact it was fenced off here because they had so many festivals they needed to let the grass grow back (indicating).

So we have been to neighborhoods all over the country and Canada and seen this type of stuff before. And we think it's very viable and doable in Oakland. We don't think that these are back yards. We don't think they're privatized. As a matter of fact, they're all separated by streets. If you look at the Bellview area just around the corner we have the residential area, then a street and a then you have

PR-37 cont.

a park with some active uses and some passive uses. Those parks are heavily used, even though there's a lot of residential just across the street. So the separation with the street and the cell phones and the, and the wide, usable space we think will overcome that.

Your direct question with regard to this is we think housing here will make this park better. I go down to that park quite a bit and I have for four years now trying to survey it. Yes, there are

organized soccer games there. But aside from that, there are not a lot of people hanging around there just on a Saturday morning at 10:00 watching the ships go by. It just doesn't happen that much.

COMMISSIONER NELSON: And you think building this building will encourage more people to venture across that no man's land and squeeze themselves down to find this park? The public -- this is to the side off your drawing.

MR. GHIELMETTI: Here (indicating)?

COMMISSIONER NELSON: How are people going to see that that's there? It's behind the building.

PR-37 cont.

MR. GHIELMETTI: Again, how do people -- I don't mean to be argumentative. But how do people discover all these other parks? This is in Fudor's, Tom McCall Park there are high-rises all on the other side of the street of it. Because it's a successful vibrant park, people know it's there. I don't live in the Marina Green. I go there all the time. I don't live near Lake Merritt. I go there all the time.

COMMISSIONER NELSON: Marina Green doesn't have huge high-rises across from it.

CHAIR WEBB: Let's not argue. Let's just --

MR. GHIELMETTI: So your other questions

then?

COMMISSIONER NELSON: View access. People being able to actually see the parks not just the outside, but throughout the whole thing that the views are cut off by the condos.

MR. GHIELMETTI: That's a great question. And there are a couple things that work here. One, you got the underbelly of the freeway here basically not a nice view and you have the freeway experience. We were trying; some will say we didn't do a good job and that's fine.

But we think we tried to do the best job of maximizing visual access in and minimizing visual access out; so you don't smell here and feel the freeway which is there. When you're out on these parks you can enjoy them.

PR-37 cont.

This street is thoroughly public. It would be a wide sidewalk, big street trees, et cetera. And yet it won't be a thoroughfare, a 4-lane or 6-lane thoroughfare that will ruin people's enjoyment of this area.

So we tried to shelter all these streets. I mean, yes, these two here you have to get into the project before you see out. But then all the streets are programmed to look straight through. And you're

going to have good views from here. You have good views through here. You have good views through here, you have good views from here (indicating). Every area doesn't need to have a view.

And the Estuary Plan, even at one- and two-story buildings there, Mr. Sutter is right we didn't have housing here, we didn't have housing here. So this whole area was more open. But they did have buildings along this area (indicating).

And guess what, from the freeway you really can't see the water. And quite frankly, you can't see the water very much from here and here (indicating). You can't see it. The distance is too far. You can see the horizon but you can't even see the water.

PR-37 cont.

So we want to maximize views in and minimize views back. And I appreciate that you think we may or may not have done it well, but that was our intent.

COMMISSIONER NELSON: Remember. The freeway is not the only way that people come to this park. Not only on surface streets like Embarcadero but the other streets going into the heart of the city as well as people who walk and bike. We're talking about, you know, a big trail here. So what happens in terms of what people see from the freeway, frankly, is not as important as a lot of other views.

And it's those other views that are the places where people are going to actually approach the park. They're not approaching it from the freeway they're approaching it from the surface streets, Jack London Square, Embarcadero, on bikes and walking and they're not going to see that there are parks on the water there.

And that has to do with not just seeing it down the street. It's more than streets. It's how you arranged the buildings. I think you could probably arrange these in a different way to open up vistas that will show people from a variety of angles. And if you look at all the colored pictures you have here, most of them show you don't see much of the buildings. And the EIR comments on that as well in almost every view.

PR-37 cont.

MR. GHIELMETTI: And, in fairness, I agree with you on the EIR diagrams, but those show the maximum envelopes in every regard. We're going to be working with the City on design guidelines on how over certain stores there will be setbacks, et cetera.

So those are the maximum. The EIR wanted to take the worst-case scenario.

COMMISSIONER NELSON: Right. That's what it has to do.

So the last question I had is why should we settle for 43-percent when it was supposed to be 60-percent open space? And there has never been a specific plan done.

MR. GHIELMETTI: Well, I'll let Claudia maybe talk about the second portion of if, because it's more of a city issue.

The reason I think you should accept 43 or 4 acres of open space versus 60 is, for one, I think the quality of this open space will be better. Someone chuckles when I say that, but I think it will. It will be vibrant and activated, number one.

Number two, the citizens don't have to pay for it. So we save the citizens $22 million in paying for it. And also the citizens don't have to maintain it and Oakland Park and Rec District doesn't have to maintain it. Which, as stated earlier, they don't have the funds to accept this amount of money anyway. So it's a trade off between quantity versus quality for one. And it's a fiscal issue.

There is a ton of contamination on this site. And I don't think -- there were no studies, or not adequate studies done, on the Estuary Policy Plan to show what the engineering challenges were.

Someone said earlier about piles. All

resume PR-38

the building types here are going to be much more expensive to build, very doable but very much more expensive to build because all of the piles and whatnot. The streets are going to be more expensive to build. Everything in here is going to be more expensive to build. And I don't think the Estuary Policy Plan took all that into consideration. It's very contaminated. There's all kind of contaminates here.

PR-38 cont.

We are going to be cleaning it to residential standards at DTSC and Regional Water Board's discretion. And there would have been, in my opinion, a massive subsidy needed over and above this $22 million to make the Estuary Policy Plan happen.

COMMISSIONER NELSON: Thank you.

Do you want to respond?

MS. CAPPIO: I'll be glad to.

CHAIR WEBB: Briefly.

MS. CAPPIO: Absolutely.

If you want to follow along you can turn to page Roman numeral IVA dash 16 and 17. A specific plan mandated by state law requires a number of different pieces to it and they're described in the text.

resume PR-35

Distribution location, extensive uses of land

including open space --

COMMISSIONER NELSON: Would you restate the page number again?

MS. CAPPIO: Sure. Roman numeral IVA dash 16, 17.

Proposed distribution, location and extent of major components of public and private transportation, sewer, water, drainage, et cetera. Standards and criteria by which development will proceed, a program of implementation measures including the financing of the project and a statement of the relationship between the Specific Plan and the General Plan.

PR-35 cont.

I believe that we're getting what we would be getting through the Specific Plan process in a much greater level of detail is number one. We're past the generalities, we already have an established and adopted base of goals, policies, and objectives in the Estuary Policy Plan. And that because this is a real developer with real money that's being brought to the table we can actually look at feasibility a lot more extensively and seriously than we would through yet another planning process without a specific context.

So for those reasons, we believe we were more than meeting the requirement of the specific

plan. And because the Specific Plan requires a series of public hearings much like the General Plan does which this process will lead to for both zoning and General Plan amendment we thought we were fulfilling it and I would make a case that we are more than fulfilling it. PR-35 cont.

Thank you.

CHAIR WEBB: All right. I want to wrap this up, so I'm not going to ask any questions. But I will state a few points of skepticism that I have about this plan.

One is that I share the speaker's concern regarding, I believe that was Mr. Weber who talked about the barrier between the park and, the creation of the barrier by the buildings that would create with shoreline park so that it would create a psychological barrier between the members of the other citizens of Oakland and that park and that that park would in turn become the de-facto park of the condominium owners. And I share that concern, because I think that if you have four 120 unit, 120-foot high-rises between the highway and the park, that creates a barrier to the use of that park. PR-40

Second, I believe that having 3100 units in that area is going to create a traffic nightmare

both in terms of parking and whether there's residents and members of the public parking. But also, you know, during rush hour to access Highway 880 is just going to create a traffic nightmare.

And then you mention the music. I mean, I believe that the, having music in any of the parks in such close proximity to condominiums will last a very short while. I know that the residents around the Kaiser Auditorium basically shut down any music that is in the Kaiser auditorium because of both noise and the traffic. And I think that as soon as you have a blues festival close to those condominiums that you're going to have those condo owners who are going to be pinching a fit. So I don't know if music and the condos are compatible. PR-40 cont.

So those are my -- and I also was present when the Estuary Policy Plan was implemented. And it distresses me that after all the years that went into creating and developing that plan, almost two years after it was implemented it's been subbed. That distresses me.

So those are my comments and there's no need for you to respond to those. But I will turn that over to if you have any questions.

COMMISSIONER ARMENDARIZ: And I also have PR-41

two more comments just for, I guess for thought as you guys work on this plan.

One is I'm going to what others have said about access. But not just about access for pedestrians and bicyclists and all that but access for all the residents of Oakland, because this can turn into another piece of Oakland that low-income residents from East Oakland or West Oakland will not have access to again.

And that tends to be something that happens in a lot of urban settings, but I don't want it to become an area just for the residents or for certain people that have access to it or know about it. But make sure that there's accessibility for all people or for young people especially of Oakland.

PR-41 cont.

And that also brings up my other point about more, how are you creating a sense of community? And I know in the proposal it mentions that there will not be a school for this area. But it seems that if you're trying to build a neighborhood you will have the need for a school at some point, especially if there isn't great vehicle accessibility for families.

So I would -- I want you guys to reconsider some of those issues and maybe talk with the District about what options there might be for a school,

PR-41 cont.

although those are limited to you as well.

COMMISSIONER TAYLOR: Okay. I have several concerns. My first one again, as you just said, about it being a part of the community. You obviously have the freeway there separating it from the rest of Oakland. I work in West Oakland and I just can't see my students catching a bus or riding their bikes through apartment buildings or residences to get to a park to play. I don't see that happening. Because as an adult I would automatically assume that that's their park, the way that is designed.

PR-42

And I talked to my students and I asked them: Where is Estuary Park? They can't tell you. One, you can't see it. It's not visible and they don't know where it is. And it's a good park, but they don't know. And to spend more money and put some nice parks there that nobody can use except for the residents there, I just can't support that.

And I like what Ms. Abad said about, she questioned why not have a recreation center there? Was that ever considered?

MR. GHIELMETTI: Yes. As a matter of fact, I said that we intend, we intend on putting a, in addition to the maritime museum, a community center, recreation center in the portion of the Ninth

Avenue Terminal building that we intend to save.

COMMISSIONER TAYLOR: Okay. And who would manage that?

MR. GHIELMETTI: It's being determined right now.

COMMISSIONER ABAD: Sorry.

Why wouldn't something like a school, a lot of the schools now have recreation programs within the schools for after school, you know, weekend sort of thing. Why couldn't a combination be put together so you have an elementary school? I'm not saying all the way to twelfth grade but an elementary program and recreation facility?

PR-42 cont.

MR. GHIELMETTI: I would actually probably defer to the School District. But in preliminary discussions, they are having trouble maintaining the schools they have. And they said that they could adequately take students from this into the schools right across the freeway.

So they said they have room for the students and our project would pay millions of dollars in state mandated fees to those districts to help fix up facilities, in addition to moneys that they've already raised.

COMMISSIONER ABAD: Do you recall what

schools they were talking about?

MR. GHIELMETTI: Franklin Elementary I think was one of them.

MS. CAPPIO: It's in the EIR.

MR. GHIELMETTI: They're all in the EIR.

COMMISSIONER TAYLOR: But Franklin is a long way away from that.

MR. GHIELMETTI: I can't say for the School District.

PR-42 cont.

COMMISSIONER TAYLOR: I know because I work for the School District. It's a long way away. It's not within walking distance definitely. You would have to drive at least 10 minutes to get to Franklin from that facility.

MR. GHIELMETTI: They said they could adequately handle the student load generated from this. And so --

COMMISSIONER TAYLOR: I don't want to belabor that point.

My next concern is I keep seeing the City come up with these projects for new development. But I don't see how it's addressing the needs of people who already live in Oakland, because you're talking about building condominiums and townhomes. One-, two-bedrooms, maybe three. But we have families that

PR-43

live in Oakland now who are being squeezed out and pushed out of Oakland, which is why our School District enrollment is going down is because our families are being pushed out of Oakland.

And the only people I see moving into that area are people who don't want to pay the exorbitant amounts to live in San Francisco. And they'll come over here and buy in that area and benefit from land that belongs to us that we gave away to a private organization. So I don't see how me as a citizen of Oakland could benefit from this project. PR-43 cont.

And then also you talked about the Aquatic Center and involved in that, which also belongs to Oakland Parks and Rec, have you guys had any conversation with Parks and Rec in how they fit into this picture?

MR. GHIELMETTI: We have just started having conversations with Oakland Park and Rec about that. But we've had conversations with the Aquatic Center about basically giving them free space, not telling them how to manage that facility. PR-44

COMMISSIONER TAYLOR: But again, that Aquatic Center is Oakland Parks and Rec. Have you guys had a conversation about that?

MR. GHIELMETTI: It's actually not -- from

the way I understand it, it's a nonprofit entity that leases that from Oakland Parks and Rec. The Jack London Aquatic Center is a separate nonprofit.

MS. JONES-TAYLOR: It is under their jurisdiction.

MR. GHIELMETTI: Right.

MS. JONES-TAYLOR: And they're on a contract, you know, which is every three years, so it actually is our facility. And, no, I have not had any conversations.

COMMISSIONER TAYLOR: So I just don't see how this is going to benefit me as a citizen of Oakland or people I know of Oakland, so...

That's all I have.

PR-44 cont.

COMMISSIONER NELSON: Ms. Cappio, what I don't understand about the specific plan is that in, like, 15 years of being around zoning issues in Oakland, I've never heard of the City ceding the specific planning process to a developer. The specific plan is supposed to be for the community not part of a specific development. And the idea that, well, we save all this time and energy by just letting the developer do it through the EIR is to me completely contrary to the purpose the specific plan. When you're doing an EIR it's about a specific project and that's not what a specific plan is about.

PR-45

So I still don't see how this community is getting what it should be getting from a specific plan when you look at things that are about a particular proposed development. They're two different things.

Why has the City not done a specific plan? You've had six years to do it long before they ever signed an agreement, long before. Why hasn't that been done? How much was it going to cost to a do specific plan?

MS. CAPPIO: Between the planning process for the specific plan and the EIR for the specific plan, roughly a half million dollars, maybe more.

PR-45 cont.

COMMISSIONER NELSON: How much just for the specific plan?

MS. CAPPIO: Probably 250- to 300,000, depending how detailed you got. But you need to do civil engineering, environmental review. It's a very lengthy and detailed process.

COMMISSIONER NELSON: Yeah, I have been involved with other specific plans. And that's why I see the value of having a specific plan to guide the development process in the absence of a specific development proposal being on the table. That it's there to guide. It's not replaced by an EIR for a specific proposal.

$300,000 seems like a good investment to me when you're looking at millions of dollars of public land being lost to the public. And the public -- $300,000 is not that much. Oakland's blown $300,000 on a lot of other things. I think that should have been done and should still be done.

PR-45 cont.

MS. CAPPIO: You can make that recommendation to the council.

COMMISSIONER NELSON: We will.

CHAIR WEBB: Thank you.

All right. We're going to move on.

I'm not going to let you. I want to move to wrap this up, because we are going to lose our quorum in just a few minutes.

This is a, this is a public hearing. We're taking comments. This is not an action item. And so the actual action item will come before PRAC in the months ahead, but this is a, just to receive public comment and information.

So with that, we're going to move on to our next items on our agenda. And we thank you for coming and we will revisit this issue when it comes before the PRAC.

MS. CAPPIO: Thank you, Commissioners, for your time.

STATE OF CALIFORNIA)
: ss
COUNTY OF ALAMEDA)

I, the undersigned, a Certified Shorthand Reporter of the State of California, do hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that a verbatim record of the proceedings was made by me using machine shorthand which was thereafter transcribed under my direction; further, that the foregoing is an accurate transcription thereof.

I further certify that I am neither financially interested in the action nor a relative or employee of any of the parties.

IN WITNESS WHEREOF, I have this date subscribed my name.

Dated:_____

_____
DANA M. FREED
CSR No. 10602

Comments from the PRAC Commission

PR-1 **Chair Commissioner Webb** asks how "open space" is defined for purposes of the project and what does the proposed 43 percent of open space includes. Mr. Ghielmetti, representative of the project sponsor, clarifies that the project proposes approximately 28 acres (28.4) which is approximately 44 percent of the 62-acre project site. This is stated on page III-12 of the DEIR under *Proposed Parks, Open Spaces and Trails*. As also stated therein, the DEIR uses "park" and "open space" in combination (or sometimes interchangeably), which is particularly appropriate since the specific programming for the proposed parks/open spaces has not been established. The comment does not address the adequacy of the DEIR analysis and is noted.

PR-2 **Commissioner Abad** asks about the proposed park maintenance mechanism. As discussed in Master Response G, the DEIR (pp. III-18 and IV.L-17 and IV.L-18) explains that the project sponsor will be responsible for providing for the maintenance of the open spaces. It continues that the project sponsor could do so through the establishment of 1) a project homeowners association, 2) a Community Facilities District or Community Services District (in conjunction with the City), or 3) other mechanism approved by the City. The specifics of a maintenance mechanism would be established through the required conditions of approval for the project or a Development Agreement between the City and the project sponsor.

PR-3 **Commissioner Abad** asks if the proposed parking will infringe upon existing recreational facilities. Existing recreational facilities on the site are Estuary Park and the Jack London Aquatic Center adjacent to Parcel N. As stated in Response to Comment R-6, the proposed project parking supply on Parcel N is 300 off-street spaces and 34 on-street spaces. As stated on DEIR page IV.A-32, the project would incorporate a parking control and management program that would ensure available public, street parking for park and open space users as well as visitors of the onsite retail/commercial uses. See Master Response D for a description of the Transportation Demand Management Plan for the project, including parking management measures. As stated on DEIR page IV.D-19, no changes are proposed to the Aquatic Center *and related parking areas* that make up approximately three acres of impervious surface (*emphasis* added). The Parcel N Variant, however, described and analyzed in Chapter II of this FEIR reconfigures the access and circulation to Parcel N in a way that provides primary access to the existing Aquatic Center parking area (shown in **Figure II-1**).

PR-4 **Commissioner Abad** asks about park patrol for the additional public parks. As stated in Response to Comment I-5, it is anticipated that the City of Oakland Police Department and Fire Department would provide services to the project site, including all private development and public areas (parks), and private police/security services would be

provided to augment those services as necessary or desired by the project sponsor or project tenants.

PR-5 **Commissioner Abad** asserts that with development of 3,000 residential units, a school would be required in the area because there are not schools in the area to absorb 1,500 to 3,000 students that could result with the project. Response to Comment GG-48 discusses that the information presented in the DEIR discussion of public school impacts (DEIR pp. IV.L-13 through IV.L-14) is based on consultation and information provided for the DEIR by the managing staff of the Oakland Unified School District, Facilities Management and Planning. Information provided by OUSD specified the capacity of the district's facilities to accommodate potential new enrollment generated by the project throughout the period of project development.

Comments from Members of the Public

PR-6 **Keith Miller** states his interest in the aspects of the project that would affect his water-recreation related business interest. The comments do not address the adequacy of the DEIR analysis or issues relevant to the project impacts under CEQA and is noted.

PR-7 **Helen Hutchison** states her support of full compliance with the Estuary Policy Plan. Section IV.A (Land Use, Plans, and Policies) of the DEIR includes a detailed discussion of the project's relationship to the Estuary Policy Plan's policies starting on page IV.A-13 and concludes that the project would not conflict with the Plan. The comment asks the PRAC to pay attention to the amount of open space, parking, visual access to open space, strong ties between Lake Merritt and the Estuary, and maintenance and how the approach will ensure full public access over the long term. The comments do not address the adequacy of the DEIR analysis and is noted.

PR-8 **Sandra Threlfall** states that Waterfront Action supports the open space acreage set by the Estuary Policy Plan versus the proposed project. (Note that the Estuary Policy Plan does not specify open space acreage, however, specific acreage is analyzed in the Estuary Policy Plan EIR.) The comment does not address the adequacy of the DEIR analysis and is noted.

PR-9 **Sandra Threlfall** mentions the need for public visual access to open. See Response to Comment B-8 and U-17 regarding impacts on views of new open space areas and the waterfront.

PR-10 **John Sutter** describes background of the Oakland waterfront ownership and the Port of Oakland's operation of the project site. The comment does not address the adequacy of the DEIR analysis and is noted.

PR-11 **John Sutter** describes background of the Estuary Policy Plan development process and compares the open space envisioned therein to the proposed project. The comment does not address the adequacy of the DEIR analysis and is noted. The comment continues with

concern about development proposed west of 5th Avenue and on Parcel N that would continue to prohibit visual access to Estuary Park. See Response to Comment PR-30.

PR-12 See response to **Mr. Sutter's** Comment PR-31, second paragraph, regarding the demolition of the Ninth Avenue Terminal for new open space.

PR-13 **John Sutter** encourages consider for additional potential reuses for the project site and conduct additional study, site visits and additional meetings to gain additional input. The comment does not address the adequacy of the DEIR analysis and is noted. As discussed in Response to Comment GG-63, the project sponsor has conducted over 100 community meetings (See detailed description in Master Response A), and the City retained CirclePoint to conduct a community outreach process which involved nine small group and two community-wide meetings. A number of official City hearings have been conducted on the project and its proposed approvals, including hearings at the Landmarks Preservation Advisory Board, the Park and Recreation Advisory Committee, and the Planning Commission in connection with the Draft EIR. Recently, the Planning Commission sponsored a publicly-noticed tour of the project site. In summary, numerous opportunities for public input on the proposed project have occurred and additional opportunities will occur in the future.

PR-14 **John Sutter** shows a comparison of open space shown in the Estuary Policy Plan and what would be developed under the proposed project. (This exhibit was not submitted as part of the DEIR comment.)

PR-15 **John Sutter** conveys the Measure DD Coalition's concern about the loss of open space (compared to that envisioned in the Estuary Policy Plan) that would occur with the project. City decisionmakers of the project will ultimately consider the adequacy of the proposed new parks and open space acreage. The comment is noted.

PR-16 **Marina Carlson** mentions that the City's plans call for the public shoreline to be more accessible to the neighborhoods and the project should comply with such plans. Additionally, the comment mentions the adoption of Measure DD intended to fund clean up and improvements to the Estuary area. As stated in Response to Comment KK-4, the project sponsor does not proposed to utilize Measure DD funds to implement the 20.7 acres of new, City-owned and operated waterfront parks/open space and trails along the Estuary. This would not, however, preclude the future use of Measure DD funds for other improvements within the project area.

PR-17 **Marina Carlson** states support for the No Project Alternatives, which would result in no change to the project site from existing conditions. See Response to Comment B-8 regarding views of the water's edge relative to new highrise development.

The comment also suggests reuses of the preserved Ninth Avenue Terminal and calls for additional reuse studies. See Master Response B regarding further analysis of reuse alternatives for the Ninth Avenue Terminal.

The comment also requests that the EIR include complaint records submitted to the City after public events at Estuary Park or excessive noise from trains. Such information is not relevant to the analysis of environmental impacts under CEQA. Noise impacts are analyzed in Section IV.G (Noise) of the DEIR according to Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines provided on DEIR page IV.G-16. Additional response regarding train noise is provided in Response to Comment M-7.

PR-18 **Marina Carlson** asks about liability responsibility regarding geologic hazards, seismic events, and specific engineering considerations regarding the site. The DEIR provides a detailed discussion and analysis of these issues in Section IV.F (Geology, Soils, and Seismicity). See Response to Comment S-37 and II-6. Concerns regarding costs and responsibilities for infrastructure repair in the event of a seismic event are not relevant to the project impacts under CEQA. The comment does not address the adequacy of the DEIR analysis and is noted.

PR-19 **Margaret Elizares** comments that a specific plan is required and should be conducted. See Master Response A regarding this issue.

PR-20 **Margaret Elizares** comments that the project is insufficient regarding open space, public access, parking, transit, and is too dense and too tall given the potential for liquefaction. The comment addresses aspects of the project that the City decisionmakers will consider in light of the environmental analysis provided in the DEIR in Impact L.4 (parks and recreation); Section IV.A on pages IV.A-10, IV.A-15, and IV.A-32 (public access); Section IV.B on page IV.B-70 (evaluation of parking supply); Impact B.4 (transit impacts); Impacts F.1 (injury and damage due to groundshaking) on page IV.F-14; and Impact F.2 (exposure to liquefaction) on page IV. F-15 and Impact F.6 (exposure to expansive soils) on page IV. F-20.

PR-21 **Joyce Roy, speaking on behalf of the Sierra Club** (and as stated in Ms. Roy's Comment PH-27), states concern that the project does not meet the open space aspect of the Estuary Policy Plan. This response assumes that the comment refers to the total acreage proposed, which is less than that analyzed in the Estuary Policy Plan EIR. See Response to Comment S-5 regarding the comparative open space acreage of the project and the Estuary Policy Plan EIR. Regarding the Estuary Policy Plan vision for large events to take place, the project proposes a series of waterfront open spaces ranging from 2.3 to 9.7 acres and between 200 to 400 feet in depth set back from the shoreline. As such, the project would not preclude the use of existing or new open spaces for festivals or any public special events, subject to the application and granting of appropriate City permits.

PR-22 **Joyce Roy, speaking on behalf of Oakland Heritage Alliance (OHA)**, comments on the Estuary Policy Plan intention regarding demolition of the Ninth Avenue Terminal. See Response to Comment PH-31. The comment suggests that BCDC and the State Lands Commission would allow reuses not normally permitted on the site (due to Tidelands Trust designation and BCDC's 100-foot shoreline band). See Master Response G, which discusses public trust use restrictions.

PR-23 **Caroline Kim** states that the project does not meet the Estuary Policy Plan and that the correct process has not been followed. Section IV.A (Land Use, Plans, and Policies) of the DEIR includes a detailed discussion of the project's relationship to the Estuary Policy Plan's policies starting on page IV.A-13 and concludes that the project would not conflict with the Plan's policies. See Master Response A regarding preparation of a specific plan (assumed to be the process referred to by the comment). The comment counters statements made by the project sponsor in forums outside the environmental review process, but does not address the adequacy of the DEIR analysis. Also, the comment asserts that the City of Oakland does not have public schools, transportation, or infrastructure to accommodate the proposed population that would result from the project. See Response to GG-48 regarding public schools. The impact analysis provided in Section IV.B (Impact B.4) discusses the less-than-significant transit impacts. Also, the impact analysis provided in Section IV.L (Public Services and Recreational Facilities) and Section IV.M (Utilities and Service Systems) do not identify significant infrastructure impacts for the project.

PR-24 **Charles Weber** states his support for Alternative 3 (Reduced Development/ Ninth Avenue Terminal Preservation) analyzed in Chapter V (Alternatives) of the DEIR. The comment suggests reuse possibilities that could provide income streams. See Master Response B regarding further analysis of reuse alternatives for the Ninth Avenue Terminal.

PR-25 **Charles Weber** mistakenly asserts that the project assumes the acreage of Estuary Park and the Jack London Aquatic Center in the proposed parkland acreage. The total 28.4 acres of open space that would occur on the project site include the existing 7.7-acre Estuary Park and Jack London Aquatic Center. As stated in Response to Comment B-1, the DEIR states and footnotes on p. IV.L-16 and Table IV.L-2 (and consistently throughout), "Approximately 20.7[1] of the 28.4 total acres of permanent open space that would exist on the project site at buildout would be new, usable park area that does not currently exist." In no instance does the DEIR present the acreage of *new* open space proposed by the project as including the existing Estuary Park area.

PR-26 **Charles Weber** suggests that intended ownership and maintenance of all portions of the project site is unclear, including intentions for Tidelands Trust lands. The project sponsor would be responsible for installing improvements and maintenance of parks/open spaces

[1] 28.4 acres total proposed, less 7.7 acres of the existing Estuary Park and Aquatic Center.

in the project area, with the appropriate maintenance mechanism to be established through an agreement with the City. The City or Port would own the open spaces, and the City would be responsible for approving park improvements, programming allowable park uses, and granting/permitting activities within parks. The ownership and maintenance responsibilities of parks and open spaces, however, do not affect the project's impacts on the physical environment under CEQA. Additionally, as discussed in Response to Comment GG-18, the Tidelands Trust designation on the site and the separate land exchange transaction that that is not a part of the proposed project.

PR-27 **Charles Weber** discusses the potential for the project parks to turn into private parks for people who live in the project. See Response to Comment Q-1 regarding this topic.

PR-28 **Steve Lowe** discusses examples of possible reuse opportunities for the Ninth Avenue Terminal. See Master Response B regarding further analysis of reuse alternatives for the Ninth Avenue Terminal.

Resumed Comments from the PRAC Commission

PR-29 **Commissioner Abad** restates his Comment PR-2 regarding park maintenance. (See response to Comment PR-2.) Mr. Ghielmetti, representative of the project sponsor, provides additionally detail regarding implementation of a maintenance assessment district (or other maintenance mechanism approved by the City).

PR-30 **Commissioner Ricards** asks why the project does not proposed over-the-railroad connections to Lake Merritt Channel and suggests that a request be made to the affected jurisdictions that a joint effort or contribution of funds go toward this effort.
Mr. Ghielmetti states that the project is providing connections to the property boundary, the land that the project sponsor would control. Response to Comment M-3 that discusses the significant topographic, engineering, and environmental constraints that limit the ability of the developer or the City of Oakland to construct grade-separated rail crossings in the project area.

PR-31 **Commissioner McClure** asks how the project will address parking for residents and people coming to public areas on the site. First, Mr. Ghielmetti explains that all streets within the project site will be ungated public streets that would be publicly owned and maintained. Streets would be marked for parking (a mix of diagonal and parallel). Also, the project would create parking areas in close proximity the special use areas, such as the Ninth Avenue Terminal Bulkhead Building. Additionally, each of the residential buildings would have residential parking at a minimum ratio of one space per dwelling unit. See Master Response D regarding the draft Transportation Demand Management (TDM) that discusses additional recommended and required measures related to parking supply and management.

PR-32 **Commissioner Magid** asks about BCDC review that has occurred and/or pending. As BCDC states in its comment letter on the DEIR (Comment Letter B in this FEIR), the

BCDC Design Review Board reviewed the project on May 9, 2005, and provided preliminary comments, which are stated in its comment letter. As stated in Response E-5/7, aspects of the project within BCDC's purview would be considered by BCDC prior to the City decisionmakers' action on the project.

PR-33 **Commissioner Magid** asks what changes are proposed to the Jack London Aquatic Center facility. Mr. Ghielmetti states that no changes are proposed as part of the project. A Parcel N Variant is described in Chapter II of this FEIR that provides opportunities for additional open space between the Aquatic Center and Parcel N development. See also Response to Comment PR-3 regarding the Parcel N Variant changes related to the Aquatic Center parking lot.

PR-34 **Commissioner Nelson** states that the provision of 43 percent (28.4 *total* acres) of the total project site as open space is inadequate, even with the provision of new housing that would occur. The alternatives in the DEIR demonstrate a range of varying open space scenarios ranging from 7.7 *total* acres (Alternative 1A: No Project) to 41.5 *total* acres (Alternative 1B: No Project / Estuary Policy Plan Alternative). This analysis provides a range of options for the City decisionmakers on the project to consider prior to acting on the project.

PR-35 **Commissioner Nelson** asks why a specific plan was not prepared for the project. See Master Response A regarding this topic. Director Cappio responds consistent with the Master Response.

PR-36 **Commissioner Nelson** states concerns with how the project would accommodate the public given the demand for parking from the proposed residential development, specifically given the distance of the project site from BART, the lack of transit that currently exists at the site, and that, as the commenter asserts, a lot of residents will have two cars. See Master Response D regarding the draft Transportation Demand Management (TDM) Plan that discusses additional recommended and required measures related to parking supply and management. The draft TDM Plan concludes that the project would have a surplus of parking with implementation of measures identified therein. In response to Commissioner Nelson's comment, Mr. Ghielmetti states efforts to get AC Transit service to the site.

PR-37 **Commissioner Nelson** asks why the building proposed at Estuary Park (Parcel N) could not be developed at the east area of the site. Mr. Ghielmetti explains that the proposed development on Parcel N is intended to help activate Estuary Park by providing critical mass in close proximity to it, and discusses examples of similar scenarios in other cities.

Additionally, each of the alternatives (except Alternative 1A: No Project) presented in the Chapter V of the DEIR includes a scenario in which Parcel N would be redeveloped as open space. Prior to its action on the project, City decisionmakers will evaluate the project alternatives and ultimately reject the alternatives and adopt the proposed project,

or alternatively elect one or a combination of the alternatives analyzed, instead of the project. See also Responses to Comments B-8 and U-17 regarding impacts on views of the waterfront relative to new buildings and street configuration.

PR-38 **Commissioner Nelson** states that he has "no problem" with the proposed density, but states that the project should "meet the 60 percent [open space] requirement for the Estuary Plan." Mr. Ghielmetti responds that the proposed 4 acres of open space would be more "vibrant and activated" and that the citizens would not have to pay for it or maintain it. He also discusses the challenges facing the site related to contamination, expensive building methods required, and infrastructure - considerations that the Estuary Policy Plan may not have taken into consideration when proposing the amount of open space envisioned. City decisionmakers of the project will ultimately consider the appropriateness of the proposed parks and open space acreage prior to taking action on the project.

PR-39 **Commissioner Nelson** states that the City should reconsider why this land should be sold instead of leased. The comment does not address the adequacy of the DEIR analysis or issues relevant to the project impacts under CEQA and is noted. The

PR-40 **Chair Commissioner Webb** restates his and others' previously-stated concerns about the open spaces being a de-facto park for project residents which would create barrier to public park use, the traffic impacts and provision of adequate resident and public parking, noise impacts to adjacent residences from music [at public events], and inconsistencies with the Estuary Policy Plan.

PR-41 **Commissioner Armendariz** states that the project area needs to be accessible to all people/young people, especially of Oakland. The comment does not address the adequacy of the DEIR analysis or issues relevant to the project impacts under CEQA and is noted.

The comment suggests that the project sponsor consider building a school at some point, especially given limited accessibility to the site. (See Response to Comment PR-42, below.)

PR-42 **Commissioner Taylor** echoes concerns about limited visual access to Estuary Park, which limits its use. See Response to Comment PH-30 regarding visibility of Estuary Park. The comment also questions whether a recreation center, even as part of an elementary school, was considered. Mr. Ghielmetti described the proposed maritime museum, community center/recreational uses that could occur in the Ninth Avenue Terminal Bulkhead Building.

As stated in Response to Comment PR-5, response to Comment GG-48 discusses that the information presented in the discussion of public school impacts (DEIR pp. IV.L-13 through IV.L-14) is based on consultation and information provided for the DEIR by the managing staff of the Oakland Unified School District, Facilities Management and Planning. Information provided by OUSD specified the capacity of the district's facilities

to accommodate potential new enrollment generated by the project throughout the period of project development. No new school would be required to accommodate school-aged children that would result from the project.

PR-43 **Commissioner Taylor** suggests that the type of residential condominiums and townhomes (one-, two-, three-bedrooms) being developed would not accommodate families in Oakland. The comment is speculative and not relevant to the analysis of environmental impacts under CEQA. Starting on page IV.J-41, the DEIR does discuss the potential for indirect impacts on housing market effects (additions to housing supply, development of affordable housing, improvement to job/housing relationship, potential effects on rents and prices in Oakland and vicinity). This discussion concludes that the project would not lead to significant indirect physical impacts (DEIR p. IV.J-46).

PR-44 **Commissioner Taylor** asks if the project sponsor had communications with Oakland Parks and Recreation regarding the project, specifically regarding the Jack London Aquatic Center. Mr. Ghielmetti clarifies that the Aquatic Center is a nonprofit entity that contract leases from the Oakland Parks and Recreation Department, and states that initial conversations with the department were underway.

PR-45 **Commissioner Nelson** revisits his Comment PR-35 regarding preparation of a specific plan and asks why the process has not occurred in the six years since adoption of the Estuary Policy Plan. Director Cappio discusses the costs for a specific plan, environmental review, and civil engineering that would be required, and the lengthy process that would be entailed. Director Cappio states that the PRAC can recommend to the City Council that a specific plan still be done.

CHAPTER IX

Responses to Comments at the Landmarks Preservation Advisory Board Public Hearing on the Draft EIR

The Landmarks Preservation Advisory Board held a public hearing on the Draft EIR (DEIR) on October 17, 2005. The following is the transcript of the public hearing, followed by responses to each comment. Responses provided in this section specifically focus on statements that pertain to environmental topics under CEQA and the adequacy of the analysis in the DEIR. Statements regarding the project are identified and responded to as appropriate.

Comments relevant to the DEIR start on page 18 of the transcript.

LANDMARKS PRESERVATION ADVISORY BOARD

RE: OAK TO NINTH AVENUE PROJECT

PUBLIC HEARING

Oakland, California

Monday, October 17, 2005

Reported by:
DIANE M. GALLAGHER, RPR
CSR No. Michigan 2191

JOB No. 3-39389

LANDMARKS PRESERVATION ADVISORY BOARD

RE: OAK TO NINTH AVENUE PROJECT

Public Hearing at City Hall, 1 Frank Ogawa Plaza, Hearing Room 1, Oakland, California, beginning at 7:36 p.m., and ending at 8:51 p.m., on Monday, October 17, 2005, before DIANE M. GALLAGHER, Certified Shorthand Reporter, Michigan No. 2191.

PRESENT:

LANDMARKS PRESERVATION ADVISORY BOARD

BARBARA ARMSTRONG, CHAIR
KELLEY KAHN
ROSEMARY MULLER
NEAL PARISH, VICE CHAIR
KIRK PETERSON

JOANN PAVLINEC, SECRETARY

SIGNATURE PROPERTIES

MICHAEL GHIELMETTI
PATRICK VANNESS

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Oakland, California - Monday, October 17, 2005

7:36 p.m. - 8:51 p.m.

R E C O R D

MS. ARMSTRONG: We are ready to begin Item No. 3.

MS. PAVLINEC: Board Member Kershaw left due to a conflict of interest on this item, and Board Member Kahn will need to leave at eight o'clock for a family commitment. Thank you.

MS. ARMSTRONG: Thank you. Item No. 3, Oak to Ninth. Approximately 64.2 acres bounded by Embarcadero Road, the Oakland Estuary, Fallon Street, and 10th Avenue.

MS. PAVLINEC: The purpose of this hearing is to provide an opportunity for the Landmarks Preservation Advisory Board and the public to comment on the Draft Environmental Impact Report.

Comments are due on October 24th. That is the end of the review period.

The LPAB is requested to take public testimony and to comment on, or submit questions about, the DEIR or the project. This is mainly focusing on the cultural and historic resources.

I want to talk a little bit more about the

Ninth Avenue Terminal, one of the main pieces of historic resources.

With this proposal, there is a maximum of 165,000 square feet of the existing 180,000 square-foot Ninth Avenue Terminal Building and a portion of its existing wharf would be demolished to create the largest of a series of interconnected parks and waterfront spaces.

Generally, as this project goes along, the site will be remediated and developed from east to west in up to eight phases from 2007 to 2018.

The Ninth Avenue Terminal is the last surviving maritime terminal building in Oakland.

The building was constructed in two phases: The original section closest to the I-880 freeway and attached to the actual Bulkhead Building was constructed in 1930; an addition, located closer to the Estuary, was added to the building in 1951.

The building is constructed in the Beaux Arts architectural style and is 1,004 feet long by 180 feet wide and it's 47 feet high.

The Oakland Cultural Heritage Survey designates the Ninth Avenue Terminal Building as an "A" - the highest rating. Buildings designated "A", highest importance, are considered outstanding architectural

examples or extreme historical importance. "A"-rated properties are considered eligible for individual listing on the National Register of Historic Places.

According to the Carey & Co. analysis, who did an historical report for this project, only the Ninth Avenue Terminal and Wharf were considered eligible for the National Register as individual resources.

An application to designate the Ninth Avenue Terminal and Wharf as a City of Oakland landmark was prepared in 2003 and accepted by the City in May of 2004.

The Carey & Co. report concurs with the designation for the historical significance included in the application for the structure.

In terms of integrity, Carey & Co. also concurs that the major additions to the structure on the 1951 were in keeping with the original design and intent, and that the building retains an overall high level of integrity. Therefore, both the original portion of the building constructed in 1930, as well as the 1951 addition, qualify as an historic resource under federal, state and local criteria.

The Landmarks Board recommended that the Ninth Avenue Terminal be designated as a City Landmark in 2004. This recommendation has not yet been forwarded

to the Planning Commission and City Council pending review and consideration of the proposed project.

The Draft Environmental Impact Report identifies the following impacts as relates to the Ninth Avenue Terminal.

The first is the project would result in the substantial demolition of the Ninth Avenue Terminal, which is an historic resource as defined in CEQA.

Second, The project would substantially alter the wharf structure and surrounding areas, which is an historic resource, as defined in CEQA.

Third, the project would construct a new mixed-use, multi-story development within approximately 100 feet of the remaining Bulkhead Building which may not be architecturally compatible with this structure as a potential future City of Oakland Landmark.

And, finally, the substantial demolition of the Ninth Avenue Terminal, in combination with the previous loss of the other two Oakland Municipal Terminals, would result in cumulative impacts to historic resources.

The Draft Environmental Impact Report concludes that by removing approximately 90 percent of the building its ability to convey its historic significance would be permanently altered and materially impaired.

Therefore, all of the listed impacts would be

deemed significant and unavoidable.

In such cases, prior to approving a project, the Planning Commission and the City Council must make a, what is called, a "Statement of Overriding Considerations." This type of finding essentially presents a rationale for letting the impact stand if the City finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.

The Draft Environmental Impact Report includes alternatives to the proposed project.

One of the sub-alternatives is a full Ninth Avenue Terminal preservation and adaptive reuse.

This stand-alone sub-alternative would retain and reuse the entire Ninth Avenue Terminal Building and related wharf structure. This sub-alternative could be combined with the proposed project or any other alternative.

There are numerous adopted city plans and documents that provide policy direction on preservation.

The first I will address is the Historic Preservation element.

The Historic Preservation Policy 3.5 sets forth the findings that need to be made when altering or demolishing an historic resource.

So for any project involving complete demolition of Heritage Properties or Potential Designated Historic Properties requiring discretionary City permits, the City would have to make the finding that (1) the design quality of the proposed project is at least equal to that of the original structure and is compatible with the character of the neighborhood; or the public benefits of the proposed project outweigh the benefit of retaining the original structures; or the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.

The other document staff report discusses the Estuary Policy Plan adopted in June 1999.

The Estuary Policy Plan acknowledges that the Oak to Ninth Avenue District is likely to be redeveloped as many of the port-related activities were relocating to other land areas under the jurisdiction of the Port.

The Plan recognizes that with the changes of land use, there are opportunities for "a-large scale network of open spaces and economic development that extend for over 60 acres from Estuary Park to Ninth Avenue."

The Plan also contains policies and action programs that are specific to the Ninth Avenue Terminal.

Some of the policy directs to establish a large park in the area of the existing Ninth Avenue Terminal to establish a location for large civic events and cultural activities.

The Plan goes on to say that it should "recognize that the Ninth Avenue Terminal shed, or portions thereof, may be suitable for rehabilitation and adaptive reuse. However, the terminal building impedes public access to and views of a key area of the Estuary."

Finally, the Open Space, Conservation and Recreation element includes a discussion of the potential waterfront parks, let's see, the Clinton Basin/Ninth Avenue Terminal area and recommends this area for a shoreline park if large-scale redevelopment is proposed. It also states that "the Marine Terminal itself has historic value and should be preserved as part of any new development."

So, therefore, as you can see, the City's adopted plans present competing priorities among historic preservation objectives, open space objectives and view objectives, with no clear direction on what policies should prevail.

The project staff is recommending they ask the Board look at a list of questions they have outlined:

What portion of the Ninth Avenue Terminal should be retained? For instance, the wharf, which is a key element of historic use for this site is slated for demolition. Is it feasible to reuse and rebuild this feature into a recreational element for the shoreline?

They also ask, what are the key elements of the historic characteristics of the site that must be retained in order to make the findings, which I mentioned earlier, required by Historic Preservation Policy 3.5?

How important is this site and whatever is retained of the building to designate it as a City landmark?

Are the proposed Mitigation Measures commensurate with the historic importance of the site and the demolition of a portion of the Ninth Avenue Terminal building?

And, a very important one, what approaches can be used to strike a balance between open space and development, such as leaving a greater portion of the structural elements of the Ninth Avenue Terminal Building in place, but removing the walls to gain waterfront views?

The staff's final recommendations for the Board are to hold a public hearing and receive public

testimony on the Draft Environmental Impact Report.

Provide staff and project sponsors any direction regarding issues to be addressed in the Final EIR or the project pertaining to cultural resources, specifically the Ninth Avenue Terminal.

Consider the manner in which the Board wishes to work in formulating recommendations to the Planning Commission and the City Council as the development review process proceeds.

This project will come back to the Board again in the later stages for design and review, and the Board will continue to accept written comments on the Draft EIR until 4:00 p.m. on October 24th. Thank you.

(Board Member Kahn not present.)

MS. ARMSTRONG: Thank you. Would the developer like to make a presentation?

MR. GHIELMETTI: Well, members of the Landmarks Preservation Advisory Board, I am Mike Ghielmetti, Signature Properties. Thank you for having us tonight.

We would like to make a brief presentation about some of the general aspects of the project and then end because I think it's important to have a little background about the project.

(POWERPOINT PRESENTATION)

The project is about 64 acres here on either

side of the Lake Merritt channel. This is the Lake Merritt channel running up from the Estuary.

This is the building in question, this is the older portion of it. This is the newer portion. It's basically half and half, and then the wharf area sits underneath it. Something shaped like this.

The site, it has some challenges from a development perspective and from a compatibility with the rest of the city perspective because you have the freeway on one side, you have Union Pacific rail yards, BART tracks, BART maintenance yard, and so it's separated from the rest of the city.

In fact, this freeway is going to be made taller, and with the upcoming CalTrans retrofit somewhere in the neighborhood 20, 25, 30 feet taller when they start retrofitting that freeway.

We have been working on this plan since about 2001 when the Port selected us in the competitive process, and our first inclination was to make this a residential and mixed-use neighborhood because it's so isolated from the rest of the city and bring it to a critical mass down here and help integrate it, bring it with the rest of the city and make it a destination.

We have several models. This is an old plywood factory and power plant in Portland called River Place.

In the mid '90s it was redone. This is that same area.

This is Tom McCall Park here, and a little marina. They are building several phases down here, which are much taller buildings.

This was in the northern portion of the central business district area of Vancouver. This was an old rail yard which became parks and housing and other recreational uses, a children's water park here, and you know it's now -- not in this picture -- but there's marinas around there.

This is what the site looks like now.

This is the underbelly of the freeway looking up this way, the shoreline, which I will show you in the next slide. It's in fairly dilapidated condition.

This is what the existing shoreline looks like.

So our site plan -- sorry for the color, didn't come out that well -- our site plan here shows 3100 units, about 200,000 feet of retail, and a little under 200 retail slips and 28 acres or about 44, 45 percent open space.

The Terminal Building in question is here. And our idea was to save about 15,000 feet of it and turn the rest into parks, much as I showed earlier in Portland, Tom McCall Park or Harbor Green in Vancouver.

We are looking to save most of the wharf area,

although this portion here is in really bad shape, and basically we are looking, in essence, to give it back to the water.

This is, again, a shot of the parks.

Again, one of the primary problems with this building is its location. It's impossible to have a waterfront park even inland of it because, with that building there, you will never be on the water. We felt it was critical to have a waterfront park here.

These are some of the view corridors, and, again, you see the effects of that, if that building were to stay in its entirety to the views corridors in the area.

This is some of the uses, ground level uses, etc. We would like to have a really exciting, vibrant retail area in these places, a little, in essence, a central park here, and, again, retail and housing along the ground floors of all of these.

One of the things we are after on this site is world-class waterfronts.

This is that Children's Park I was pointing out earlier in Harbor Green in Vancouver. This is the same configuration as what we are proposing on the site of the current Ninth Avenue Terminal shed building.

This is the Bay Trail section, we are copying

this from Vancouver. They did a fabulous job. So you have sections for bicyclists and roller bladers in one area, and a section for pedestrians in another.

This is where the plywood factory was in Portland, and this is the same thing when they have a blues festival.

We want to create vibrant retail corridors, bring people down there to use these parks.

We want to create dynamic residential districts where you have ground-floor activity and we want to create some park row density. We want to create density near transit and jobs versus continuing to go out to the Central Valley or other locales.

This is in the Pearl District of Portland, which is not too far away from the waterfront I showed you.

Again, living on the waterfront. These buildings, on average, are much taller than what we have. These are probably more indicative of the building massing that we have around there.

And this is what we would like to, how we would like to reuse the Ninth Avenue Terminal Building.

Now, we didn't get the details in here, but we would make the details of the front facade come back to life and bring it back somewhere around 80 or 100 feet.

We would like to make this a cultural resource for Oaklanders.

We would like to put in a maritime museum, a community center, kind of like the garden center on Lake Merritt there so anyone could come and use it and potentially some visitor services like a bike shop or canoe shop or other kinds of things that would help bring people down there, and then leave an overhang at the end where we could set up a little stage or whatnot. I think it's a better view from this side. And have parks where people can enjoy whatever activities are going on around here.

So this wouldn't be used for private use. It would be used for public use; like I said, a museum and community center, and then the park which extends, as you saw earlier, extends way down would be a fabulous gathering place, a place to have either active or passive type recreational uses.

Other types of uses we envision in the parks, children's park, dog park, bocce ball park, other types of things to get people down there.

Again, we view this building as an integral part of this new system of parks that we would like to create down there.

And this is kind of a sample shot of an

interior where we can preserve the big, kind of the grandiose center portion, and then have things on the sides, again, museums and community centers and that type of stuff.

So I wanted to keep it fairly brief. I know there are several comments from the public, and if you have any questions, I would be happy to answer them.

MS. ARMSTRONG: Thank you. Are there any questions of the presenter? This might be a good time, or you can hold off and we can ask later, if you have no questions now, but they will come up. Any other speakers on this item?

MS. PAVLINEC: We have eight speakers on this item.

MS. ARMSTRONG: Go ahead and call the speakers, please.

MS. PAVLINEC: I'll call the first four speakers: Joyce Roy, Steve Lowe, Charles Weber, Pam Weber.

MS. ROY: My name is Joyce Roy.

I would say the program for this whole project was brought to shoehorn as many units as possible on this site and provide only the amount of parking space as required for local use because that's what this is, and this was supposed to be an area for all of Oakland

LB-1

for public use.

And the only thing that can prevent this development from appearing as if it were transplanted from an East Contra Costa clean-slate site and that it belongs to Oakland are things that exist here like the Fifth Avenue Community and this terminal.

So this really needs to be reused for the citizens of Oakland with a large park in front of it, might not be crescent shaped, but some shape that it really belongs to Oakland citizens and not just for the residents here.

LB-1 cont.

Now, in the BCDC presentation some of the members said that with a historic resource like this they could allow uses in here that they normally would not allow within 100 feet of the water, and I think somebody from the Public Lands Commission also said you could allow uses here that -- a wide variety of uses -- not just what is normally limited for the waterfront.

So there is a great opportunity to really use this and make this area, you know, follow the Estuary Policy Plan.

But some of the spirit of it, that it's a public, it will be for pubic use and not just this little isolated community that does not have any transit and that has a lot of, it has a lot of pollution from

LB-2

LB-2 cont.

the freeway that they were blessed with.

Thank you.

MS. ARMSTRONG: Thank you.

MR. LOWE: Steve Lowe. Well, I just look at that building and think of all of the uses that could be brought to it and that it really does need a more -- I don't know how to say it -- another planning effort, I guess, to make sure that the building is going to be reused to its highest and best use.

I know there are several architects who could do wonders with that building and retain it all or even add to it.

It's just a phenomenal piece of architecture that is unique in the Bay area. It's unique to the East Bay, certainly; and when you think of all of the good uses that Fort Mason has put together and has been used over there in San Francisco, we could duplicate that here.

LB-3

But we don't, I don't think we have a clear enough idea on the multiplicity of uses that could be in that building, and somehow that needs to be brought into this picture.

How can we better reuse it than cutting it all down, as has been proposed, or most of it, anyway.

I just think there's a higher or better use

than that. LB-3 cont.

MS. ARMSTRONG: Thank you.

MR. WEBER: Good evening. Ladies and gentlemen, my name is Charles Weber. I think you have got some handouts that may have been given to you: a brochure, there's a ring binder that kind of pertains to what we are talking about.

Good evening. My name is Charles Weber. I have operated my boat building at the Fifth Avenue Point Community for over 40 years. My wife and I have lived there for the past 22 years.

I am here as a director of the Fifth Avenue Institute, a 5013-C organization dedicated to the education, craftsmanship, the arts, preserving artistic enclaves and communities, including historic structures; and, by the way, we have just recently taken possession of the old cupola that was on the Webster Building at 7th and Broadway and then went down to Jack London Square. We now own it and are restoring it, and it will be put on display. So we are involved in historic restoration. LB-4

The Ninth Avenue Terminal is the last remaining link to Oakland's waterfront history.

The Fifth Avenue Institute proposes that it be preserved intact to create a cultural, educational and

recreational center that reflects the unique history, talents and interests of the people of Oakland and the East Bay, much like Fort Mason, which serves the citizens of San Francisco and the Greater Bay Area.

We propose the adaptive reuse of the structure to accommodate a conference center, festival pavilion, theater, exhibition hall, meeting spaces, art gallery, museum, sailing school, maybe a junior yacht club, restaurants, whatever.

Fort Mason has been in operation for 28 years, and it is the role model for other such facilities all over the United States.

LB-4 cont.

Fort Mason hosts 1.6 million people a year -- by the way, Yosemite only gets 4 million a year -- and at about 70 percent capacity collects a rental income of over $4 million per year.

We feel that it is financially feasible to reuse the Ninth Avenue Terminal in the same manner.

This could be the East Bay's answer to Fort Mason.

The Port of Oakland spent a great deal of money in the early 1970s relocating the Jack London Cabin from the Yukon to Jack London Square, at a great expense in junkets of Board of Port Commissioners to Alaska.

We feel the same dedication to preservation

should be directed toward the Ninth Avenue Terminal.

Two-hundred square feet, this is in the EIR mitigation, 200 square feet of display space about the history of the terminal and landscaping depicting the footprint of the original building does not constitute historic preservation. LB-4 cont.

Thank you very much.

MS. ARMSTRONG: Thank you.

MS. PAVLINEC: Okay. The next speakers are Pam Weber, Anna Naruta and Keith Miller.

MS. WEBER: I will concede my time to Naomi.

MS. PAVLINEC: Thank you.

MS. NARUTA: Hi. My name is Anna Naruta. I am an Oakland resident and historical archeologist, and I came today to talk about that other portion of the cultural resources section, the archeology portion.

I am not an archeologist specializing in native California sites, but I am quite familiar with the record of cultural resource management excavations in Oakland; and so it is with interest that I looked at the Draft EIR portions relating to archeology. LB-5

They are rather inadequate, and I would be interested to hear your feedback on how they should be modified.

The Draft EIR mentions a 1909 survey published

by N.C. Nelson where he was going around and recording some of the standing Bay area shellmounds at that time, just the ones that were standing above ground at that time, and he had mentioned that over the last 40, 50 years they had lost a lot of the above-surface indications.

And the EIR notes that in that 1909 walk-around survey there were no shellmounds recorded in the project area.

But that actually has no bearing on whether there might be legally significant remains of Native-American shellmounds in the project area.

N.C. Nelson did describe the types of areas that were likely to have shellmound remains and the project area fits within that kind of thing.

Also, the 1909 survey was not meant to be comprehensive of shellmound sites. It didn't discover, for example, the major shellmound sites that we know about in the city of Oakland; for example, reported shellmounds within five blocks of the project area.

Shellmound sites, well, in our City Center area shellmounds were first discovered in 1876, then rediscovered in 1928, and then rediscovered again when BART was coming through town.

It didn't discover the shellmound at Harrison

LB-5 cont.

and Second Street, which wasn't discovered until 1952.

And a third shellmound site near the southeastern edge of Lake Merritt.

So actually within a half-mile of the project area, or within one mile you are getting two shellmound sites already -- two to three.

So there is the potential for legally significant historic shellmound sites in the area.

Also, the Draft EIR mentions that in April 2005 a registered professional archeologist conducted a reconnaissance level survey of the project site to determine if undisturbed soils or areas suitable for survey exist. That's a quote from the Draft EIR, page 12, and that person decided that there were no such soils.

LB-5 cont.

However, this conflicts with the earlier portion of the Draft EIR that mentions that the early layer of the strata shellmounds now are currently found 6 meters below ground surface. Six meters.

So it's hard to see how someone kind of walking around the site was able to detect anything about whether there are shellmounds there or not.

In the Broadway area shellmounds they have found things 15 feet below the surface. So you can have quite a bit of archeology quite deep when you are

talking about shellmounds.

What is proposed in the Draft EIR currently is to have the construction workers act as monitoring archeologists.

A construction worker who uncovers evidence of an archeological site, as far as this proposal goes, is supposed to then notify some sort of channels and stop the project.

If I were a construction worker -- first of all, I don't have training to recognize an archeology site, and I am probably not going to get it from my employer.

LB-5 cont.

Secondly, if I am a construction worker, I am really not going to stop a major project. You know, it's likely to cost me my job.

So having a construction worker serve as a cultural resource management person doesn't really work, and we found it didn't work for the Broadway/West Grand project where the agreement with the City was that if there was, if there was just one artifact found that the project was supposed to be stopped and an archeologist brought in.

You know, I saw the site and there was plenty of those one artifacts that could have had evaluation, but there wasn't anything.

So let's not try to make construction workers be archeologists. It doesn't meet adequate treatment under CEQA, and it can cause a project a lot of delay and cost if things are left until the end.

What this project should do is they should have an archeologist compile land use history of the area, predict what areas are filled, test those areas. We often find archeological sites underneath fill.

In this case, you can go ahead and have like a mechanical auger survey of drilling different holes around the area. That's fine for a shellmound. That's a good discovery method.

So it doesn't take much just to have that study out of the way because we are legally obligated to protect these remains whether we know about them ahead of time or not.

If they are likely to be in the area, the City of Oakland is legally obligated to take measures to protect them.

LB-5 cont.

Thank you.

MS. ARMSTRONG: Thank you.

MS. PAVLINEC: The next speakers are Keith Miller, Sandra Threlfall, and Naomi Schiff.

MR. MILLER: Well, that brought back memories. I spent most of 1975 working on a Miwok Indian dig in

Marin County, part of a Laney College class, and found a beautiful obsidian projectile point. Wow! So if you find a shellmound, I volunteer.

I am Keith Miller. I am the owner of California Canoe and Kayak in Jack London Square. I was on the Estuary Planning Committee, and I recognize Rosemary as being a member of the Advisory Committee too because her name appears right below mine on the document.

I want to read something from back about two years ago when I first heard about this project. I took a "shoot from the hip approach" because I'm also on the board of directors of the Jack London Aquatic Center, and I wrote this about this project:

I am aghast -- and this is an e-mail to Nancy Nadel, who I've paddled with down the Estuary --

I am aghast. This port/signature plan makes a mockery of years of hard work formulating the Estuary Plan. It also has the potential of scuttling JLAC, whose "bang for the buck" in providing access to low and no-cost paddling and rowing opportunities for Oakland "is unprecedented nationally." LB-6

So it's kind of odd to come tonight and participate in some of these meetings.

Basically, I have gone 180 degrees, and I like

quite a bit of what is being proposed with this project.

I know that there's parking and traffic issues, and I am fully aware that there's disagreements over the amount of open space.

However, I look back on what the Port did on the Lincoln properties deal several years ago. That was the land between Webster Street and Channel 2, and that is where Cirque Du Soleil was set up, as you may recall.

Cirque Du Soleil did a tremendous amount for my business and my company. It brought people in and they basically saw my shop in Jack London Square and consequently they said, Hey, let's go kayaking. Let's go paddling. Let's learn how to do this.

So I would kind of like to see that giveaway of that great open space recovered somehow.

LB-6 cont.

This is a difficult question, because, as it has been mentioned, the Estuary Plan clearly states in one paragraph, consequently the terminal shed should be demolished. Related maritime sport activities adjacent to the terminal be relocated. And then in two paragraphs it also says, it is recognized that the Ninth Avenue Terminal shed may be suitable for rehabilitation and adaptive reuse.

The Port and City should investigate the feasibility of doing so and evaluate the potential

LB-7

impact of keeping and reusing the building, and so on and so forth.

It's tough. There is no clear direction.

I just have to say that in my opinion, and I am a resident of the City of Oakland here, I would like to see a lot more open space down there.

I think -- I don't want to get into an argument about the Fort Mason comparison -- I sat on the board of directors of the Friends of the River for five years and I know Fort Mason quite well because FOR has an office down there. I don't think the comparison is a very solid, very good comparison, personally. LB-7 cont.

I think the project will create a lot of open space, enough so Cirque Du Soleil and those types of activities could come down there again.

I think having the front of it saved, showing what was there is a very good compromise. I think that's a good way to go.

So, thank you.

MS. ARMSTRONG: Thank you.

MS. THRELFALL: Good evening, once again. Sandra Threlfall, Waterfront Action.

The Ninth Avenue Terminal, you need to walk through it. You need to experience it. The height alone is -- it takes your breath away. It's a LB-8

remarkable structure.

Now, I am not a historian. The whole debate about the whole building or just the 1920s building, I am not going to weigh in on, but I would, I really believe that Oakland is losing its history.

The rate at which development is occurring on the shoreline, the old building where they soldered the steel for the Golden Gate Bridge is now going to be housing, and housing is important.

I don't have a problem with this plan in terms of the footprint of the original Estuary Plan. LB-8 cont.

My concern is that we hold on to what Oakland was all about, which was a waterfront industrial city.

We have the very contemporary cranes, but we have no more sheds once this one goes, and I think the cotton mills, and all of the other things that we are going to lose where Jack London worked and so many other people, this is all part of who we are and why we are here.

And, the other point, which is a side point, is that the Estuary Plan really speaks to events, a place where we can have large community events. LB-9

It's difficult, with the amount of housing that is proposed for this site, unless in the deed or in the rental agreement it says, there will be public events,

they will be noisy, you will not be able to complain, because we had a jazz festival at Estuary Park for a number of years until the Portobello apartment people got organized and stopped it. They didn't want noise after ten o'clock at night. And, living there, I think that, which came first, is a problem.

And I don't want to lose our last shore space and our last terminal to housing that will impact how we can use the open space.

LB-9 cont.

Thank you.

MS. ARMSTRONG: Thank you.

MS. SCHIFF: Well, the Landmarks Preservation Advisory Board, I don't have to convince you, I think, that the Ninth Avenue Terminal is a valuable building because this is the board that voted unanimously to recommend that it be landmarked. I am not going to belabor that.

And, in fact, the Environmental Impact Report is very clear in supporting that conclusion, quoted liberally from our landmarks application and from the board's decision, and I don't think we have to argue about the fact that it's a valuable building.

LB-10

I did bring along my cheap architectural model here. (Indicating.) If this were the Ninth Avenue Terminal -- and I saw you at the Berkeley Bowel,

right -- this is how much is saved, and this much is demolished; and, by the way, put into a landfill, not a green kind of an activity, putting buildings into landfills.

So you end up with this much.

And I must say I was a little shocked. I had never seen those renderings before today of how they managed to take a large, grand industrial building and turn it into a kind of a shed of rather uninspiring proportions, but I don't think it cuts it.

LB-10 cont.

So what do we do?

Well, first of all, I thought to myself, how bad off is this thing? So this week we went down there and took a look at that building with a structural engineer who is licensed and knows a lot about structures standing in water and not standing in water, and just asked him, well, you know, how bad is this?

And he said, you know, he wasn't doing a deep study, just looking around. He's a pretty educated guy.

LB-11

Couple things. He said he would like to move his office there. He thinks he knows a lot of architects and designers who would like to be in that building. He loves the steel structure. And he felt it would be really very straight forward to do any required seismic additional bracing.

He thought it was pretty good, by the way. He said the trusses in there actually prevented a lot of lateral motion and that he did not see any sign of the thing caving in.

You know, there were not areas that were badly out of plum and terribly cracked concrete.

There certainly is the damage of age, but he was real enthusiastic about this thing.

And so I asked him a couple of questions.

LB-11 cont.

One was, if you knock the shed down, and you put a park on it, does it then mean that you don't have to maintain the wharf because you now have a bunch of dirt and grass over water on those same old pilings, I guess? And he said, No, you know, that, I mean, you got pilings, you got pilings.

So that doesn't seem -- that seems like a wash. You know, that doesn't seem to be an issue, if they are willing to put a bunch of dirt and grass, and by the way, fertilizer, and irrigation and goose poop out there, then they might as well leave the shed up.

Then there's the question of whose view are we talking about? What view? Whose view?

LB-12

Those of you who have been down there probably know the water side of that shed, it isn't sheer to the water. There's a big, wide edge there between the shed

and the edge of the wharf. There is room for a rail car and an off-loading operation from ships. So it's quite wide, and if the Bay Trail were to run around it, it would be wonderful.

You could come from Mr. Ghielmetti's Park and you could walk around this building, and you could suddenly have a little retro experience of walking along a wharf in the industrial era, and it is quite wide enough for that to be a very substantial piece of the Bay Trail and far more interesting than walking along a rather sterile development. LB-12 cont.

So I think, you know, there's great potential. There are also many doors penetrating, and so you could open that up. You could have windows or doors. It's not an entirely opaque structure.

There are a lot of other cities that have big buildings, and some of them tear them down and some of them reuse them. LB-13

I have given you a handout which shows a few of the reuses. It doesn't include a couple of the obvious ones.

Yeah, there's Fort Mason and there's also the Ferry Building, and this might be, might be a good place for a ferry to stop.

There's going to be some kind of need for

community services. Maybe they could go in that building.

I was sort of curious about how many hotel patrons does 3100 units generate. Like, if you go visit your friend, and they live in a small apartment, with a million dollar view on the 28th floor of Mr. Ghielmetti's house there, then where do they stay when they come visit if there's no spare bedroom?

LB-13 cont.

Well, 3100 units, not people, but units would generate a fair number of visitors.

So wouldn't it be kind of cool to have the Ninth Avenue Terminal Inn? You could stay on the water, and it would be kind of cool.

And I want to say two other things:

One, about the views. That the streets in the proposed design are all bent. They don't actually provide views. If you went from Embarcadero and you looked down the street, you would see the development. You would not see water.

LB-14

So, in fact, Ninth Avenue Terminal is not the problem.

Secondly, or a sub-category of that, Ninth Avenue Terminal in itself is something to look at. You know, it's kind of an interesting old building, and there's nothing wrong with looking at an interesting old

building. LB-14 cont.

The other thing I want to say is I hope you will comment because the deadline here, it's not just for us to give comments to you, but also for you to give comments that can be forwarded as part of the record. So I am hoping that the counter to those really feel-good projects we just heard, that on this one you will really give it some thought and make comments, if not today, then, subsequently; if not as a group, then individually, because this thing is on kind of a fast track. We don't have a lot of opportunities to make our views known. LB-15

If you would really like to have an impact on the historic preservation of the Ninth Avenue Terminal, I would suggest that this board take a look at the alternatives and take a look at the historic analysis and make some clear comments, even if you don't all agree, but clear comments, so that the Planning Commission and City Council can benefit from your somewhat greater knowledge about historic buildings than they've got; Colland Jang excepted, of course.

Thank you. And if anybody wants some bread...

MS. ARMSTRONG: It's getting late, so it looks good.

MS. PAVLINEC: There are no more speakers.

MR. PETERSON: I have a series of comments. I guess the things I think should be addressed at greater length in the EIR, there are alternatives, I think Section C, they are less than a page, and I don't think they have been explored well at all. I would like to see the EIR talk about those more.

One of the speakers brought up something that is half a sentence here that there could be alternatives or more varied uses in this building because of the historic structure. I am an architect. I work for developers. I look at that, it's an enormous building. You don't have to get permission to let it exist. LB-16

It looks like an opportunity to me, but that's an economic thing. I am not so concerned about that.

It probably has a viable economic future if it continues to exist.

I would like to address, apparently the proposal demolishes, it demolishes 93 percent of the historic structure, and I would like the DEIR to address how you can destroy 93 percent of something that complies with the Secretary of Interior standards. It seems like some kind of a token gesture to me. Doesn't look like historic preservation to me. LB-17

It is interesting to note that the newer portion of the building was born the same year I was.

I am not sure I like it being called historic.

The question of the view, I have been on the promenade there. It's a really cool space with the building behind and the wharf and you can be high up on the water, and there's plenty of opportunities along the waterfront to walk on a path with a bunch of riffraff, and it's not a natural setting, but it's not really very inspiring. For example, I think along the Portobello development, I mean, it's just kind of a nothing space. It's nice, it's near the water, but that opportunity is available to anybody along the waterfront.

And I think preserving the building and the sort of spacial character of the wharf with the building behind it is something that's unique. It's historic. It's a built-in environment. There's nothing like it all along the waterfront. LB-18

And I would also concur with Naomi that the building is, you know, we just talked about being able to see the auditorium, and this, of course, isn't the same sort of building, but it is part of the view. When you are on the water, it's a major building.

And I think it doesn't preclude views of the water from the public. It precludes views of the water from residents of the proposed building.

So I would like the EIR to talk about, be more

LB-18 cont.

clear about whose views and views of what?

I think, Joann, you said one of the required findings was that the design quality of the new project had to be better or equal or something. What was that?

MS. PAVLINEC: The design quality of the proposed project is at least equal to that of the original structure and is compatible with the character of the neighborhood.

LB-19

MR. PETERSON: I would say the latter is almost impossible because it's just not -- it's an industrial neighborhood, and I don't think any new residential work is compatible with.

As far as the quality, I don't want to get on the architect's case, but I know the buildings we build now are not just kind of durable, you know, concrete and steel, but wood, old, rough wood in the building. So at least at that level the quality is quite different. I would like that to be addressed.

And, well, that's enough.

MS. MULLER: I feel like I am sort of at a loss as to what to say.

LB-20

I was on the Estuary Plan Advisory Board when we came up with the plan; and at the time I did vote for demolition of this historic building, even though it's historic, and that was based on a thought that the

design that was in the plan and the public open space that was going to be created was of higher value than the historic building.

However, when I see this plan in front of me, I don't see that quality of open space. It's certainly not adjacent to Brooklyn Basin.

I see a remanent of the historic building being left, and, in my mind, to block other people, to keep the public away from this green space that is being created, in my mind, just for the residents of the apartment building.

And so the remaining portion of the historic building that's there is serving more as a barrier to use of the space than is becoming open by removing the rest of the building rather than a significant public space that the original Estuary Plan showed on it; and the EIR does identify the demolition of 90 percent of this building as an unmitigable, negative impact.

LB-20 cont.

And I guess that City Council may vote that they are overriding considerations, but I must admit I don't see them from a spacial point of view when I look at this particular plan.

So, as I say, I am sort of at a loss as to what to say in terms of the Environmental Impact Report. I think it's correct. I think it correctly identifies

that this is an unmitigated, negative impact of the plan. LB-20 cont.

MS. ARMSTRONG: Thank you.

MR. PARISH: I agree. I think the EIR does a good job of documenting that the demolition of the entire 90 percent of it, all but the crust, is definitely significant impact.

From that aspect, I think the EIR is appropriately written.

I agree also with Naomi's comments on the views and your comment on the blocking. I hadn't really thought of it, but it blocks the view and access from that section of the Embarcadero, and with the curve and bent streets, as Naomi pointed out, you really don't have any views of that park from the rest of Oakland. LB-21

The only views, like my office is up on the 24th floor of the APO Building. I have a nice view of that building right now. Then I would be able to see the park.

Where I think the EIR falls down a little bit, and I have a little bit of trouble figuring out what to do with that building, is I don't think that the Fort Mason comparison works all that well either, partly because the access to that area would be a little tricky, and where the heck would everybody park? LB-22

There's no discussion in the EIR on the preservation alternatives of how visitors to that building would park.

So I see in the diagrams the building, and then immediately adjacent to it is park and the other side of that is development.

So I have a hard time figuring out what to do with that building if you don't tear it down.

But that's why I am an attorney not a developer.

Somebody should be able to come up with something and have it analyzed properly and figure out what the impact would be for the preservation of it.

LB-22 cont.

And with respect to the findings that you need to make, HP policy 3.5, I agree with Rosemary, the alternatives are the City defines that the design quality of the project is at least equal to the original structure and compatible with the neighborhood -- and I don't think that you can find that -- or that the public benefits of the proposed project outweigh the benefit of obtaining the original structure.

That was probably the basis of the original finding in the Estuary Plan that it was okay to demolish the project because you were getting a lot from it.

I don't think you are getting a lot from it.

LB-23

I don't think it's possible for the city council to realistically make the finding that HP policy 3.5 is satisfied. I just don't think it's possible with this current design. LB-23 cont.

So I don't know what to do on that. I think those are my comments.

MS. ARMSTRONG: I have a few questions to ask. So I will ask staff, and maybe I could ask the developer as well.

When you are talking about turning this building into grass, which is really what it looks like, because you're removing the building and putting grass down, are you removing the existing pilings and putting in new pilings, or are you using the existing pilings?

MR. GHIELMETTI: Probably a combination of both. We would basically do everything we could to structurally secure the platform, the marina, or the wharf that's still there. LB-24

MS. ARMSTRONG: And have you retained the services of a structural engineer to ask them what it would take to have a live load in that building as far as piling strength?

MR. GHIELMETTI: There wouldn't be a heck of a lot of difference with the pilings themselves because there wouldn't be that much load difference, quite

frankly.

It would be putting on, as was mentioned, structure, concrete structure, top soil, you know, plants, trees, grasses, etc.

MS. ARMSTRONG: Okay.

MR. GHIELMETTI: There would be some.

MS. ARMSTRONG: There would be some. Thank you.

LB-24 cont.

And then my next question is the uses of the building and what it could be used for, and evidently that is, there are certain restrictions on the uses, and I am unsure as to what we really could put there.

One speaker talked about what Fort Mason does. I have actually gone to Fort Mason numerous times. I didn't know they made $4 million a year. That's not a bad income. That's a good income.

My question, what can that building really be used for, because of the Tidelands issue, the BCDC issue, the Estuary Policy?

It seems to me what we are trying to do is solve all of this by putting a park in and saying there are not enough parks in Oakland and therefore there should be a park when, in fact, maybe we really need to rethink it and give this project a little bit more thought as far as the angling the streets for views. A

LB-25

few people mentioned that that might be a very simple thing to do, and really thinking about what we can use that building for.

And I am not saying they have to preserve all of the building, but certainly it's a building that looked very different in some of the photographs I've seen, as opposed to the projections I saw in the PowerPoint.

MS. PAVLINEC: If you're asking with respect to what the uses can be, and I believe maybe the Applicants can address this, there are some restrictions on uses due to the Trust.

However, as Joyce Roy mentioned in her comments, there was a conference on this and they did indicate at that conference that there was some leeway that they could look at for historic structures to expand the uses that are allowed under for new construction.

MR. GHIELMETTI: Yeah. The first part of your question, technically speaking, forget that it's historic for half a second.

Uses that are allowable under the Tidelands Trust Easement are basically ones that bring visitors down to the water, for one.

You could use it for maritime navigation,

LB-25 cont.

fisheries type stuff, waterfront commerce.

Also, you could put a hotel down there because that would be deemed visitors serving retail. You know, an example, Fisherman's Wharf brings tourists down to the area. Those are considered trust allowable uses.

Parks are considered a trust allowable use because you bring people down to the water.

Locals serving retail, generally frowned upon. Residential, generally frowned upon in those areas.

There is some flexibility with both BCDC and the State Lands Commission with regard to historic buildings, but I do not know exactly how much flexibility. LB-25 cont.

So we can certainly pose those questions and they are good ones.

MS. ARMSTRONG: I think there are enough nonprofits that could rent the space, enough -- certainly I know that your project is, will take a number of years to build, and you are going to do it in phases, but I think really you could actually make some income from this too. It might not be a bad idea.

MR. GHIELMETTI: We are listening to all of your comments.

MS. ARMSTRONG: So I want to address something else that I saw when I was looking through all of this LB-26

was the parking.

It looks like you have one-to-one parking, and, is that correct, one-to-one parking?

MR. GHIELMETTI: Those are minimum parking guidelines; but, yes, the minimum number is one-to-one for residential.

MS. ARMSTRONG: One-to-one parking.

MR. GHIELMETTI: For residential.

MS. ARMSTRONG: For residential. So basically you have 434 parking places that are not restricted to residents, and I would ask you to build in a lot more parking.

I think that reusing this building would, you would have to have parking too if you were going to have people using the building. But I really think that this is, this doesn't even come close to what you need.

LB-26 cont.

If we really want to have the citizens of Oakland use this space, there's not very good transit down there, and I don't know if there are any plans to talk to AC Transit.

MR. GHIELMETTI: There are plans. We have been talking to AC Transit, and we hope to have the question resolved by the time the final EIR comes out.

We also have a condition in there about shuttle services that we will agree to.

MS. ARMSTRONG: From BART?

MR. GHIELMETTI: Jack London Square, BART and the project, basically.

MS. ARMSTRONG: Like the Emeryville Ramp? Are you familiar with that?

MR. GHIELMETTI: Very familiar.

MS. ARMSTRONG: So I really think you need to have parking, absolutely and positively.

LB-26 cont.

Let me see. There was one other item. Panel, this is a letter, I am reading a letter we got from the panel. It said, Panel endorsed Measure DD with the understanding that some monies would go to implementing the waterfront plan for this area.

Is, in fact, DD money available for this?

MS. SCHIFF: Yes.

MS. ARMSTRONG: Have you contacted anyone about DD?

LB-27

MR. GHIELMETTI: There was, I believe, I can't be sure, but I think $22 million available for DD. I don't know whether it's specified. I think it was for parks, but I don't know that it couldn't be used for other purposes, and we have said that we do not need that money, and are not contemplating tapping into it.

These parks would be privately built. No public money involved.

MS. ARMSTRONG: So money is not the issue?

MR. GHIELMETTI: Well, money is partly the issue, in trying to figure out uses for the building, cost to rehabilitate the building are issues; but, also, as I said, you can't have a park inland of that and call it a waterfront park, and some of the best examples, like I said, from Portland and Vancouver are these beautiful waterfront parks that are not like the Portobello operation. They are vastly bigger spaces that the public can come and enjoy.

There's a shortage of park space on the water and this is close to people who live right across the freeway there.

LB-27 cont.

MS. ARMSTRONG: I would ask you to take another look at the project design. I would ask you to provide more parking, not only for the residents, but for people who are going to use any sort of open space to look at reusing the building.

I am not opposed to taking some of the building down for some park space, but, to be very honest with you, I think a lot of grass isn't a lot of park.

LB-28

MR. GHIELMETTI: Well, the grass is not necessarily the design. There are landscape areas, portions would be grass, public art, trees, bushes structures, etc.

I do hear your point, and we will be studying that.

MS. ARMSTRONG: Yeah. I would really welcome you to do that.

MR. GHIELMETTI: Thank you. We appreciate that.

MS. ARMSTRONG: Thank you.

LB-28 cont.

MR. PETERSON: I concur. Just looking at the Plan, the terminal is proposed to be removed and on the yacht basin the buildings are all up to the water. Maybe you can look at rearranging things.

I go to the boathouse all of the time. Row. People playing soccer. You are a hundred feet from the water playing soccer. You don't see the water anymore. I don't know that the depth of the park is that critical to the waterfront experience.

And I am wondering how the City, I think the EIR should address the overriding consideration for this much housing.

This density is like the Tenderloin.

When I look at the height of the buildings, and I like dense development, I like cities, but the city's General Plan calls for the housing element, a lot more housing here, but I don't know that it has to be here as to this extent when there are other, there are many,

LB-29

many places in the city where there could be more housing.

This is a nice, big site, but the loss of other amenities to the public permanently, I don't know that those are, the need for this much housing here can be considered an overriding consideration.

Something else to figure out what, how -- an attorney probably has to figure that out, right -- are there precedents for what the overriding consideration is?

MR. PARISH: The Council can basically decide whether they think the benefit of the project outweighs the significant impacts, and they don't have to be too detailed, I believe.

LB-29 cont.

MR. PETERSON: But they have to make specific findings.

MR. PARISH: Specific findings.

MR. PETERSON: Existing documents.

MR. PARISH: One of the findings relates to the HPE, the historic preservation elements we are talking about too. That finding.

Part of it has to be on the basis that housing and parks are more beneficial than the building, they would have to find.

MR. PETERSON: We can't just say something is

a landmark. We like it. We have to have criteria that we'll make a decision to. I wonder what those criteria are.

MR. PARISH: Consistent with the General Plan for the rest of the housing.

MS. ARMSTRONG: And, of course, there's new zoning. It's the waterfront plan. So none of the zoning -- it's my understanding when I was reading the EIR, that's new zoning.

MR. WEBER: The zoning would be given over to the developer.

LB-29 cont.

MR. PETERSON: By the third meeting, I will know it all. Forgive me for all of the questions.

MS. ARMSTRONG: Please, Mr. Ghielmetti.

MR. GHIELMETTI: It was called Planned Waterfront District and the Estuary Policy Plan. The Estuary Policy Plan had a series of goals, had an illustrative picture of what those goals may look like. And so we came forward with our plan.

Part of our proposal is to have a planned district zoning for the site.

MS. ARMSTRONG: Well, I think this is an opportunity to try to balance the Estuary Policy Plan, which is in conflict with some of the other issues.

LB-30

So I would say that, I would ask you to take

another look at the project, see what we can do for open space, try to reuse some of that building. I think it's really worthy.

I thought initially it was a cost issue that there would be new pilings that had to be put in. It would be terribly expensive.

And so if money is really not the issue, then I would ask you to take another look at it, please, and maybe work with some members of the community. I would ask maybe that you kind of open your doors a little bit.

LB-30 cont.

MR. PARISH: The comments about the Bay Trail going along side of it, and I have explored many sections of the Bay trail with my family, and I am looking forward to be able to go past the Richmond-Ford plant on the Bay trail, and it's very, it's interesting and entertaining to be riding next to a building with the water right on the other side, and, I mean, that is a park experience, even though it's a very urban environment. I think the same thing could happen here.

You don't need a huge waterfront park to have a waterfront park experience. It could be right next to the building, the Bay Trail, and that definitely adds to the vitality of the area.

LB-31

MS. ARMSTRONG: In our staff recommendations, I was looking through this item 3.C, the manner in which

the Board wishes to work in formulating recommendations to the Planning Commission and the City Council as the development review process proceeds, such as forming a subcommittee.

Is anyone interested in being on a subcommittee? Formulating recommendations? Taking another look at the developer's plan? Thought I would put it out there.

MR. PETERSON: I will do it.

MS. ARMSTRONG: A committee of two? Board member Muller just volunteered.

So maybe what we could do is form a subcommittee. When you take a look at your plans, bring it to the subcommittee, get feedback from them. Maybe we can make this a work in process.

I want to thank you for bringing the proposal to us and thank you all for attending.

MR. PARISH: No action to take.

MS. ARMSTRONG: No. It's simply comments.

MR. PARISH: So now close the public portion.

MS. ARMSTRONG: So we'll now close the public hearing on the Draft EIR and we will continue to accept written comments on the Draft EIR until 4:00 p.m. on October 24th, 2005, and we are very happy to work with the developer on this project, and we would like also to

compliment you on the brochure and the presentation.

(Off the record.)

(Whereupon, this portion of the hearing regarding Oak to Ninth concluded at 8:51 p.m.)

STATE OF CALIFORNIA)
: ss
COUNTY OF MARIN)

I, the undersigned, a Certified Shorthand Reporter of the State of Michigan, Notary Public of the State of California, do hereby certify:

That the foregoing proceedings were taken before me at the time and place herein set forth; that a verbatim record of the proceedings was made by me using machine shorthand, which was thereafter transcribed under my direction; further, that the foregoing is an accurate transcription thereof.

I further certify that I am neither financially interested in the action nor a relative or employee of any attorney of any of the parties.

IN WITNESS WHEREOF, I have this date subscribed my name.

Dated: _____

_____
Diane M. Gallagher, RPR
CSR No. (Mich) 2191
California Notary Public No. 1419258

Comments from Members of the Public

LB-1 **Joyce Roy** states that the Ninth Avenue Terminal needs to be reused with a large park in front it. See Response to Comment Q-2 regarding preservation alternatives and Master Response B regarding further analysis of reuse alternatives for the Ninth Avenue Terminal.

LB-2 **Joyce Roy** states that BCDC members stated that uses note normally allowed within the 100-foot BCDC Shoreline band may be could be allowed given the historic resource. See Master Response G, which discusses public trust use restrictions.

The comment suggests that reuse of the Terminal would "follow the Estuary Policy Plan." See Response to Comment PH-31, which clarifies the Estuary Policy Plan policy statement, direction, and vision regarding preservation of the Terminal.

LB-3 **Steve Lowe** states that additional consideration of reuses of the Terminal should be considered to ensure the higher and better use than its demolition. See Master Response B regarding this topic.

LB-4 **Charles Weber, speaking for the Fifth Avenue Institute**, proposes that the Ninth Avenue Terminal be preserved intact and discusses possible adaptive reuses and their income streams. See Master Response B regarding further analysis of possible reuses for the Terminal. The comment refers to Mitigation Measure E.8 on DEIR page IV.E-30. First, the mitigation does not intended as "historic preservation," particularly as it would not eliminate the significant and unavoidable impact to the historic resource, but that it would lessen the impact to some extent. Also, 200 square feet of floor is stated as a *minimum* area to be set aside

LB-5 **Anna Naruta** states that the DEIR discussion relating to archeology are inadequate in its use of the N.C. Nelson 1909 survey as reference for the likelihood of shellmound findings on the project site and the reliance on a reconnaissance level survey of the project site to determine areas suitable for survey. See response to Ms. Naruta's Comments JJ-1 and BB-4 regarding this topic.

The comment also states concern that the mitigation measures for Impact E.1 (archeological resources) (DEIR p. IV.E-24) would effectively have construction workers act as monitoring archeologists. The comment suggests reconstruction research and survey methods that should occur. See responses to Ms. Naruta's Comments and JJ-5 and JJ-8 that modifies mitigation measures relevant to Impact E.1.

LB-6 **Keith Miller** states his past concerns with the project and his current support, particularly with respect to the potential benefits to his business. The comments do not address the adequacy of the DEIR analysis or issues relevant to the project impacts under CEQA and is noted.

LB-7 **Keith Miller** supports that the Port and the City should investigate the feasibility of rehabilitating the Ninth Avenue Terminal for adaptive reuse, and an alternative that preserves the "front (1920s) portion of the Terminal, still providing desired open space. See Response to Comment Q-2 regarding preservation alternatives and Master Response B regarding further analysis of reuse alternatives for the Ninth Avenue Terminal.

LB-8 **Sandra Threlfall** states her concern that the City preserve the Ninth Avenue Terminal which reflects Oakland's history as a waterfront industrial city. See Response to Comment Q-2 regarding preservation alternatives.

LB-9 **Sandra Threlfall** states concern with the proposed public spaces for public events in proximity to residential uses. Noise impacts are analyzed in Section IV.G (Noise) of the DEIR consistent with Oakland's 2004 CEQA Thresholds/Criteria of Significance Guidelines provided on DEIR page IV.G-16. See Response to Comment U-10 regarding.

LB-10 **Naomi Schiff** demonstrates the amount of the Terminal proposed to be retained by the project. The comment does not address the adequacy of the DEIR and is noted.

LB-11 **Naomi Schiff** restates her Comment S-3; see Response to Comment S-3 regarding assertions made about the conditions of the Ninth Avenue Terminal and maintenance requirements of the pier. See also Response to Comment E-8.

LB-12 **Naomi Schiff** asks about view impacts and the potential for views from the waterside of the Terminal where the Bay Trail could be located. See Response to Comment LB-18 below, which raises this topic.

LB-13 **Naomi Schiff** offers reuse possibilities for the Terminal. See Response to Comment B regarding the exploration of reuses for the Terminal.

LB-14 **Naomi Schiff** states that the proposed street design prevents views of the waterfront. See Response to Comment U-17 regarding impacts on views from the Embarcadero and street alignments. See Response to Comment LB-20 below, regarding views prohibited by the Ninth Avenue Terminal.

LB-15 **Naomi Schiff** encourages the LPAB to provide comments and historic analysis in the DEIR. The comment is noted.

Comments from Board Members

LB-16 **Board Member Peterson** references the Alternatives discussion in Chapter II, the Summary of the DEIR. A full description and analysis of the project alternatives is provided in Chapter V (Alternatives). The comment also speaks to Terminal reuses that should be explored. See Master Response B regarding this topic.

LB-17 **Board Member Peterson** states that Mitigation Measure E.3b, which requires compliance with the Secretary of Interior's Standards, would not address the significant

and unavoidable impact that would result with substantial demolition proposed for the Ninth Avenue Terminal. Mitigation Measure E.3b requires that the Bulkhead Building's reuse and rehabilitation comply with the Secretary of the Interior's Standards for Treatment of Historic Property. The mitigation clearly states that further review of detailed final design plans (including, but not limited to, proposed window treatments, materials palette, awnings, signage, and interior configurations) by a qualified professional must occur. This process would establish which standards the project would follow, based on the final approved project, and to what extent. Subsequently, the findings would be subject to review and final approval by the City. Compliance with the standards is required by the project if any portion of the Terminal is retained.

LB-18 **Board Member Peterson** states that the Ninth Avenue Terminal does not preclude views of the water from the public, but instead from the residents of the proposed project buildings. As depicted in the range of visual simulations provided in the DEIR (Figures IV.K-2 through IV.K-16), there is minimal existing visual access to the waterfront from most viewpoints around the site due to existing buildings and the relatively flat topography of the area. This limited visual access from outside the project site is not solely attributable to the Ninth Avenue Terminal structure, which itself is not readily visible from most viewpoints. From within the site, however, at approximately three stories tall, 1,000 feet long, and situated linearly along and adjacent to the water's edge, the sheer size and location of the Terminal would inevitably limit views that could be created from new open spaces and public rights-of-way (streets) within the project site. Figure IV.K-16 specifically shows a possible new view of open space taken from the edge of the proposed Shoreline Park at 6th Avenue. The comment suggests that the Terminal would block views from the proposed project buildings, namely the residential buildings. However, the height of the Terminal would not likely substantially preclude such views since most residential units would be located above the lower levels of commercial/retail uses and parking. Thus, views from residential units would likely be from elevations high enough not to be affected by the Terminal building and that would likely have more expansive views to the southeast and southwest, beyond or away from the Terminal.

LB-19 **Board Member Peterson** asks about the findings that must be made pursuant to Historic Preservation Element Policy 3.5 (Historic Preservation and Discretionary Permit Approvals), and opines that the project, as designed, may not meet those findings and directs the project sponsor to address the "quality" of the project in terms of building materials. The comments do not address the adequacy of the DEIR analysis or topics relevant to the project's environmental impacts.

L-20 **Board Member Muller** states that the quality of open space proposed does not warrant demolition of the historic resource. The comment suggests that the approximately 18,000 square-foot portion of the Ninth Avenue Terminal Bulkhead Building that the project proposes to retain is intended to block the public from viewing the proposed new

Shoreline Park to the south of it (where the Ninth Avenue Terminal is currently located). The comment also suggests that the retained Bulkhead Building would be a "barrier to use of the space that is becoming open by removing the rest of the building rather than a significance public space that the original Estuary Plan showed on it."

The project sponsor proposes to rehabilitate the Bulkhead Building to retain a representative portion of the significant historic structure and to allow its reuse for possible community activities (cultural, educational, recreational) on the project site. Complete demolition of the Terminal, including the portion intended to be retained, would in fact allow for a larger park area or parking area and would expand views of the new Crescent Park and waterfront from the northeast and from public streets within the project site. The expanded medium-range views can be envisioned using Figure IV.K-11 from the shoreline trail along Brooklyn Basin and in Figure IV.K-12 from the Embarcadero looking southwest.

The comment adds that the DEIR correctly identifies the impact on the historic Ninth Avenue Terminal as a significant and unavoidable impact.

LB-21 **Board Member Parish** echoes that the DEIR appropriately defines the impact on the Terminal as significant.

The comment agrees with comments regarding views relative to the Ninth Avenue Terminal and proposed street configuration. See Response to Comment U-17 regarding impacts on views from the Embarcadero and street alignments. See Response to Comment LB-20 above, regarding views prohibited by the Ninth Avenue Terminal.

LB-22 **Board Member Parish** comments on the need for the project to figure out potential reuses of the Terminal if it is preserved, and what the resulting impacts would be. See Master Response B regarding further analysis of reuse alternatives for the Ninth Avenue Terminal. See Response to Comment Q-2 regarding preservation alternatives.

LB-23 **Board Member Parish** restates concerns outlined in Comment LP-19 regarding the project's ability, as currently designed, to satisfy HPE Policy 3.5 findings. The City decisionmakers will consider the project, as revised through the project design review process, and determine whether the project meets all required findings and criteria prior to acting on the project.

LB-24 **Board Member Armstrong** asks whether the existing piles (under the Terminal and wharf) would be retained and reused. Mr. Ghielmetti, representative of the project sponsor, states that some piles would be retained and others replaced. He also clarifies that there would be minimal difference in load on the pilings when comparing the existing building load or proposed live loads and open space. The comment does not address the adequacy of the DEIR analysis and is noted.

LB-25 **Board Member Armstrong** asks about potential reuses for the Ninth Avenue Terminal and what the building can be used for under the Tidelands Trust, BCDC, and the Estuary Policy Plan designations. Mr. Ghielmetti describes the uses allowed under the Tidelands Trust. See Master Response G, which discusses public trust use restrictions. Uses currently allowed by the Estuary Policy Plan are those allowed by the existing Planned Waterfront Development-1 (PWD-1) land use classification discussed on page IV.A-11 of the DEIR under *Estuary Policy Plan*, and those described for the existing M-40 Heavy Industrial Zone and the S-2/S-4 Civic Center Zone / Design Review Combining Zone (which would not accommodate the project) as discussed on DEIR page IV.A-27 under *Zoning Regulations*. The amendments to the existing PWD-1 land use classification and zoning designations on the project site proposed to accommodate the uses and development intensity of the project are described starting on page IV.A-37 of the DEIR, under *General Plan Use and Development Standards and Zoning Regulations*. BCDC's land use purview focuses on uses and development that facilitate public access to the bay, to the maximum extent feasible, and applies to areas within the 100-foot BCDC shoreline band. Area near Estuary Park is designated as a Waterfront Park Priority Use Area, and there is not other Port Priority Use Area on the project site (as designated in the *San Francisco Bay Plan*).

LB-26 **Board Member Armstrong** requested that the project build in a lot more parking for public users (non-residents). The DEIR does not identify a significant impact related to parking supply, however this is addressed in the draft Transportation Demand Management (TDM) Plan that concludes that, with implementation of the TDM, a parking surplus would occur. Mr. Ghielmetti confirms that there are ongoing discussion's with AC Transit regarding service to the project site, and states that the project would be required to provide a private shuttle from the site to specific transit and activity nodes as well.

LB-27 **Board Member Armstrong** asks whether Measure DD funding is available to the project. Measure DD allocates funding for a series of improvements and maintenance related to parks and open spaces and specifically identifies improvements to Estuary waterfront parks, including the expansion of Estuary Park. The project sponsor does not propose to use Measure DD funding to develop 20.7 acres of new public waterfront parks along the Estuary, which does not preclude future use of Measure DD funds for improvements in the project area on other related projects. The comment does not address the adequacy of the DEIR analysis or pertain to the project's environmental impacts and is noted.

LB-28 **Board Member Armstrong** directs the project sponsor to provide more parking on the project site and more detail on the design of Shoreline Park. The comment does not address the adequacy of the DEIR analysis or pertain to the project's environmental impacts and is noted.

LB-29 **Board Member Peterson** states that the City decisionmakers should carefully consider the question of the potential overriding consideration of new housing development in Oakland as it considers the loss of other amenities to the public permanently. If the City chooses to allow full or partial demolition of the Terminal, it would be required to prepare and adopt statement of overriding considerations in support of its choice, as it previously did prior to adoption of the Estuary Policy Plan for which a significant unavoidable. Board Members add that specific findings related to historic preservation findings (Policy 3.5) must be made in order to approve the project (see Responses to Comments LB-19 and LB-23) in addition to findings of consistency with the General Plan and Zoning (as proposed for amendment).

LP-30 **Board Member Armstrong** directs the project sponsor to revisit the proposed open space (the comment is not specific as to what aspect) and the reuse of a greater portion of the Terminal. The comment is noted.

LP-31 **Board Member Parish** restates the points in Comment LB-12 and Comment LB-18 regarding the alignment of the Bay Trail along the waterside of the retained Terminal. See Response to Comment LB-12 and LB-18.

APPENDIX A

Draft Transportation Demand Management Program

January 2005

Oak to Ninth Project

Transportation Demand Management Plan

DRAFT

Nelson|Nygaard
consulting associates

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CHAPTER 1 INTRODUCTION

Purpose of the Plan

The Oak to Ninth Project represents one of the most exciting opportunities for dense, urban development in the Bay Area, not least because of its size. This report presents the proposed Transportation Demand Management (TDM) plan for the project. It sets out a series of measures by which the developer and property manager can reduce vehicle travel to and from the site, and promote transit, walking and cycling. These measures capitalize on the mix of uses, walkability and future transit accessibility of the development, giving people a choice whether or not to use their vehicles.

At the same time, the TDM plan is designed to manage the demand for auto travel and ensure that the parking system works well, and that spaces are readily available for all users. The project is designed using "urban" parking ratios, rather than the "suburban" model of unlimited free parking. While this brings numerous advantages – increased development potential and reduced auto use, to name just two – it also requires careful management of the parking system and the provision of alternatives to the auto. The analysis is intended to provide assurances to the developer, lenders, the City and the public that the transportation system will be sufficient to meet the needs of residents, employees, visitors and recreational users.

In summary, the plan concludes that a comprehensive transportation demand management plan can reduce auto trips to and from the site, improve the accessibility of the site to all users and ensure that all modes of transportation including the parking system function well. The basic building blocks of the transportation demand management plan are summarized in Figure 1-1.

Measures Included in the Plan

Chapter 2 proposes transit improvements to serve the site. Chapter 3 describes the proposed facilities for bicyclists, while Chapter 4 details a recommended parking management plan.

The full set of recommended measures is shown in Figure 1-1. Many of these, particularly the bicycle facilities, have already been incorporated into the project design from an early stage. The table divides the measures into *required mitigations*, which are considered essential for the project's success, and *recommended actions.*

Figure 1-1 Planned TDM Measures

Transit

Required Mitigations

- Create a shuttle line that will begin operation with the first residential move-ins. The shuttle will connect the development with the Aquatic Center, Jack London Square and Downtown Oakland, operating at 15 or 30 minute intervals. This route would connect with AC Transit Route 72 in Jack London Square as well as Amtrak, the Ferry Terminal, 12th St. BART and other AC Transit bus routes.

Recommended Actions

- Work with AC Transit to consider the extension of Line 72 from its current terminus at the Jack London Amtrak station to the development site. This route would circulate and layover within the development, providing enhanced "front door" service to businesses and residents in the development.
- Provide enhanced transit information specifically tailored to residents and visitors
- Develop an "eco-pass" deeply discounted transit pass, ideally utilizing Translink which will enable residents to access all Bay Area transit systems without any out-of-pocket expenses for fares
- Implement AC Transit's proposed extension of Line 11 service, providing service every 20 minutes during the week to both Lake Merritt and downtown Oakland, serving BART stations and other local trips
- Provide high quality stop amenities and wayfinding for residents and visitors to the site. Bus shelters should be provided at all stops, and signage should indicate key locations within the development, especially the Bay Trail
- Coordination between bicycle and transit modes is critical, especially for visitors who will want to access the site for recreational trips

Bicycles

Required Mitigations

- Provide an on-site network of bicycle and pedestrian paths to ensure public access to the shoreline, in line with Bay Trail design standards
- Provide Bay Trail signage
- Provide sufficient long-term bicycle parking to meet demand, with cages and/or lockers

in the residential garages

Recommended Actions

- Provide good connections to the City bicycle network, particularly to BART and Downtown Oakland, through ensuring safe crossings at Ninth Avenue and Fourth Avenue
- Provide long-term bicycle parking at an initial ratio of 1 space per 5 units, adjusted upwards as necessary to cater for demand
- Provide secure short-term bicycle parking, with bicycle racks provided along retail frontages in line with City of Oakland placement standards
- Provide distinctive gateway signage to direct cyclists off Embarcadero to follow the shoreline

Parking

Required Mitigations

- Charge for parking separately from the costs of residential units
- Offer residents the option of a reserved, dedicated space at a higher price, or a discounted, shared space
- Manage on-street parking, for example through pricing and/or time limits

Recommended Actions

- Charge non-residents an hourly or daily rate for parking
- Charge the right price to maintain availability, through adjusting prices to ensure that spaces are available
- Price all on-street parking using meters or pay-on-foot technology
- Provide smartcard access to residential garages, ensuring security for residents while allowing employees to use this parking
- Charge a higher rate for the most convenient on-street parking on Main Street
- Provide at least two City CarShare vehicles, and provide free memberships to residents and employees
- Regularly monitor parking occupancy
- Depending on parking demand in Phase I, consider the potential to lease additional space for overflow parking for special events. Caltrans, for example, has historically been willing to lease space under freeways for this purpose

TDM Coordinator

One overarching recommendation is to employ a full-time Transportation Demand Management coordinator for the project. This person would be based in the property management office, and be easily accessible to residents and employees – ideally from a "storefront" location. He or she would take overall responsibility for implementing and adjusting the TDM program; promoting it to the public; and selling parking permits. Two full-time positions may be warranted in Phase II of the project, as this person would have a wide range of responsibilities, including:

- Transit
  - Marketing transit service
  - Selling or distributing transit passes
- Bicycling
  - Allocating bicycle cage spaces and lockers and issuing keys
  - Distributing bicycle maps
  - Monitoring bicycle rack usage and the need for more racks
- Parking
  - Selling parking permits and allocating spaces
  - Overseeing parking administration, enforcement and maintenance
  - Monitoring parking occupancy
  - Recommending parking price adjustments
  - Marketing the City CarShare program
  - Special event planning
- General marketing
  - Publicizing City, County or regional programs such as 511 and the carpooling matching database
  - Organizing transportation information displays
  - Providing transportation information for "new resident" welcome packets
  - Liaising with City transportation staff
  - Responding to public complaints

Each element of the TDM plan is documented in subsequent chapters. The importance of implementing a TDM plan is highlighted on Figure 1-2, which summarizes the results of a study recently completed by the City of Portland. This study showed that with a combination of good transit service and mixed-use development, auto ownership can be reduced by nearly 50% from approximately 2 vehicles per household to one. This type of success is dependant on the combination of mixed-use development, such as the proposed Oak to 9th Plan, and the availability of good transit service, as proposed in Chapter 2. As the figure shows, providing only a mix of uses will not achieve the same results. While these results have been calibrated for Portland, national studies support these findings throughout the Country.

Figure 1-2 Impacts of Transportation Demand Management and Mixed Use Development on Auto Use (Calibrated for Portland, OR)

Land Use Type	Mode Share (percent)					Vehicle Miles per Capita	Auto Ownership per Household
	Auto	Walk	Transit	Bike	Other		
Good Transit and Mixed Use	58.1	27.0	11.5	1.9	1.5	9.80	0.93
Good Transit Only	74.4	15.2	7.9	1.4	1.1	13.28	1.50
Suburban Multnomah Co.	81.5	9.7	3.5	1.6	3.7	17.34	1.74
Portland Region	87.3	6.1	1.2	0.8	4.6	21.79	1.93

Source: City of Portland, 2002

While the transportation demand management plan focuses on transit, biking and parking services and policy, the greatest benefit to the combination of mixed-use development and high quality transit service can be seen on Figure 1-2 under the mode shift to walking trips. All three of these elements enhance the walkability of the development with substantial increases seen in walking trips.

CHAPTER 2 TRANSIT ACCESS PLAN

Encouraging Transit Use

Encouraging transit use on the site requires more than simply providing a bus line. To create a culture of transit use, transit must compete favorably with auto use on speed, cost and convenience to encourage choice riders to use transit. This requires a combination of techniques including enhanced transit information, transit pass provisions, and transit service, including comfortable and secure bus stops. Provisions should be made for combining bicycle and transit trips by accommodating bicycles at transit stops and on-board transit vehicles. Each of these concepts is described below.

Enhanced Transit Information

Transit information is widely available through AC Transit and BART's website and the 511 website and telephone service in the Bay Area. Information on transit service should be provided to all prospective residents and included in a "welcome packet" for all new homeowners and renters on site. Information should include routes and schedule information as well as connection information for the two local BART stations, the Jack London Ferry and AMTRAK. The location of car-sharing vehicles should also be identified and marketed as part of the transit program.

This plan calls for the implementation of a TDM Coordinator to manage the parking operations on site, and distribute transit passes and information. Ideally, this person would be located on site and would be reachable in person and by telephone to answer specific transit information questions. The TDM Coordinator would also be responsible for managing the shuttle, which will likely be contracted with a private operator. While transit information is widely available through other sources, a consolidated local source will help newcomers orient to available transit services, and may encourage them to try transit for the first time.

Transit information should also be available to visitors who may wish to travel to the site for recreation and other purposes. East Bay Regional Parks and others provide information about using transit for recreation. The developer should coordinate with as many of these sources as possible to provide information about services available, including information about bicycle facilities and coordination with transit.

Defraying the Cost of Transit

Discount fare programs that provide special discounts to identified groups such as employees of a particular business, students at a University, or residents of a large development are increasingly common in the United States, and in the Bay Area. These types of fare discounts are often referred to as "Eco Passes" because they encourage transit use by making the cost of transit invisible to the user and by dividing the cost of transit service over both users and non-users. In some cases, the sponsoring agent, usually a large employer, simply reimburses the transit agency for all fares incurred. Employees of the City of Berkeley ride AC Transit for free for all trips, reimbursed by agreement with the City. More sophisticated sponsored programs are used by organizations with a large number of members. In these programs, the sponsor allocates the cost

of transit equally across all members regardless of how often they use the system. Since only a percentage of any group will actually use transit regularly, the cost per person remains low. For example, King County Transit in Seattle, WA uses this type of pricing scheme for its participation in employer-subsidized "flexpass" agreements established with King County employers. Pricing is based on transit usage which is gathered from periodic surveys. Closer to home, AC Transit has a "Class Pass" arrangement with all students and staff at UC Berkeley. AC Transit currently receives about $22.00 per SEMESTER for all students on campus, paid by student fees. In exchange, all students may take all AC Transit services, including local and transbay routes, at no additional charge. The university estimates the value of these services to a student who regularly commutes to school at over $1,000 per year. The deep discount is possible because some students will never or seldom ride AC Transit, while others will ride regularly, and the average fare can be covered with the class price pass. An advantage to AC Transit is a guaranteed revenue stream and an increase in ridership associated with providing "free and unlimited" service to students.

Eco pass programs involving residential developments are less common but do exist. In the Santa Clara Valley, VTA has extended its Eco Pass program to residential developments. Similar programs exist in Portland, OR and Boulder, CO. The cost of the Eco pass for residential customers varies tremendously depending on the expected level of transit use and the number of residents involved, but generally range from $40 to $100 per year per resident.

One of the difficulties in developing an Eco Pass program for Oak to Ninth residents is the high percentage of multi-jurisdictional transit trips in the area. Commuters traveling to San Francisco, for example, would typically take an AC Transit bus to a BART station, then a BART train, and possibly transfer to San Francisco's Muni. Some may prefer to take the ferry into the City, all of which require different fares and fare instruments.

AC Transit local fares are $1.75 per ride, with 10-day and monthly passes available. Combined bus and BART trips offer a $0.25 discount with transfers distributed by BART. BART's fare system is distance based, using stored value tickets that are not compatible with the AC Transit pass and ticket system.

The Bay Area region is in the process of implementing a universal fare media called Translink. This "smart card" will be good on all Bay Area transit systems. The new fare media is currently in its test phase, with initial roll out of a full system anticipated in early 2006. AC Transit will implement the system in stages, with initial implementation anticipated in the first quarter of 2006. With full implementation, Translink will replace AC Transit's prepaid pass programs, including, potentially, existing Eco Passes. BART will be one of the last systems to fully implement Translink, with implementation expected by 2008.

The full implementation of Translink will offer new opportunities for special pass programs, since an Eco Pass could be developed that would cross all transit carriers. Without precedent, it may be difficult to price this pass, but this opportunity should be aggressively pursued before the opening of the first phase of the development.

Transit Service

At present, the Oak to Ninth development area does not have transit service. However, future transit access will be a major factor in managing transportation and parking demand from residents, employees, visitors, and recreational users. The amount that transit service reduces overall demand depends upon its frequency, span (e.g., 7am—10pm), and usefulness – its speed, cost, convenience, and how well it connects people to other transit service and key destinations.

As Oak to Ninth is developed, increased transit service will also be required to serve the needs of residents and visitors to the area. For residents, transit service must connect to local and regional transit networks and job centers, as well as provide a way for residents to make local and regional non-work trips (e.g., shopping, educational, or recreational). Transit service also needs to provide a way for people to access the development's employment, retail, and recreational opportunities.

Key transit linkages include:

- Connections with downtown Oakland including the 12th Street BART station. This all day demand will include commuters, and trips for a full range of trip purposes in downtown Oakland. Connections to the Lake Merritt BART station are also desirable, but would not be adequate without additional service to downtown Oakland, which has more rail options and is itself a major destination. This primary service should operate 7 days a week, providing fast and frequent service for residents accessing transportation connections and services downtown, and also for connecting visitors to the site.
- Connections with Jack London Square, the closest retail and entertainment complex to the development. Residents will need access to goods and services at Jack London, while visitors may want to "make a day" of a trip to both locations. A connection between Jack London and the site could also provide connections to the Aquatic Center, the Ferry Terminal, and to Amtrak, all within reasonable walking distance.

Initially, there will be relatively low demand for transit service on site as development is phased. It is important, however, for transit service to be available from the time the first residents are in place, to encourage a culture of transit riding on the site. AC Transit has committed to rerouting its Line 11 service to the project site as an initial transit service to the new development. Figure 2-1 shows the current Line 11 and the potential reroute of service to the development. Line 11 would run along the Embarcadero, but would not penetrate the site. However, the bus stops would be within convenient walking distance to most residents and activity centers on site. The route will provide service to both Lake Merritt and 12th Street BART and downtown Oakland, which will be the end destination of many trips. Line 11 operates every 20 minutes from approximately 6:00 AM to 7:00 PM during the week and hourly from 7:00 AM to 7:00 PM on weekends. The reroute would abandon the current segment on 12th Street, which carries relatively low ridership. The line would be rerouted via the 16th Street Bridge to Embarcadero, where it would continue on Embarcadero to 5th Street, rejoining the current route. Riders losing their service on 12th Street would continue to be served on 14th Street, a major transit corridor, two blocks away.

Bus stops along the Embarcadero would be located in the vicinity of 8th Street and Main Street, with enhanced treatments for the Main Street stop. Should senior housing be located on the northeast side of the development, the stop at 8th Street should be located to best serve this parcel. The stop at Main Street would be the gateway to the development and should be a high amenity stop with bus shelters and orientation to the development. The developer and AC Transit should work together to design the amenities at this location, particularly way-finding signage and other information to orient visitors to the development and encourage safe access for pedestrians and cyclists.

The reroute provides at least some transit service to the development, which can be offered as soon as people are living on the site. This route alone, however, does not fully meet the needs of the ultimate development, even at the Phase 1 build-out. A key issue with the proposed Line 11 is the lack of frequency, especially on weekends when visitors may want to access the site. The route provides service to both Lake Merritt and downtown Oakland, but does not provide service to Jack London Square, the Ferry Terminal, Amtrak or the Aquatic Center. Service to downtown is circuitous and somewhat indirect, which may discourage ridership.

There are two alternatives for adding service which will better meet the needs of the development. In the short term, a shuttle route, designed specifically around the needs of the development could be contracted to provide service to Jack London Square and Downtown Oakland. In the long term, discussions could also be conducted with AC Transit to extend a route to the development.

The shuttle route would operate on 9th from the Embarcadero to the intersection at 9th and Main, to the Embarcadero and across the Lake Merritt Channel, serving the Aquatic Center and crossing the railroad tracks at Oak Street. Service could be provided to the Amtrak station, Jack London Square and continue up Broadway to the 12th Street BART station. At select times, the shuttle could deviate to the Ferry Terminal to provide direct connecting service.

The advantages of the shuttle include:

- Direct service between the development, the Aquatic Center, Jack London Square and downtown Oakland.
- Transit service that penetrates the development. This would be a particular enhancement for any senior housing, allowing for penetration into the development and eliminating the need to cross Embarcadero for seniors and disabled residents.
- Direct connecting service to AC Transit Route 72 that provides service along the entire San Pablo Corridor, one of the most diverse and highest ridership corridors in the AC Transit system, as well as BART at 12th Street, Amtrak, the Ferry Terminal, and other AC Transit routes.
- Opportunities for enhanced frequency, especially on weekends, when Line 11 provides only hourly service.
- It is likely to be more economically feasible than extending AC Transit Route 72 to the development.

The proposed route would be just over 2 miles long each way, and could be operated by one bus providing service every 30 minutes, or with two buses, providing service every 15 minutes. The frequency of the shuttle will depend to some extent on the size of the vehicle operating the route. A larger bus may provide adequate service every 30 minutes, while a smaller bus may need to operate more frequently to handle

variations in demand. At a minimum, all buses should accommodate 16-seated passengers, and should be fully accessible to passengers using wheelchairs and other mobility devices. Capacity for carrying bicycles on the bus is essential, and should be accommodated on all vehicles.

Key stops along this route would be at the Aquatic Center, 5th Avenue, Main Street and Embarcadero, Main and 9th Avenue and 9th at Embarcadero in addition to existing AC Transit stops along Broadway to the 12th Street BART station.

Stops should be characterized by quality amenities and wayfinding. The developer will have greater flexibility in designing those stops that are internal to the site, providing signage identifying Main Street businesses, and orienting pedestrians and cyclists to the Bay Trail, the Marina, and other recreational sites. A layover point with high amenity treatments would be located on Main Street. Bus stops within the development should be designed to accommodate full 40-foot coaches, even if the initial service phase utilizes smaller vehicles.

The cost of this service would be dependant on the size of the vehicle and bids from vendors. Smaller vehicles are generally offered for $60-80 per hour while larger buses are more likely to cost between $80 and $100 per hour for shuttle service. Using the same vendor to operate parking facilities and the shuttle can result in lower cost shuttle operations. As a rough estimate, assuming 1 bus operating every 30 minutes over a 15-hour service day and 365 days per year, the cost would range from $330,000 for a small bus every half hour to $550,000 for a larger bus every half hour. Increasing to 15-minute frequency would double the cost. The cost of the shuttle would likely be lower than the alternative of extending AC Transit Route 72, since that would require adding a vehicle to an already long route.

Presumably, this service would be established as a "free fare" shuttle, with no revenue to offset the operating cost. Provided that residents were provided with "eco-passes," the shuttle would not result in any revenue loss to AC Transit, and free transfers could be made to other AC Transit routes. Fares and transfer policy for non-residents would need to be negotiated with AC Transit.

In the long term, discussions should be conducted with AC Transit to extend Route 72, the local San Pablo Corridor Service, to the development. A possible extension for this route is shown on Figure 2-1. This route currently begins in Richmond and covers the entire San Pablo Corridor through Berkeley and Oakland, terminating at the Amtrak Station at Jack London in Oakland. A relatively short extension of that route would bring it across the railroad tracks at Oak Street continuing along the Embarcadero and terminating within the development. This extension would require just over a mile of travel, and would add about 10 minutes to the round trip.

The key stops for the extension would be the same as for the Shuttle Line. Bus stops within the development should be designed for quality transit operation and customer experience , with curb extensions (bus bulbs) where possible marking the stop and providing easy stop access. Bicycle parking should be conveniently located near bus stops, especially on Main Street, where cyclists may choose to pause in their trip.

The primary drawbacks for this extension are that the route cannot be extended without added cost and that the extension would elongate

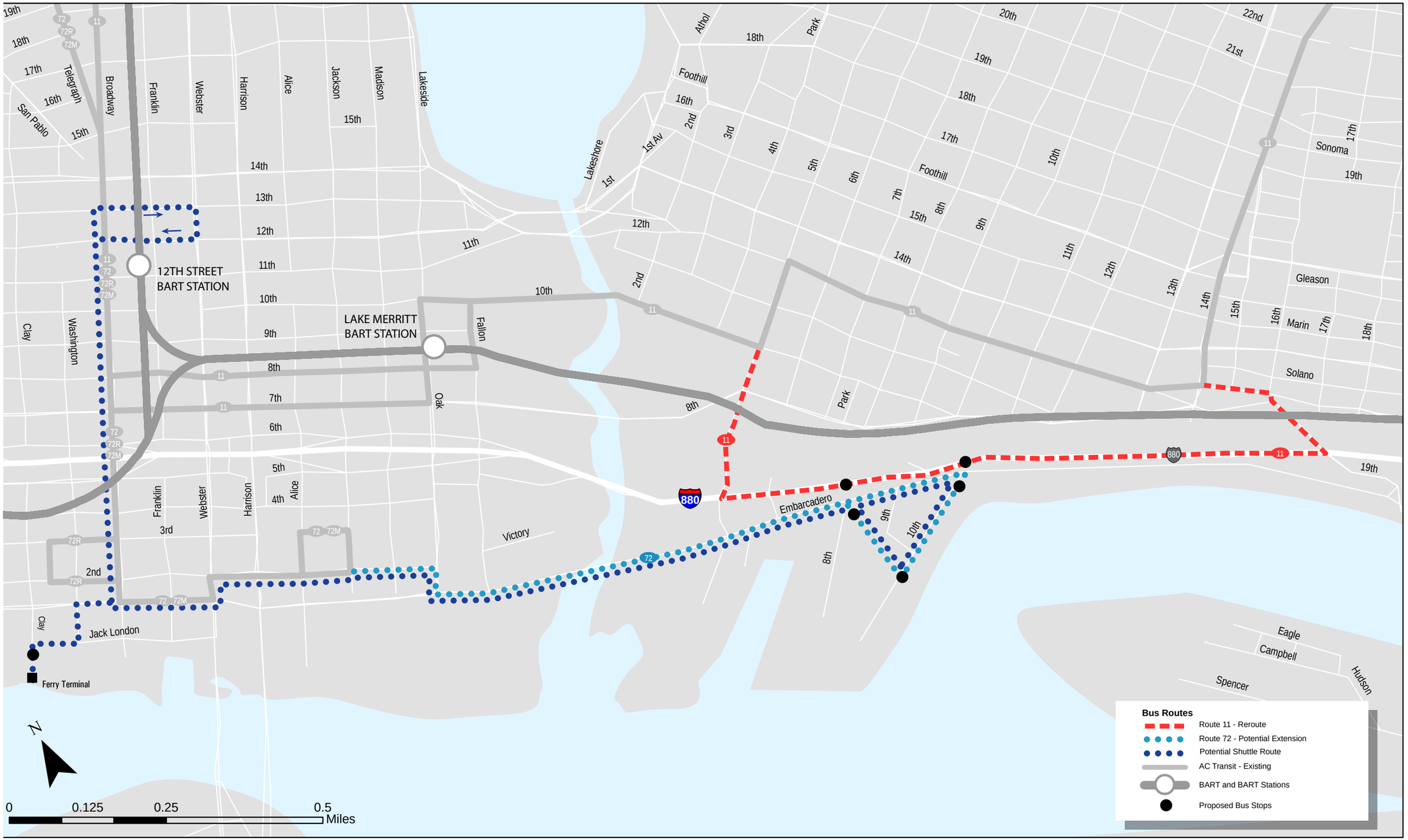
a route that is already very long. Although the extension itself is just over a mile, adding this additional service would increase the number of vehicles required to operate the service by one.

The cost of this extension would need to be negotiated with AC Transit, assuming they would be interested in this service. However, because the extension would require an additional bus and driver to be in service over the entire service day, the extension would cost several hundred thousand dollars, and may not be cost effective.

The proposed shuttle or Line 72 extension should be seen as a complement to, rather than as competition for, the Line 11 extension proposed by AC Transit. Line 11 will be the fastest route to Lake Merritt and the Lake Merritt BART station. It will also provide access to the site from East Oakland neighborhoods. The shuttle, and in teh long term a possible Route 72 extension, on the other hand, are also of great importance, as they will be the fastest route to Jack London Square and downtown Oakland.

Combined, these services will provide adequate coverage to all key demand points for both residents and visitors to the site. All residents will live within comfortable walking distance of a bus route, and all routes will serve downtown and at least one BART station.

Figure 2-1 Oak to Ninth Street Potential Transit Service (GIS)



Source: MTC and ESRI

CHAPTER 3. BICYCLE FACILITIES

Introduction

Bicycle facilities are a critical part of the Oak to Ninth Project. They will allow easy access for residents and visitors to and from nearby destinations and transit hubs, particularly Jack London Square, downtown Oakland and Lake Merritt BART station. These are all between one and two miles from the project site – a long walk, but a brief bicycle ride. In turn, bicycle facilities will help to reduce parking demand and traffic impacts from the development.

At the same time, provision of bicycle facilities can help the wider community take advantage of the recreational opportunities that redevelopment will bring. The San Francisco Bay Trail runs through the project site, and many trail users will enjoy the facility by bicycle.

This chapter of the Transportation Demand Management Plan discusses how bicycle facilities will be integrated into the Oak to Ninth Project. The first section outlines the proposed bikeway network, including the Bay Trail and links to the City of Oakland network. The second section covers bicycle parking facilities.

Bikeways

Bikeway Network

Bikeways must meet the design standards specified in Chapter 1000 of the Caltrans Highway Design Manual. In this chapter, three types of bikeways, are defined:

- Class I Bike Path. Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with cross-flow minimized.
- Class II Bike Lane. Provides a striped lane for one-way bike travel on a street or highway.
- Class III Bike Route. Provides for shared use with pedestrian or motor vehicle traffic.

At the Oak to Ninth Project, Class I bike paths will primarily provide for recreational use. The path will follow the shoreline, as part of the Bay Trail. Class II bike lanes, meanwhile, will provide a higher-speed, direct route along the Embarcadero. Fifth Avenue, Main Street and Eighth Avenue will carry some bicycle traffic, and should be treated as Class III bicycle routes, although need not be signed.

The planned bikeway network is shown in Figure 3-1. Along the Embarcadero, 6' wide Class II bicycle lanes will provide the most direct route past the project site. For recreational users or less experienced cyclists, a Class I Bike Path will follow the shoreline, as follows:

- From Fourth Avenue to Clinton Basin, this will provide a 40' section, including a 10-12' bike path separated from the pedestrian path (Figure 3-2).
- Around Clinton Basin, there will be a 35' Promenade Zone, shared between pedestrians and bicycles, stepped down from a 15' Cafe Zone (Figure 3-3).
- Along Ninth Avenue and along Fourth Avenue, the Bay Trail will split into separate bicycle and pedestrian sections. The pedestrian route will hug the shoreline, while the bicycle path (Figure 3-4) will follow the roadway.

Main Street will also be an important access

route to the project site, particularly for more experienced cyclists. For this reason, we recommend that back-in/head-out angled parking be provided along Main Street, to improve visibility of cyclists to motorists leaving a parking space.

Figure 3-1 Planned Bikeway Network

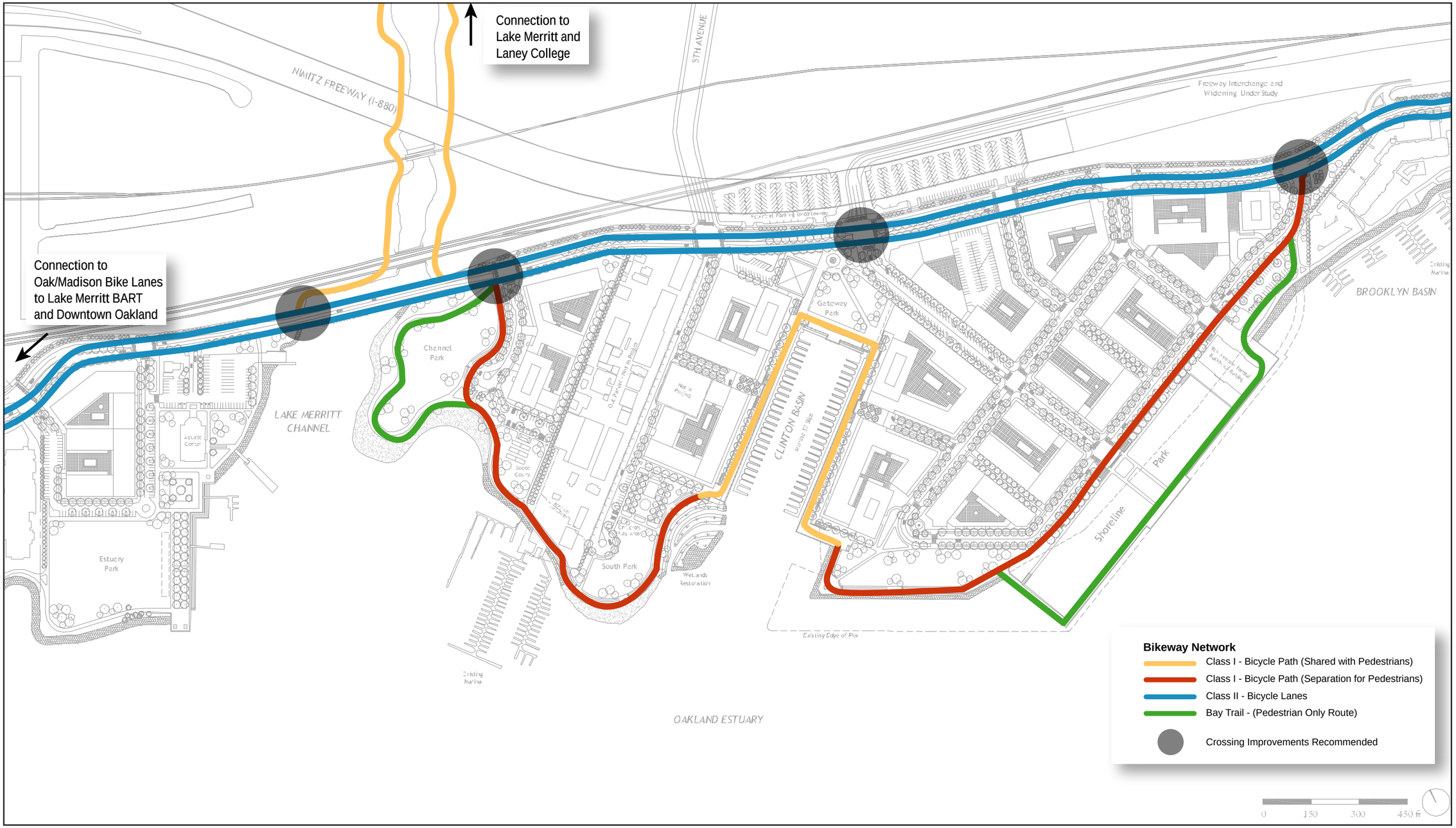
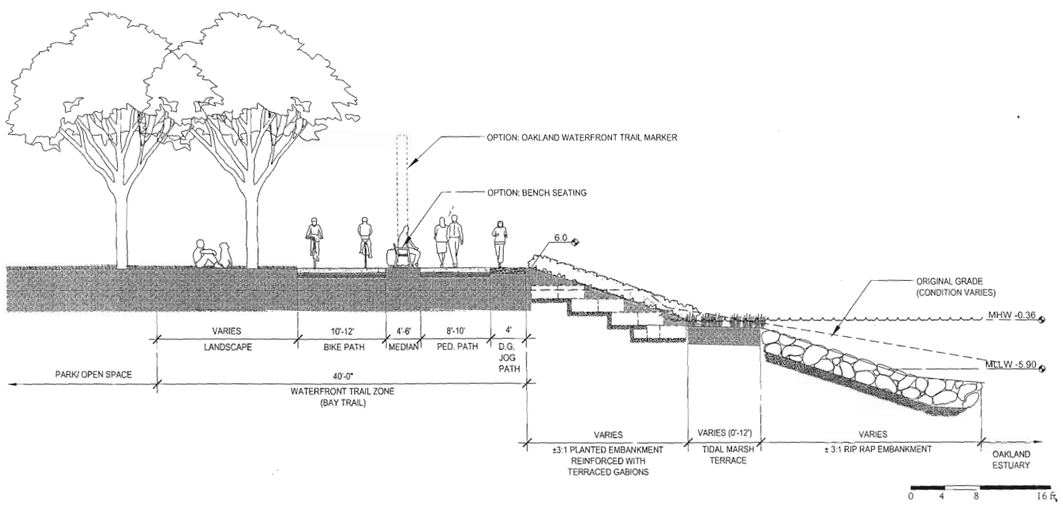
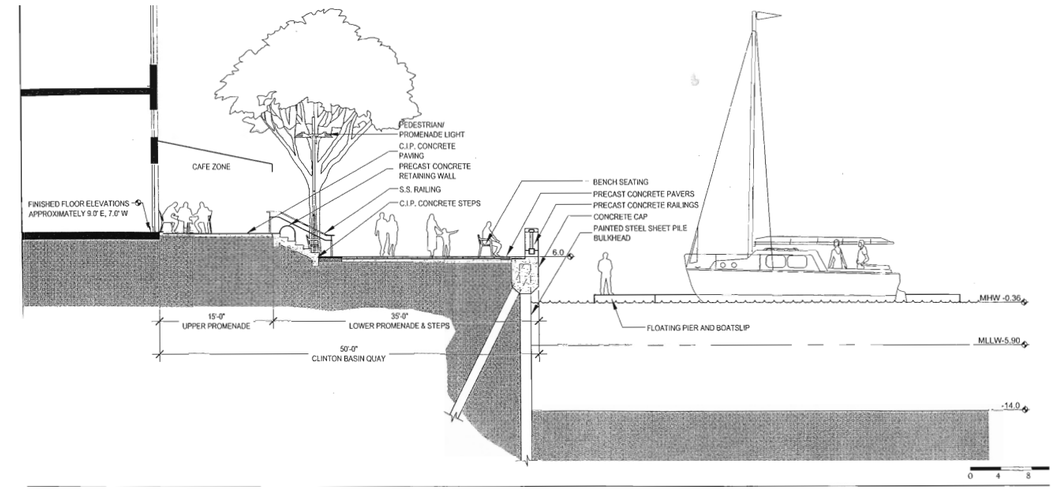


Figure 3-2 Typical Bay Trail Section



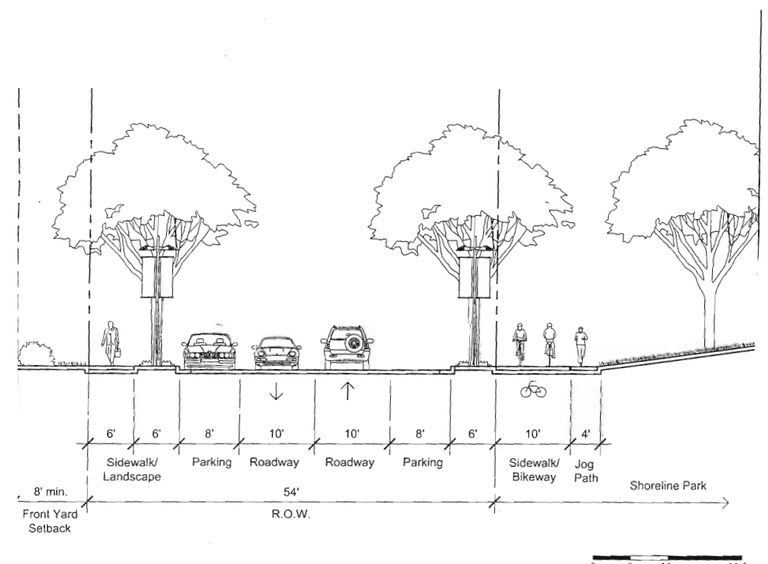
Source: Prepared by ROMA Design Group in association with MVE Architects, Moffatt & Nichol and BKF Engineers

Figure 3-3 Clinton Basin Section



Source: Prepared by ROMA Design Group in association with MVE Architects, Moffatt & Nichol and BKF Engineers

Figure 3-4 Ninth Avenue Section



Source: Prepared by ROMA Design Group in association with MVE Architects, Moffatt & Nichol and BKF Engineers

Bay Trail

In addition to Caltrans Highway Design Standards for bikeways, the San Francisco Bay Trail Plan sets out trail alignment and design policies in order to ensure high-quality public access to pedestrians and bicycles as close to the shoreline as possible. The Oak to Ninth Project will implement the Bay Trail according to these policies through the project site, as shown in Figure 3-5 and 3-6.

Figure 3-5 Relevant Bay Trail Alignment and Design Policies

Policy	Implementation
Trail Alignment Policies	
Ensure a feasible, continuous trail around the Bay.	The trail will be continuous through the project site.
Locate trail, where feasible, close to the shoreline.	The trail will follow the shoreline through the project site.
In selecting a trail alignment, use existing stream, creek, slough and river crossings where they are available. This may require bridge widenings in some locations.	The trail will cross Lake Merritt Channel via the existing Embarcadero bridge.
In order to minimize the use of existing staging areas along the shoreline and to reduce the need for additional staging areas, the choice of trail alignment should take full advantage of available transit, including rail service (e.g. Caltrain, BART), ferries and bus service.	The trail can be accessed by a bike path from Lake Merritt BART station, and by planned new AC Transit and shuttle service.
Trail Design Policies	
Provide access wherever feasible to the greatest range of trail users on each segment.	The trail will be fully accessible through the project site.
Wherever possible, new trails should be physically separated from streets and roadways to ensure the safety of trail users.	The trail will be fully separated from roadways through the project site (Class I facility). However, the trail will use the Embarcadero bridge to cross Lake Merritt Channel.
Create a trail that is as wide as necessary to accommodate safely the intended use, with separate alignments, where feasible, to provide alternative experiences.	Bay Trail design standards will be adhered to within the project site (Figure 3-6). The north part of the site will offer several different alignments through Channel Park and South Park (see Figure 3-1).
Highlight the interpretive potential of certain trail segments, including opportunities for interpretation, education, rest and view enjoyment.	Benches, cafes and other amenities will be provided throughout the project site.
Incorporate necessary support facilities, using existing parks, parking lots, and other staging areas wherever possible.	Through shared parking, the project will minimize the need to construct dedicated parking facilities for Bay Trail users.
Design new segments of trail to meet the highest practical standards and regulations, depending on the nature and intensity of anticipated use, terrain, existing regulations, and standards on existing portions of the trail.	Design standards for both the Bay Trail and City of Oakland will be adhered to.
Minimum and maximum standards by use, width, surface, etc. should be developed, to ensure safe enjoyment of the trail and compatibility with surroundings and existing facilities, and to encourage use and design of surfaces for which long-term maintenance will be cost-effective.	Bay Trail design standards will be adhered to within the project site (Figure 3-6).
Design and route the trail to discourage use of undesignated trails.	In general, the alignment will provide the most direct route along the shoreline.

Figure 3-6 Bay Trail Design Guidelines

Item	High-Use Facilities (Separate Paths)	Multi-Use Paths	Bicycle-Only Paths
Minimum width (one-way)	8-10'	10'	8'
Minimum width (two-way)	10-12'	10-12'	10-12'
Surface	Asphalt	Asphalt	Asphalt
Horizontal clearance (incl. shoulders)	12-16'	14-16'	10'
Shoulder	2'	2'	2'
Vertical clearance	10'	10'	10'
Cross slope	2% max	2% max	2% max
Maximum grades*	5%	5%	5%

* Percentage grade for short distances with flat rest areas at turn outs, except where site conditions require a greater slope for short distance.

Bicycle Access

There will be two major access routes to the project site for bicyclists, shown in Figure 3-7:

- Embarcadero, which will have a 6' bicycle lane and 6' sidewalk, buffered from the roadway with a 6' planting strip, in each direction. The Embarcadero provides some of the most important connections to the site. To the northwest, it links to Jack London Square and the Amtrak station, and to the Oak/Madison bicycle lanes which provide access to Lake Merritt BART station and downtown Oakland.
- Lake Merritt Channel Pathway, which is a multi-use bicycle and pedestrian path linking to Laney College and Lake Merritt, and a planned east-west Class I bicycle path along the Union Pacific right-of-way.

Note that these projects are identified in the City of Oakland bicycle plan; they would not be implemented as part of the Oak to Ninth project. The City is also considering the potential for Fifth Avenue bicycle lanes to link Embarcadero to 10th Street; again, however, this is a separate City project.

Slight modifications to several proposed intersection designs are recommended to provide good connections from the project site to these access routes, particularly for left-turning cyclists:

- Crossings. The Bay Trail connects to the Embarcadero at Fourth Street and at Ninth Avenue. These intersections would be unsignalized; at Ninth Avenue, a median would prevent left turns for vehicles. We recommend that a crossing be provided to serve both bicycles and pedestrians, with design elements such as bulbouts and adequate median refuges to facilitate crossing and improve pedestrian visibility.
    - At Ninth Avenue, the crossing should be on the east leg of the intersection. The curb should be dropped at the intersection and in the median to allow cyclists to cross.
    - At Fourth Avenue, only the crossing on the west leg of the intersection needs to accommodate bicycles; again, the curb should be dropped.
    - A similar treatment could be provided where the Lake Merritt Channel Pathway intersects with Embarcadero.
- Bicycle lane. A bicycle lane is not necessary along the length of Main Street given relatively low traffic volumes and speeds. However, many cyclists may use this as the most direct access route to the Embarcadero. To allow safe turns, a left-turn bicycle lane may be striped between the two travel lanes.

Figure 3-7 Bikeway Connections

Source: MTC, ESRI, and City of Oakland

Wayfinding

Wayfinding signage will be provided along the length of the Bay Trail within the project site. This will help visitors to locate the trail once they arrive at the site, and also to stay on the trail. Gateway signage will be provided at every intersection with the Embarcadero, although the most important locations are:

- Gateway Park. This will be the primary point of access for many visitors, since it is adjacent to the freeway off-ramp. The park is also directly across the street from the proposed overflow parking facility under the freeway, which will primarily be utilized on sunny summer weekends. As well as signage, there will be a direct line-of-sight connection to the Bay Trail and the cafes around Clinton Basin, which will help to draw visitors in.
- Channel Park. This marks the western entrance to the Bay Trail; good signage here is important in drawing pedestrians and cyclists off the Embarcadero and down to the waterfront.
- Ninth Avenue. In a similar way to Channel Park, Ninth Avenue marks the eastern entrance; good signage will help to draw pedestrians and cyclists off the Embarcadero.

Secondary markers such as a map kiosk, light marker or interpretive signage marker will be provided at regular intervals along the trail, where there is a choice of paths. This will comply with Bay Trail policies, which state:

A consistent signing program should be established throughout the trail system, using a Bay Trail logo which will identify trails within the Bay Trail system as distinct from other connecting trails. The choice of materials used should be the concern of the individual implementing jurisdictions and agencies.

Bicycle Parking

Bicycle parking on the project site serves two important markets.

- Long-Term parking is needed for bicycle storage for residents and employees. This parking will be in secure, weather-protected, restricted access facilities (Class I parking).
- Short-Term parking will serve shoppers, trail users and other visitors (Class II parking). As well as security, convenient locations are a priority – otherwise, bicyclists will tend to lock their bicycles to poles or fences close to their final destination.

Long-Term Parking

A mix of long-term bicycle parking facilities is recommended in each parking garage.

- Bicycle racks at garage entrance. These will primarily serve employees, and are particularly important on Parcel G which will be a staffed garage. Here, racks should be located in clear view of the garage attendant, and may replace one or more vehicle parking spaces. In other garages, racks can make use of nooks and corners that are too small for a vehicle parking stall, provided that these are close to the entrance.
- Bicycle cages are needed in all garages, and will primarily serve residents. The cage will be secured with a locked gate (ideally using an electronic keycard). Within the cage, cyclists will be able to lock their bicycles to a rack, providing an additional level of security.
- Bicycle lockers will provide an additional option for the most security-conscious bicycle users (both residents and employees). Since they are more space-intensive than other options, they should be made available for a modest fee. A small number of lockers can be introduced initially,

with the demand being closely monitored.

The parking garage is the most suitable location, as bicyclists can use the vehicle entry without the need to navigate stairs or elevators. Bicycle parking should be on the ground floor, as close to the entry as possible.

Keys or access cards would be managed by the on-site TDM coordinator. The coordinator would also need to monitor the cages and racks regularly, for example to identify and remove abandoned bicycles and assess security.

Figure 3-8 shows the number of long-term caged bicycle parking spaces that are recommended initially. However, these will need to be adjusted in line with demand; should a cage fill up or lockers be oversubscribed, additional parking must be provided, even if this replaces a vehicle parking space. The initial parking requirements are deliberately set at the lower end of the range, on the understanding that new bicycle parking can quickly be added. They are calculated as follows:

- The City of Oakland bicycle plan calls for one long-term space per two units. However, this recommendation is likely to be revised downwards, and this is much higher than several comparable cities such as Portland, OR which requires one space per 5 to 10 units; and San Jose which requires 1 space per 4 units. San Francisco is considering a 1:4 requirement in the mid-Market neighborhood. A baseline is therefore set at 1 space per 5 units.
- The number of cages is rounded down.
- Bicycle parking provision for Phase II should be readjusted based on experience in Phase I.
- Any parcel that includes senior housing could include a lower number of cages.

Employee demand will be greatest on parcels "G" and "H", where secure racks will be available within sight of the Parcel G garage attendant. On other parcels, employee bicycle parking demand is likely to be minimal and can be catered for with the racks located in nooks and corners, with lockers available as required.

A typical cage can be sized at slightly less than one vehicle parking stall (i.e. 9' by 16'). This cage would accommodate 4 to 5 racks holding 8 to 10 bicycles[1]. Any cage that is larger than ten bicycles poses a security risk due to the number

1 This sizing accommodates the dimensions recommended by the Association of Pedestrian and Bicycle Professionals. There would be two rows of three parallel racks with the middle rack in one row to provide access from the 9" side of the cage. Each row would be 6' wide with a 4' aisle in between. The racks would be spaced at 2.5' intervals, with 2' clearance to the wall.

of keyholders.

Figure 3-8 Initial Bicycle Parking Provision

Parcel	Number of Units	Baseline Number of Spaces	Initial Cages Recommended	Bicycle Parking Ratio (Spaces per Unit)
A	375	75	9	0.19
B	160	32	4	0.20
C	160	32	4	0.20
D	160	32	4	0.20
E	86	17	2	0.19
F	164	33	4	0.20
G	280	56	7	0.20
H	335	67	8	0.19
J	292	58	7	0.19
K	310	62	7	0.18
L	144	29	3	0.17
M	334	67	8	0.19
N	300	60	7	0.19
Total	3100	620	74	0.19

* Each cage measures at least 9' by 16', and holds 4 racks or 8 bicycles. Most cages will replace a single vehicular parking space.

Short-Term Parking

Short-term parking will be provided by means of on-street racks immediately adjacent to high-demand locations, in the following locations:

- On all retail frontages
- Around Clinton Basin
- Next to the primary transit stops; this will allow cyclists to park their bicycle should the on-bus racks be full
- In other locations, where the presence of bicycles locked to fences or railing indicates demand

Initially, a single "U" or similar rack should be placed as close as possible to the entrance of all retail businesses where this is not prevented by other obstructions. Additional racks are easy to install and this should be done based on demand. The on-site TDM coordinator will need to conduct regular observations.

The street furniture zone will generally be the most appropriate place for racks, where they can be placed in between street trees and lights. This maintains the maximum clear width for pedestrians. The City of Oakland has developed detailed standards for rack placement, as follows:

Measurements

- Footprint: 6' long x 2½' wide (the "footprint" is the area occupied by a bicycle when it is parked at the rack)
- Rack: 36" tall x 21" wide

Location Details

- Commercial district
- On public property

- With business owner's permission
- On a flat concrete sidewalk
- Sidewalk must be free from cracks or other damage

Clearance

There should be a minimum of 5½' clear for pedestrian right-of-way outside the footprint; 7' in areas of heavy pedestrian traffic. Rack should be located a minimum of:

- 5' from Fire Hydrant
- 4' from AC Transit Red Zone, Loading Zone, Blue Zone (disabled parking), Curb/Curb ramps, Crosswalk or BART entrance
- 3' from Newspaper Racks, US Mailbox, Light Pole, Sign Pole, Bus Shelter, Driveway, Surface Hardware (PG&E, Cable grates, etc.), Street Furniture, Standpipes, Bus Benches, Trash Cans, or other sidewalk obstructions
- 30" from light pole
- 18" from the curb

CHAPTER 4 PARKING

Introduction

This chapter presents Nelson\Nygaard's parking analysis for the planned Oak to Ninth development. It covers two areas:

- Quantification of parking demand
- Discussion of parking management arrangements

Effective parking management and a correctly sized supply are extremely important if the potential of this development is to be fully realized. The strategies presented in this chapter will ensure that the parking system works well, and that spaces are readily available for all users at all times. This Transportation Demand Management plan provides a detailed parking demand analysis; it takes into account surplus/deficits in each parcel and also includes impacts of parking pricing, which will be a very important tool to reduce parking demand for both residents and employees. This chapter analyzes several parking management measures in detail.

For residents, it will be a matter of unbundling the parking costs. Typically, when a residential unit is bought or rented, the costs of providing parking are included in the price or the rent. At Oak to Ninth, this Plan proposes that residents will be able to choose how many parking spaces they need, and will be charged for these costs separately – providing a financial incentive to own fewer cars, and to take advantage of alternatives such as City CarShare. Residents who do not park in the structures would benefit from lower housing prices or rents. Of course, this calls for on-street parking management and pricing, to avoid congesting on-street parking.

Parking demand will also to a great extent depend on how the development is marketed and presented to the public, due to a "self-selection" process. A marketing message that stresses the availability of good regional transit connections, the mix of uses and the availability of car sharing (if provided) is likely to disproportionately attract households who want the choice to own just one vehicle – or in some cases none at all.

The strategies outlined here also analyze parking demand in two phases; Phase I which includes construction of Parcels A, B, C, G and F; and project build-out.

Since there are very few similar developments that can be used as a model to estimate travel behavior and thus parking demand, it is difficult to provide precise estimates of parking demand with a high degree of certainty. Parking supply ratios can thus be more generous in early phases, taking account of the fact that parking demand will be higher in earlier phases until the mix of uses matures and future transit services begin. In later phases of development, the supply of parking can reflect both this initial surplus and the actual level of demand.

Summary of Results

The analysis in this chapter shows that parking supply will be adequate to meet demand, provided that parking is charged for and shared between different users. The peak time of demand is expected to be weekday evenings, meaning that ample parking will be available on weekends for Bay Trail users and other recreational visitors. It is estimated that there will be more than 220 on-street parking spaces available on Saturday afternoons. Figure 4-1 shows the summary of peak parking demand.

Figure 4-1 Summary of Peak Parking Demand

	Supply	Demand*	Occupancy
Phase I	1,602	1,226	77%
At build-out	3,902	3,340	86%

Figures are for weekday evening peak. Daytime and weekend demand will be lower.

* Excluding recreational use

These estimates are conservative, as they do not take into account the impact of transit service improvements, bicycle facilities or car-sharing. These investments will serve to reduce demand further, but – more importantly – provide amenities to residents and realistic alternatives to paying for parking.

Parking Supply

The proposed project will provide covered parking at a rate of one space per residential unit, one space per 500 sq. ft. of commercial space, and one space per five boat slips, which is consistent with parking requirements for the planned Waterfront Zoning District. Figure 4-2 shows the number of on-street and off-street parking spaces provided after Phase I and at project build-out.

Figure 4-2 Parking Supply

	On-street			Off-street		
Parcel	Phase I	Phase II	Total	Phase I	Phase II	Total
A	67		67	375		375
B	32		32	160		160
C	33		33	160		160
D	7	26	33		160	160
E		36	36		86	86
F	13		13	164		164
G	79		79	480		480
H	32	7	39		390	390
J		6	6		294	294
K		26	26		339	339
L		20	20		180	180
M		36	36		360	360
N		34	34		300	300
Total	263	191	454	1339	2109	3448

Parking Demand Analysis: No Pricing

This section, together with Appendix A which documents the full analysis, provides a quantitative estimate of parking demand in the development that can be used to guide the initial management of parking. Rather than using generic estimates of parking demand, they are adapted to consider how vehicle ownership and use patterns are likely to vary on the site:

- Estimates of residential parking demand are made using current vehicle ownership levels in an Oakland census block with similar characteristics
- Employee parking demand estimates are based on the expected number of employees in each parcel and employee mode split from two neighboring census block groups, rather than standard parking ratios from the Institute of Transportation Engineers[1]
- Visitor parking demand is derived from assuming a commercial parking demand of two spaces per 1,000 sq. ft. and then

1 Problems with the Institute of Transport Engineers' standard ratios are discussed in Shoup, Donald (2002), "Truth in Transportation Planning", Journal of Transportation and Statistics.

subtracting employee parking demand (since these two together constitute the commercial demand)

- Marina parking demand is a conservative estimate based on standard parking ratios from the Institute of Transportation Engineers
- Recreational parking demand has not been estimated, since little or no data exists for estimating the number of recreational visitors. However, the figures show the number of parking spaces available for these visitors during daytime on weekdays and weekends.
- Allowance is made for shared parking, as different users will have different times of peak demand

Methodology

Residential Parking Demand

To estimate vehicle ownership amongst potential residents, 2000 census data from one of the adjacent block groups (Block Group 1, Census Tract 4033, Alameda County, California) was used. This method generates an estimate of 1.19 vehicles per household, which is in between typical urban and suburban residential peak parking demand ratios. Vehicle ownership is much lower for renters than for owner occupiers; it was assumed that 70% of the units would be owner-occupied and 30% renter-occupied.

Parking demand is not only lower for rental units, but also for senior housing. Any senior housing on site would be expected to 30% less parking demand, based on findings for Bay Area senior residents (above the age of 65 years) from the 1990 MTC Household Survey.

Employee Parking Demand

Typically employee and customer/visitor parking demand are combined into a single analysis for commercial parking demand. However, these two components are separated in this analysis, since a key aim is to manage the parking to ensure that the most convenient, visible spaces are available for customers. The 1995 Commercial Buildings Energy Consumption Survey from the Energy Information Administration reveals information about typical number of employees per 1,000 sq. ft. of gross floor area for more than 15 types of commercial uses, such as retail and grocery stores. This data was used to retrieve the expected number of employees in each parcel in the development.

The second step was to estimate the number of employees who will need a parking space in each parcel. The Census Transportation Planning Package (CTPP 2000) for two relevant census block groups (Block Group 1, Census Tracts 4032 and 4033, Alameda County, California) was used to estimate expected employee mode split on the site. One of these block groups contains the site of Jack London Square. This method generates an estimated parking demand of 0.74 spaces per employee, based on 68% of employees driving alone and 14% carpooling.

Visitor Parking Demand

A review of parking demand of "main street districts" comparable to the Oak to 9th development found that parking occupancy rates for successful mixed-use districts ranged from just 1.6 to 1.9 spaces per 1,000 sq. ft. of non-residential built areas (see Figure 4-3). We have therefore assumed a commercial parking demand of 2 spaces per 1,000 sq. ft. of gross floor area in the Oak to 9th development. By subtracting employee parking demand in each parcel we get visitor parking demand (since these two together constitute the commercial demand).

Figure 4-3 Summary of parking occupancy in four Main Street districts

	City Population	Mode Split[1]							Occupied Parking Spaces per 1,000 Sq.Ft.[3]
		Drove Alone	2 or More Person Carpool	Transit	Bicycle	Walked	Other Means	Worked at Home	
Chico	59,900	61%	12%	1%	11%	13%	1%	1%	1.7
Palo Alto	58,600	80%	9%	4%	3%	3%	1%	0%	1.9
Santa Monica	84,100	74%	11%	11%	1%	2%	1%	0%	1.8
Kirkland, WA[2]	45,600	77%	12%	4%	0%	2%	1%	4%	1.6

1 Source: Census Transportation Planning Package (CTPP) 2000.

2 Commuter mode split for Kirkland, Washington is not limited to the main street district, but covers commuting to the entire city, due to lack in data from CTPP 2000.

3 Sq. Ft. refers to occupied non-residential built area in Chico and Palo Alto and both vacant and occupied non-residential built area in Santa Monica and Kirkland.

Marina Parking Demand

There is very little known about parking demand generated in marinas. There are several factors influencing parking demand, such as presence of guest boats (which typically will not need any parking), size of each boat, and the potential for public attraction. The ITE Parking Generation manual only refers to one study, where Saturday demand is 0.35 parking spaces per boat slip and Sunday demand is 0.59 spaces per slip. During weekdays parking demand is even lower.

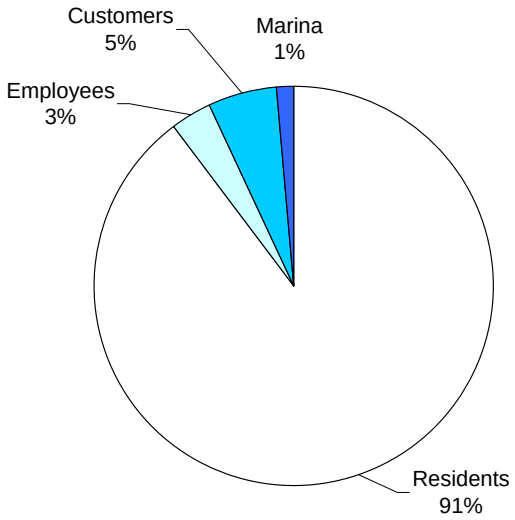
In this plan, we have assumed that its parking demand will be held constant during the entire week. To keep the analysis conservative, the Saturday parking demand for marina users was chosen over the weekday parking demand.

Overall Parking Demand with No Parking Management

Figure 4-4 shows how parking demand would be distributed between the four major parking user groups. Based on the methodology described above, there would be a deficit of 214 parking spaces (4,116 spaces needed of a total of 3,902 spaces) at project build-out, if no parking management strategies were implemented. In Phase I there would be a surplus of 89 parking spaces, or 6%, in large part because of surplus parking in parcel G and on street. See Appendix A for full details on this baseline scenario.

This analysis indicates that active parking management will be required to ensure that residents and employees as well as commercial and recreational visitors can easily find a space. This will help reduce the baseline parking demand. At the same time, these management strategies will help reduce the traffic impacts of the development, and encourage travel by transit, bicycle and walking. The group that is the most important to reach with parking management techniques is residents, who account for almost 95% of the total parking demand.

Figure 4-4 Parking Demand Distribution – No Parking Management



Proposed Management Approach

There are two key principles that should govern the management of parking in order to realize more "urban" demand ratios: charge the appropriate rate to maintain availability, and build and manage as much parking as possible as a common pool. These two principles will do the most to ensure that parking is readily available to all users. At the same time, these principles support other goals such as development marketability, improving walkability, reducing the cost and land requirements for parking, and maintaining public access to the shoreline.

Charging for Parking

(1) Parking should be priced to reflect the real costs of its provision, and leased separately from residential or commercial space.

Although it is often provided at no charge to the user, parking is never free. A typical cost for structured parking in California is $20,000 in construction costs alone. This equates to a monthly cost of $130 per space, including debt service, operations and maintenance, insurance and enforcement. Where parking takes up land that could be put to other uses, it is appropriate to add in land costs as well. Even on-street spaces incur costs in terms of land value and maintenance.

Parking fees are generally subsumed into lease fees or sale prices for the sake of simplicity and because that is the more traditional practice in real estate. However, providing anything for free or at highly subsidized rates encourages use and means that more parking spaces have to be provided to achieve the same rate of availability. Charging for parking is also the single most effective strategy to encourage people to use alternatives to the single occupant vehicle.

It is important that parking fees not be seen as being punitive to "bad" car drivers. Parking fees can be made more acceptable by ensuring there are good alternatives to driving, by making it clear that the fees cover the costs of parking, and by providing different parking options at different price points.

It is also critical that residents and tenants are made aware that rents, sale prices and lease fees are reduced because parking is charged for separately. Rather than paying "extra" for parking, the cost is simply separated out – allowing residents and businesses to choose how much they wish to purchase. No tenant, resident, employer or employee should be required to lease any minimum amount of parking.

Effects on Employee Parking Demand

In the Bay Area, parking charges have been found to reduce vehicle trips from 8% to 21%, with reductions of up to 38% in other California locations. See Figure 4-5 for some examples of the effects of parking incentives on parking demand. These results indicate that a parking demand reduction of at least 20% can be expected if all Oak to Ninth employees are charged a monthly parking fee of $130, the amount equal to the monthly cost of providing a parking space.

Figure 4-5 Pricing Impacts on Employee Parking Demand

Location	Scope of Study	Financial Incentive per Month (1995 $)	Decrease in Parking Demand
Group A: Areas with little public transportation			
Century City, CA[1]	3500 employees at 100+ firms	$81	15%
Cornell University, NY[2]	9000 faculty and staff	$34	26%
San Fernando Valley, CA[1]	1 large employer (850 employees)	$37	30%
Bellevue, WA[3]	1 medium-size firm (430 empl)	$54	39%
Costa Mesa, CA[4]	State Farm Insurance employees	$37	22%
Average		$49	26%
Group B: Areas with fair public transportation			
Los Angeles Civic Center[1]	10,000+ employees, several firms	$125	36%
Mid-Wilshire Blvd, LA[1]	1 mid-sized firm	$89	38%
Washington DC suburbs[5]	5500 employees at 3 worksites	$68	26%
Downtown Los Angeles[6]	5000 employees at 118 firms	$126	25%
Average		$102	31%
Group C: Areas with good public transportation			
University of Washington[7]	50,000 faculty, staff and students	$18	24%
Downtown Ottawa[1]	3500+ government staff	$72	18%
Average		$102	31%
Overall Average		$67	27%

Sources:

1 Willson, Richard W. and Donald C. Shoup. "Parking Subsidies and Travel Choices: Assessing the Evidence." Transportation, 1990, Vol. 17b, 141 157 (p145).

2 Cornell University Office of Transportation Services. "Summary of Transportation Demand Management Program." Unpublished, 1992.

3 United States Department of Transportation. "Proceedings of the Commuter Parking Symposium," USDOT Report No. DOT-T-91-14, 1990.

4 Employers Manage Transportation. State Farm Insurance Company and Surface Transportation Policy Project, 1994.

5 Miller, Gerald K. "The Impacts of Parking Prices on Commuter Travel," Metropolitan Washington Council of Governments, 1991.

Effects on Residential Parking Demand

It is important to note that construction costs for residential parking spaces can substantially increase the sale/rental price of housing. This is because the space needs of residential parking spaces can re-strict how many housing units can be built within allowable zoning and building envelope. For example, a study of Oakland's 1961 decision to require one parking space per apartment (where none had been required before) found that construction cost increased by 18% per unit, the number of units per acre decreased by 30% and land values fell by 33%.[2]

2 Bertha, Brian. "Appendix A" in *The Low-Rise Speculative Apartment* by Wallace Smith UC Berkeley Center for Real Estate and Urban Economics, Institute of Urban and Regional Development, 1964.

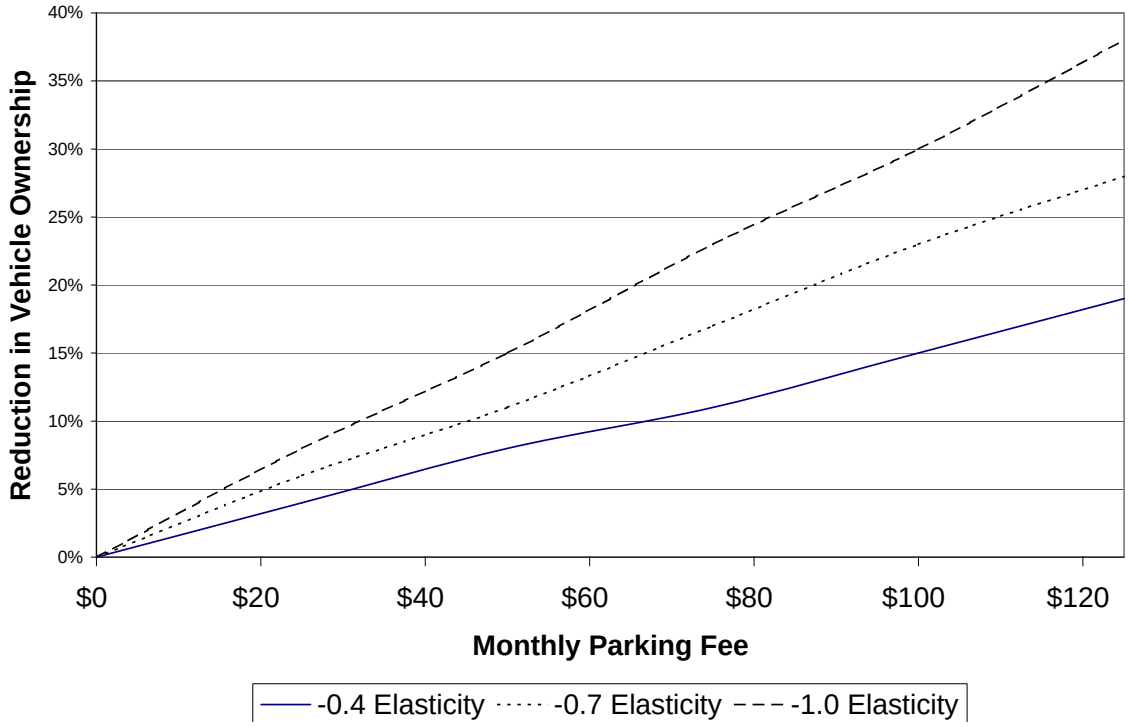
As a result, bundled residential parking can significantly increase "per-unit housing costs" for individual renters or buyers. Two studies of San Francisco housing found that units with off-street parking bundled with the unit sell for 11% to 12% more than comparable units without included parking.[3] One study of San Francisco housing found the increased affordability of units without off-street parking on-site can increase their absorption rate and make home ownership a reality for more people. In that study, units without off-street parking:

- Sold on average 41 days faster than comparable units with off-street parking
- Allowed 20% more San Francisco households to afford a condominium (compared to units with bundled off-street parking)
- Allowed 24% more San Francisco households to afford a single-family house (compared to units with bundled off-street parking)

Charging separately for parking is also the single most effective strategy to encourage households to own fewer cars, and rely more on walking, cycling and transit. According to one study, unbundling residential parking can significantly reduce household vehicle ownership and parking demand. These effects are presented in Figure 4-6. Based on this data, we assume residential parking demand at Oak to Ninth to fall by 15% if parking is unbundled from housing costs, and is charged for at cost – approximately $130 or more per month.

3 Wenyu Jia and Martin Wachs. "Parking Requirements and Housing Affordability: A Case Study of San Francisco." University of California Transportation Center Paper No. 380,1998 and Amy Herman, "Study Findings Regarding Condominium Parking Ratios," Sedway Group, 2001.

Figure 4-6 Reduced Vehicle Ownership with Unbundled Residential Parking

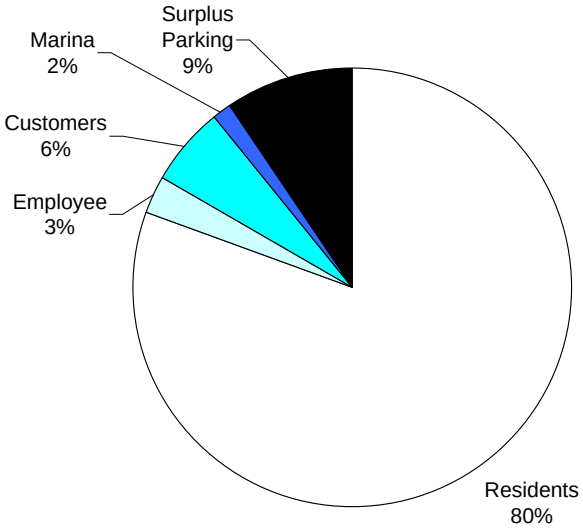


Source: Litman, Todd. "Parking Requirement Impacts on Housing Affordability." Victoria Transport Policy Institute, 2004.

Effects on Total Parking Demand

Figure 4-7 shows the impacts of a $130/month parking charge for employees and residents. There will be a parking surplus of 9%, or 368 spaces, at project build-out, with 232 on-street parking spaces available. In phase I, the parking surplus will be even larger, with 19% or 303 spaces available (of which 178 spaces are on-street) at peak times. See Appendix B for the full parcel-by-parcel calculations.

Figure 4-7 Parking Demand With Priced Parking



The policy of pricing parking does not preclude the charging of different rates to different users or in different areas. For example:

- Businesses might cover the cost of visitor parking. They could also subsidize employee parking, provided that equal benefits were offered to employees who do not drive and park (i.e., a parking cash-out program)
- Lower rates or free parking might apply for short-stay parkers to attract shoppers
- Residents might pay a premium for an assigned space

These and other recommendations are discussed in later sections of this chapter.

Allow for a public and shared parking system

(2) As many parking spaces as possible should be built and managed as a common pool.

The mix of uses at Oak and Ninth, their physical proximity to each other and their staggered times of peak parking demand set the stage for a successful shared parking arrangement. Uses that could share parking include:

- Residential
- General commercial
- Grocery store
- Marina
- Public shoreline access

There is likely a shared parking reduction for retail of up to about 160 spaces, which is largely achieved by the mixed-use nature of the development rather than physical sharing of spaces. There are potentially greater reductions that could be achieved through the strategies discussed below, particularly through a move away from assigned residential spaces for some users. Greater use of shared parking will allow for a greater "buffer" that can absorb the natural variations in parking demand, and account for the uncertainties in demand analysis. It also allows potentially greater shared parking reductions to be factored into Phase II of the development.

A common management framework for parking spaces allows the supply to be utilized in the most efficient way possible. It facilitates the sharing of parking between commercial and residential uses and recreational users, and allows the greatest availability for a given level of supply. This principle capitalizes on the

Unbundling Parking in Owner Occupied Condominiums

Parking can easily be unbundled in renter-occupied units by a separation of the rent for parking from the rent for housing. However, how can it be done in a condominium complex? Some options for Oak to Ninth are discussed in a later section of this chapter. However, according to Donald Shoup, professor of urban planning at UCLA, there are two different ways[1]:

> "Developers can offer the option to buy parking spaces separately from housing units or to lease the parking spaces from the condominium association rather than buy them. Under the first option, the market would reveal how much residents value the parking spaces, and developers could cease building spaces residents do not think are worth the construction and maintenance costs. Under the second option, the association could own the parking spaces as common property and lease them to the residents at a price that equates demand and supply. The rent from commonly owned parking spaces could then replace all or part of the association fees residents pay to maintain their association. Parking wouldn't be free, but those who own fewer cars would pay less."

Unbundling parking in condominium complexes is the norm in both downtown Washington D.C. and Brooklyn, NY and not unusual in downtown Chicago.[2] Even in car-oriented Los Angeles, a new development at 1100 Wilshire, a high-rise downtown condo development, is now selling assigned parking spaces through the home-owners association at a cost of $20,000 per space. Condo owners who do not want an assigned space have access to free but less convenient spaces in the parking structure.[3]

Typically, the spaces are rented or assigned to condo owners through the homeowners association. In Chicago, several homeowners associations provide and manage parking at a monthly cost of around $150-$250 per space. Tandem parking is provided at a lower cost in some complexes, with valet parking provided at a premium. In addition, the privately owned Field Harbor Parking Condominium in New East Side in Chicago is actually selling its 400 parking spaces to residents and employees in the area as well as to yacht-owners at a nearby harbor. Another 200 parking spaces are being built and currently sell for $35,000-$50,000.

The City of San Francisco has recently begun requiring the unbundling of parking in new multi-family developments in downtown, a process that has been supported by several developers. For instance, the Four Seasons Residences on 735 Market Street rents parking to condo owners. The parking is owned by the developer Millennium Partners and managed by City Park. The residents are now in the process of buying the parking spaces from Millennium Partners; each resident can pay a lump sum and receive a contract for a specific space. There is a $150/month fee for self-park, or $250/month for valet parking. At 300 3rd Street, a 233-condo unit development in SOMA, all parking is owned by a third party, and residents lease parking at a monthly rate.

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1 Shoup, D. (2005) *The High Cost of Free Parking*. The American Planning Association.

2 Strategic Economics (2004) *Summary of Findings Regarding Higher Density Condominium Parking Ratio Survey & Expert Interviews*. Memorandum to the San Francisco Planning Department.

3 Want Deed to Park Place? http://www.latimes.com/news/local/la-me-parking9nov09,1,4393294.story?coll=la-headlines-california&ctrack=1&cset=true

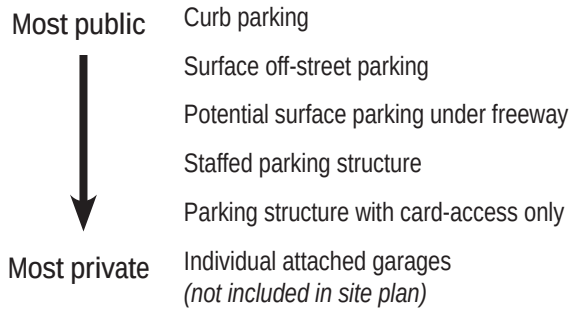
facts that lower-than-expected demand among some users can compensate for higher demand amongst others, and that the demand among users is staggered throughout different times of the day.

> A common parking pool allows the supply to be determined by average rates of parking demand. For example, if all residential units are provided with one assigned space, this space is "lost" to other users – even if a household does not own a car, or does not leave it at home during the working day.

The parking supply can be divided into five broad categories, based on the physical location of spaces and their real or perceived degree of 'public ownership'. At one extreme, garages provide private parking facilities, while at the other end of the spectrum on-street parking is generally perceived as open to all (Figure 4-8). 'Public' spaces are the easiest to manage as a common pool, since there are no limitations as to who is allowed to park and there is one administrative body that manages the supply for multiple users. Therefore the proportion of public spaces should be maximized.

The current site plan already ensures that all spaces can be made public. This feature needs to be retained throughout the planning process, to ensure that physical design decisions do not constrain access for any group of users. Note that this principle does not preclude the use of controlled-access systems (e.g. garage access via card) or provision of assigned spaces at a premium cost.

Figure 4-8 Parking Classification



Effects on Total Parking Demand

The analysis shows that peak parking demand for Oak to Ninth occurs around 8:00 PM during weekdays, when residents have returned from work and restaurants on the site are busy. Since there is very little data available for marina usage, we have assumed that its parking demand will be held constant during the entire week (conservative estimate). Appendix C contains details about the effects of shared parking on demand, both for Phase I and at project build-out.

As Figures 4-9 and 4-10 show, there will be more than enough parking during peak demand (8:00 PM during weekdays) at project build-out. Several of the parcels are projected to barely satisfy their residential parking demand on the same parcel. For these parcels, there are surplus spaces on adjacent parcels G, H, K, L and M that can be provided to residents at discounted rates. Overall, 14% of all parking spaces – and 70% of all on-street spaces – will be available at this time. This gives an overall occupancy level of 86%, which will enable users to easily find a space.

On weekend days, there will be more than 200 spaces available on-street and good availability in the Parcel G Garage (which will be open to the public). All of these spaces can be used by recreational visitors to the site.

Figure 4-9 On-Street Parking Demand (8PM on Weekday)

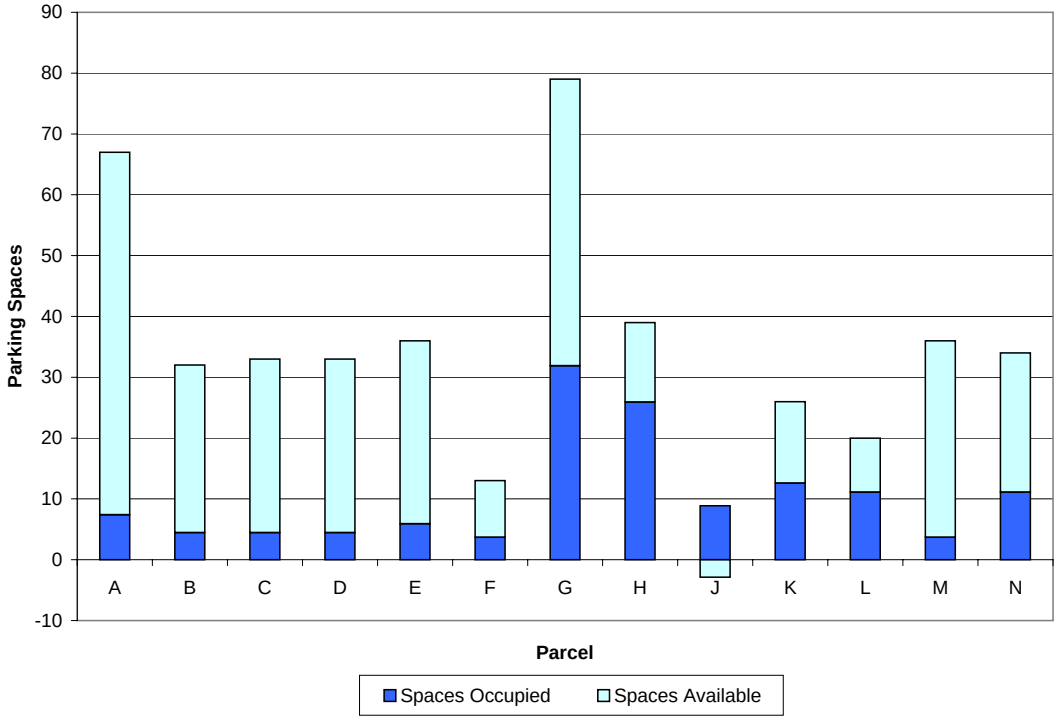
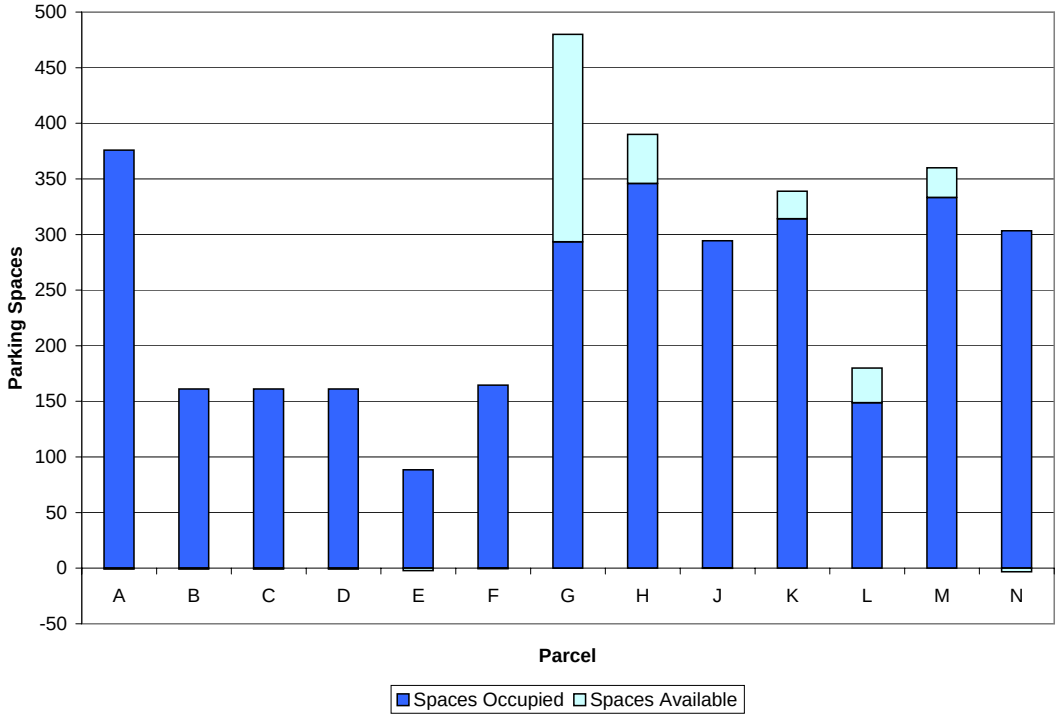


Figure 4-10 Off-Street Parking Demand (8PM on Weekday)



Charge the Right Price to Maintain Availability

The right price for parking is the price that ensures a small number of spaces are available at all times. In a complex project such as Oak to Ninth, this means that parking supply has to be segmented depending on the target users.

For parking facilities that are primarily used for residential and employee parking, target occupancies can be extremely high since demand will be more predictable and stable. A target of 95% is appropriate, allowing some flexibility to reassign spaces when units are rented or sold to another tenant.

For parking facilities that are used by retail customers and other visitors, parking occupancies need to be lower in order to absorb the wider variation in demand, and to ensure that parking is perceived to be plentiful. A target of 85% occupancy is appropriate for the curb spaces, particularly along Main Street, and 85-90% for the Parcel G garage that will be available to retail users.

If target occupancies are regularly exceeded, prices need to be increased. If this relates to a single parking facility or a specific curb segment, the differential with other parking facilities needs to be adjusted or space assignments reviewed (see next strategy), to encourage users to park in places where there is greater availability.

One way to set initial prices is on a cost recovery basis. For a typical parking structure, this might be $6 per day or $130 per month per space, as described earlier, (with lower rates for non-assigned, shared spaces). If occupancies fall short of the target, it may be appropriate to reduce prices (except in the earlier stages of the project as residential and commercial vacancies are being filled). In this instance, however, prices should be set to maximize revenue rather than achieve target occupancies; otherwise, households and commercial tenants that use less than their proportional share of parking will be subsidizing those that use more spaces. As discussed above, charging for parking does not mean that overall housing costs are increased; rather, it means that the cost of parking is separated from the price of the residential unit or homeowners' association fees.

Segment Users Based on Price

Parking pricing is the most effective tool available to manage demand, facilitate shared parking and steer users to parking facilities with spare capacity. The exact pricing structure will evolve over time; this discussion is intended as an example of how users can be segmented based on their individual tradeoffs between price and convenience.

For residential parking, assigned spaces that are reserved for an individual household should command a premium price. These spaces are likely to be close to the garage entrance. Households that do not wish to pay for an assigned space could opt for a lower-cost permit that would allow them to park in their preferred facility (i.e., the parking structure in the same building as their residential unit). This would provide an economic incentive for them to share spaces with employees and other residents.

If necessary to balance demand between various parking structures, permits could be offered at

an even lower cost to households that are willing to park in another structure, and walk the short distance to their residential unit. Permits could double as on-street permits, allowing residents to park on-street as well overnight.

Pricing could also distinguish between households with different numbers of vehicles. For example, residents could receive a percentage discount on the first permit per household, with subsequent permits being sold at full cost.

Similarly, for visitors and other short-term users, the most attractive parking spaces (e.g. curb parking along Main Street) should cost more, while the garage on Parcel G (earmarked for the grocery store) might offer one hour of free parking. While other on-street parking spaces should still be metered – otherwise they would be congested with employees, residents and visitors seeking free parking – they can be charged for at a lower rate. In summary, there are three tiers of residential parking charges, shown in Figure 4-11.

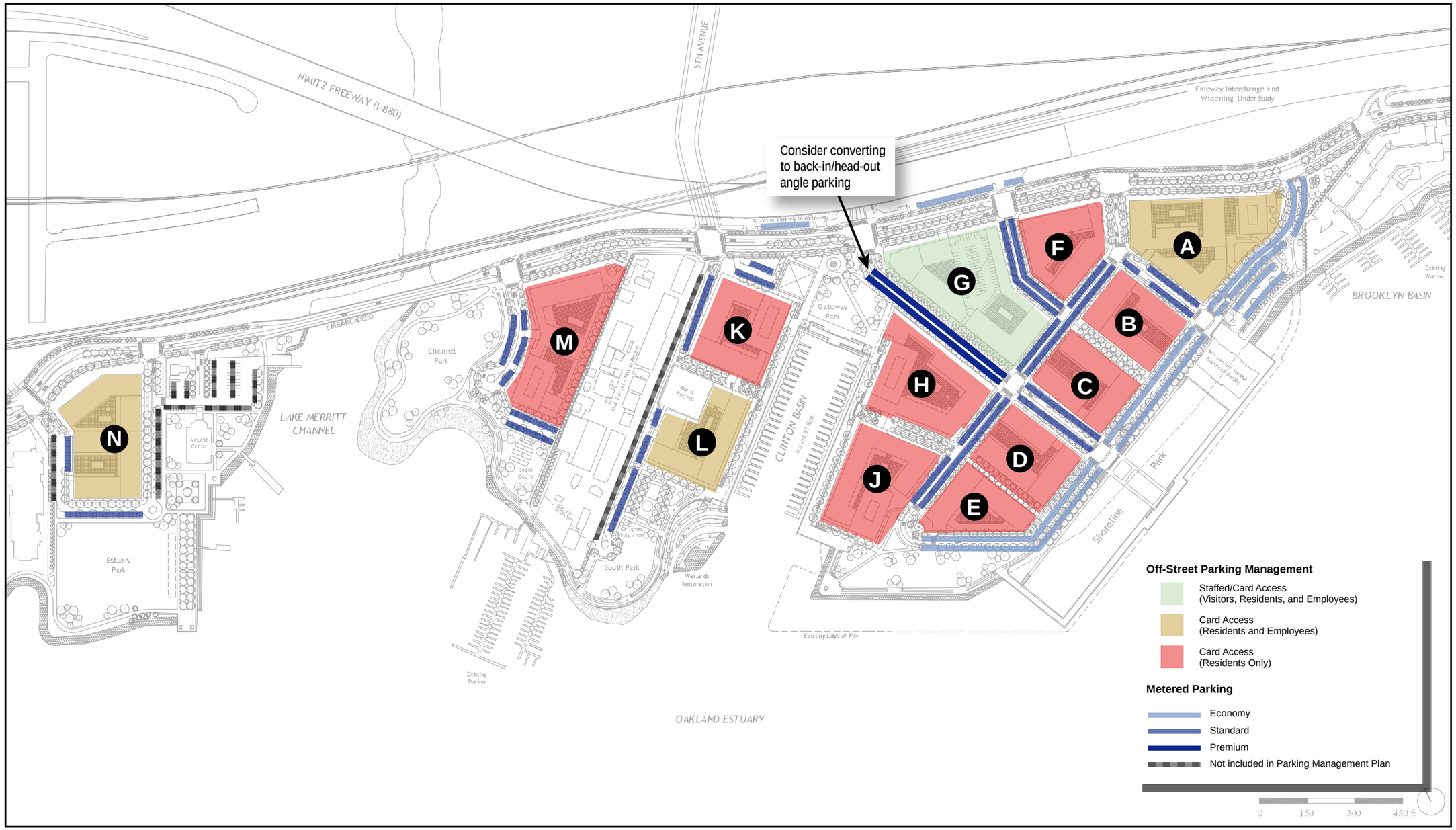
Note that to avoid the need for time limits, the cost of parking at meters must be the same or more as the cost of employee parking in garages.

Figure 4-12 illustrates proposed locations for visitors, employees and residents, as well as the three tiers of on-street parking. This proposal concentrates employee parking in controlled access garages on Parcels G, H, L and M.

Figure 4-11 Proposed Initial Parking Rates

Type of Parking	Description	Proposed Initial Fee
Residents		
Premium	Dedicated space in preferred building	$130/month
Standard	Unreserved space in preferred building; may be shared with other users	$100/month
Economy	If their preferred garage is fully subscribed, residents may be offered a discount to park in another building	$80/month
Other Users		
Premium	Parking along Main Street (in front of parcels G and H)	$1.00-$1.50/hour
Standard	All curb parking except on Main Street, 9th Avenue and Embarcadero Garage G (staffed garage)	$0.50-$1.00/hour
Economy	All parking along 9th Avenue and Embarcadero Employee parking in Garages A, L and M	$0.50/hour

Figure 4-12 Proposed Parking Locations



Basemap Source: ROMA Design Group

Optional Parking Policies

Charge Employees and Visitors for the Time Parked

Employees and visitors should have an incentive to carpool, take transit, walk or cycle whenever possible – even if they have to drive alone some or most days. For this reason, parking prices should be charged using a time-based strategy so that long-term or more-frequent parking is not rewarded with discounts. In other words, there should be a standard daily or hourly rate, with no discounts for monthly parking (except for residents). This will provide economic incentives to those using transportation alternatives on an occasional basis, so that someone is not dissuaded from using transit simply because they have already paid for a monthly parking pass.

Similarly, short-stay parking should be charged for at an hourly rate. In order to simplify the management of the supply, we recommend treating all short-stay visitors – shoppers, residents' guests, marina users and other recreational visitors – identically. Charges would depend only on length of stay, time/day of visit and location. However, commercial tenants would be free to subsidize parking for their customers.

Install Controlled Access Systems to All Garages

The varied composition of the parking supply gives an opportunity to direct certain users to different types of parking. This can maximize flexibility, while minimizing revenue collection costs. Figure 4-13 presents one possible categorization. It reserves curb parking along Main Street and other commercial frontages for short-stay visitors; while there would be no time limit, the pricing structure should be designed to make it attractive for longer-stay users to use the garages instead.

For security reasons and to minimize operational costs, all garages except the Parcel G facility would be card-only access for residents. The garages on parcels H, L and M would be card-only access for residents and employees. The Parcel G garage and other curb frontages would be open to all users.

The smartcards issued to residents and employees would look similar, but function in different ways. For residents, the card would simply provide access, provided that the monthly fee had been paid. For employees, it would function as a payment card, with the appropriate amount deducted based on length of stay.

Currently the City of Oakland's on-street meters are in operation from 8:00 AM to 6:00 PM, Monday through Saturday, with an hourly rate of $1.25 in the CBD and $1.00 in all other metered spaces. It is important to realize that the proposed management approach at Oak to Ninth requires regulation of curb parking throughout the day (8:00 AM to 9:00 or even 10:00 PM). Peak parking demand will occur in the evenings when residents return and visitors are patronizing restaurant and retail venues at about 7-8 PM. Regulation and enforcement of evening parking is essential so that residents do not try to avoid fees by simply parking on the street when returning home from work. The simplest approach is to issue residential permits that are valid for both garage and on-street parking.

Figure 4-13 Eligibility for Each Parking Type

Type of Parking	Access Control and Revenue Collection	Eligible Users			
		Residents	Employees* With Pre-Paid Parking Card	Other Employees*	Visitors**
Curb parking (premium and standard meters)	Meters or pay-on-foot (any time); residential permits OK overnight only	(1)	(1)	(1)	√
Curb parking (economy meters)	Meters, pay-on-foot or residential permits	√	√	√	√
Parcel G Garage (grocery store parcel)	Card access or cash at staffed payment booth	√	√	√	√
Parcel A, L and M Garages	Card access only	√	√	-	-
Other Garages	Card access only	√	-	-	-

* Also includes boat owners using the marina.

** Includes shoppers, guests of residents, marina visitors and other recreational users

(1) Residents and employees would not be precluded from daytime parking along commercial frontages, but would have to pay the hourly rate; they would generally park in garages to obtain a cheaper rate.

Use Customer-Friendly Payment Systems

Many complaints about parking charges are unrelated to the principle of paying for parking. Rather, they relate to user-unfriendly payment technologies, whereby parkers need to carry quarters for meters, buy a permit at an inconvenient location during limited hours, or wrestle with confusing time limits and other restrictions. One of the keys to success will therefore be the use of user-friendly payment systems. Figure 4-13 suggests some possible technologies. Note that on-street parking charging will need to be discussed with the City of Oakland (see below).

There are a wide variety of options to charge for on-street parking, including traditional meters (newer models can take pre-paid cards), multi-space meters, in-vehicle meters and "pay-on-foot" machines which serve a larger number of spaces and accept credit cards. The precise technology is less important than its ability to take a range of payment options.

Figure 4-14 Parking Provision and Payment for Each User Type

User	Possible Payment Mechanism
Residents	Electronic "proximity card" to provide access to garages. This card could also be used as a form of on-street residential permit; residents would leave the card in their vehicles, where it could be detected by readers carried by enforcement staff. Alternatively, residents could be issued with a separate hang-tag or adhesive permit for on-street parking. Residents could be invoiced monthly, and payments combined with homeowners association or similar monthly fees. Permits could also be purchased in person at the management office,
Employees and boat owners	Electronic "proximity card" to provide access to garages; this would be pre-paid, with the daily charge deducted on each use. Cards could also be used to purchase time on parking meters/pay on foot machines for curb parking. Cards could be recharged at the staffed payment office in the garage on Parcel G.
Shoppers/recreational users/other short-term visitors	Cash or credit card at parking meters/pay on foot machines or the staffed payment booth. Regular users could purchase pre-paid card. First hour could be free for garage parking.
Residents' overnight guests	24-hour permit. Residents could receive a small number of permits free of charge, and purchase additional ones via mail or from the management office. Before each use, residents would write in or scratch off the date. A card-based system is also feasible.

Parking Cash Out

In order to minimize parking demand by employees, employers that want to subsidize parking for their employees should have the option to do so through parking cash-out arrangements. Under a parking cash out program, an employer offers its employees the choice of: free parking; a transit/vanpool subsidy equal to the value of the parking (of which up to $100 would be tax-free); or a taxable carpool/walk/bike subsidy equal to the value of the parking. Employees who opt for the subsidies would not be eligible to receive free parking from the employer, and would be responsible for their parking charges on days when they drive to work.

Since parking will be leased separately from commercial space, parking cash-out is actually mandated through state law for any employer with more than 50 employees. However, it should be reinforced through its inclusion in tenant agreements, and also applied to smaller employers.

Establish a Car-Sharing Program

Car sharing makes a common fleet of vehicles available to members, and can be an important tool to reduce parking demand. For residents, car sharing reduces the need to own a vehicle, particularly a second or third car. A recent Transportation Research Board study shows that more than half of car-sharing members have sold at least one vehicle since joining their program. For employees, car sharing allows them to take transit to work, since they will have a vehicle available for errands during the day. Developers can attract car-sharing operators by providing visible parking (especially on-street) and subsidizing memberships for residents.

City CarShare provides car-sharing services in San Francisco, Oakland and Berkeley. Viable markets are places with high density, a mix of uses, and low vehicle ownership rates. Car-sharing is likely to be ultimately successful at Oak

to Ninth, but as with most parts of Oakland, it will be a marginal location for car-sharing in the early phases of development. This means that some form of risk-sharing arrangement between City CarShare and the developer, such as a revenue guarantee, may be necessary in order to secure car-sharing service.

The number of car-sharing vehicles should be based on demand. Initially, it makes sense to provide two City CarShare vehicles on Main Street. This is the minimum number to ensure that residents perceive that the service will always be available. Vehicles should be added in line with demand. To maximize usage, car-sharing memberships should be provided free of charge to all residents and employees, and marketing information should be distributed as part of new resident "welcome packs".

Undertake Continuous Monitoring

Continuous monitoring of parking occupancy is needed to effectively manage the parking supply, so that decisions on pricing and space assignments can be made. Controlled access systems for the parking garages can allow this information to be gathered automatically, but regular counts of on-street parking occupancy will also be needed.

Establish Institutional Responsibilities

Management of the common parking supply by a single entity has the following important advantages:

- Eliminating the propensity for site employers to provide free or reduced-cost parking to certain classes of employees due to union bargaining or other company policies
- Allowing efficient management of parking payment, maintenance, security, operations, information and janitorial services
- Facilitating the sharing of parking between different users, allowing the same availability to be achieved with a lower total supply
- Facilitating parking charges, through making a clear separation between the cost of parking and the cost of the housing unit or leasable space
- Making the system user-friendly, with the same permits or payment cards accepted in all garages and on-street

The appropriate organization to undertake this role will depend on the management arrangements for the project as a whole. Figure 4-15 shows some options for ownership units. It would be extremely advantageous for this organization to be able to manage on-street parking as well, including setting the level of charges and hours of operation and enforcement, although this would require delegation of City of Oakland responsibilities. This should be discussed with the City. The parking manager should also have a wider transportation role as an on-site transportation coordinator (see introduction to this report), and be charged with the following core responsibilities:

- Selling parking permits (revenue collection)
- Revenue distribution to the developer or other body that funded parking construction, with the authority to use surpluses to fund Transportation Demand Management (TDM) programs and other transportation improvements in the area
- Enforcement
- Maintenance
- Rate changes and other parking allocation policies
- Monitoring of parking occupancy and availability
- Management of permit programs
- Special event planning

Special Event Planning

There may be need for special event planning for large events. The precise arrangements will depend on the type of event and the number of attendees expected, but might include:

- Use of temporary overflow lots (especially in the early phases of development, prior to build-out, when land may be available). One potential option may be under the I-880 freeway, as Caltrans has historically been willing to lease similar sites for this purpose.
- Use of valet parking to stack vehicles in aisles
- Shuttles from remote parking facilities (for evening and weekend events, this might make use of garages in Downtown Oakland)
- Special incentives to encourage employees to take transit, carpool, walk or bike to work.

Figure 4-15 Parking Ownership and Management Options for Ownership Units

Arrangement	Advantages	Disadvantages
Residents own individual, assigned spaces; managed by HOA or third party.	Most common and intuitive arrangement.	Difficult to share parking; least flexibility. Residents may buy spaces to protect condo resale value, even if not required.
Owned and managed by HOA; spaces leased by residents.	Keeps resident control while facilitating sharing. Residents can choose how many spaces to lease.	Difficult to share spaces between buildings. HOA may not have parking management experience.
Owned by HOA, managed by third party contractor; spaces leased by residents.	Management expertise from contractor. Residents can choose how many spaces to lease.	May be difficult to share spaces between buildings. Potential for contract complexity.
All parking owned and managed by third party (e.g. Parking District) or jointly by HOAs; spaces leased by residents.	Economies of scale, particularly if same organization runs shuttle service. Greatest sharing potential and demand reductions.	Least control for residents and HOA.

Phasing

Parking demand, particularly for mixed-use, urban projects, is an inexact science; it is difficult to provide precise estimates of parking demand with a high degree of certainty. Parking supply can thus be more generous in an early phase, providing a hedge against higher than expected demand, and also taking account of the fact that parking demand will be higher in earlier phases until the mix of uses matures and transit options expands. In later phases of development, the supply of parking can reflect both this initial surplus and the actual level of demand.

As far as possible, the parking management strategies discussed above should be introduced from the date the first occupants move in. This will help to avoid resistance to the introduction of charges or other regulations, and establish the perception that parking is a valuable, controlled, priced resource. Parking policies should be made clear prior to signing commercial leases or selling residential property.

Experience with Phase I will provide valuable data on actual parking demand by different groups of users at different price levels; this should be taken into account during detailed planning for subsequent phases.

APPENDIX A.
PARKING DEMAND BASELINE

Appendix A. Parking Demand Baseline

Assumptions:		Comment:
* Saturday will yield peak demand, with peak in marina and recreational usage, as well as in residential and retail/commercial usage		
* Parking Demand per 1,000 Sq. Ft. Retail:	2 spaces	Based on Main Street parking demand in 6 cities
* Parking Demand per Boat Slip:	0.35 spaces	ITE Parking Generation, Code 420, Saturday demand

Phase 1:

Parcel	Parking Supply		Parking Demand				Total	Net Surplus/	On-Street	Off-Street
	On-Street	Off-Street	Residents	Employee	Visitors	Marina	Demand	Deficit	Surp./Def.	Surp./Def.
A	67	375	447	8	12		467	-25	55	-80
B	32	160	191	5	7		203	-11	25	-35
C	33	160	191	5	7		203	-10	26	-35
D	7	0	0	0	0		0	7	7	0
E	0	0	0	0	0		0	0	0	0
F	13	164	195	4	6		205	-28	7	-35
G	79	480	334	32	52		418	141	27	115
H	32	0	0	0	0		0	32	32	0
J	0	0	0	0	0		0	0	0	0
K	0	0	0	0	0		0	0	0	0
L	0	0	0	0	0		0	0	0	0
M	0	0	0	0	0		0	0	0	0
N	0	0	0	0	0		0	0	0	0
Marina						18	18	-18	0	-18
Total	**263**	**1339**	**1357**	**53**	**85**	**18**	**1513**	**89**	**178**	**-89**
								6%		

Build-Out:

Parcel	Parking Supply		Parking Demand				Total	Net Surplus/	On-Street	Off-Street
	On-Street	Off-Street	Residents	Employee	Customers	Marina	Demand	Deficit	Surp./Def.	Surp./Def.
A	67	375	447	8	12		467	-25	55	-80
B	32	160	191	5	7		203	-11	25	-35
C	33	160	191	5	7		203	-10	26	-35
D	33	160	191	5	7		203	-10	26	-35
E	36	86	102	6	10		118	4	26	-23
F	13	164	195	4	6		205	-28	7	-35
G	79	480	334	32	52		418	141	27	115
H	39	390	399	28	42		469	-40	-3	-37
J	6	294	348	9	15		372	-72	-9	-63
K	26	339	369	13	21		403	-38	5	-44
L	20	180	172	12	18		202	-2	2	-3
M	36	360	398	4	6		408	-12	30	-42
N	34	300	357	12	18		387	-53	16	-69
Marina						60	60	-60	0	-60
Total	**454**	**3448**	**3692**	**142**	**222**	**60**	**4116**	**-214**	**232**	**-446**

APPENDIX B
PARKING DEMAND WITH EMPLOYEE PARKING PRICING AND RESIDENTIAL UNBUNDLED PARKING

Appendix B Parking Demand with Employee Parking Pricing and Residential Unbundled Parking

Assumptions:			Comment:
* Saturday will yield peak demand, with peak in marina and recreational usage, as well as in residential and retail/commercial usage			
* Parking Demand per 1,000 Sq. Ft. Retail:	2	spaces	Based on Main Street parking demand in 6 cities
* Parking Demand per Boat Slip:	0.35	spaces	ITE Parking Generation, Code 420, Saturday demand
* Employee parking fee will yield	20%	parking demand reduction	
* Unbundling of residential parking costs will yield	15%	parking demand reduction	

Phase 1:

Parcel	Parking Supply		Parking Demand				Total	Net Surplus/	On-Street	Off-Street
	On-Street	Off-Street	Residents	Employee	Visitors	Marina	Demand	Deficit	Surp./Def.	Surp./Def.
A	67	375	380	6	12		398	44	55	-11
B	32	160	162	4	7		173	19	25	-6
C	33	160	162	4	7		173	20	26	-6
D	7	0	0	0	0		0	7	7	0
E	0	0	0	0	0		0	0	0	0
F	13	164	166	3	6		175	2	7	-5
G	79	480	283	25	52		361	198	27	171
H	32	0	0	0	0		0	32	32	0
J	0	0	0	0	0		0	0	0	0
K	0	0	0	0	0		0	0	0	0
L	0	0	0	0	0		0	0	0	0
M	0	0	0	0	0		0	0	0	0
N	0	0	0	0	0		0	0	0	0
Marina			0	0	0	18	18	-18	0	-18
Total	**263**	**1339**	**1153**	**42**	**85**	**18**	**1299**	**303**	**178**	**125**
								19%		

Build-Out:

Parcel	Parking Supply		Parking Demand				Total	Net Surplus/	On-Street	Off-Street
	On-Street	Off-Street	Residents	Employee	Customers	Marina	Demand	Deficit	Surp./Def.	Surp./Def.
A	67	375	380	6	12		398	44	55	-11
B	32	160	162	4	7		173	19	25	-6
C	33	160	162	4	7		173	20	26	-6
D	33	160	162	4	7		173	20	26	-6
E	36	86	87	5	10		102	20	26	-6
F	13	164	166	3	6		175	2	7	-5
G	79	480	283	25	52		361	198	27	171
H	39	390	339	22	42		404	25	-3	29
J	6	294	296	8	15		318	-18	-9	-9
K	26	339	314	11	21		345	20	5	14
L	20	180	146	9	18		173	27	2	25
M	36	360	338	3	6		347	49	30	19
N	34	300	304	9	18		331	3	16	-13
Marina			0	0	0	60	60	-60	0	-60
Total	**454**	**3448**	**3139**	**113**	**222**	**60**	**3534**	**368**	**232**	**137**

APPENDIX C
PARKING DEMAND WITH EMPLOYEE PARKING PRICING, RESIDENTIAL UNBUNDLED PARKING AND SHARED PARKING

Appendix C Parking Demand with Employee Parking Pricing, Residential Unbundled Parking and Shared Parking

Assumptions:			Comment:
* Residential parking demand based on vehicle ownership west and north of the site . Senior housing has a 70% demand of the general public			
* Parking Demand per 1,000 Sq. Ft. Retail:	2	spaces	Based on Main Street parking demand in 6 cities
* Parking Demand per Boat Slip:	0.35	spaces	ITE Parking Generation, Code 420, Saturday demand
* Employee parking fee will yield	20%	parking demand reduction	
* Unbundling of residential parking costs will yield	15%	parking demand reduction	

Shared Parking Assumptions:	Weekday 2PM	Weekday 8PM	Saturday 2PM	Saturday 8PM
Residential:	60%	98%	71%	92%
Retail:	97%	61%	100%	55%

Source: ULI Shared Parking Manual.

Note: Look at shaded cells for peak shared parking demand!

Phase 1:

Parcel	Parking Supply		Parking Demand				Shared Parking Analysis: Weekday 2:00 PM		Weekday 8:00 PM		Saturday 2:00 PM		Saturday 8:00 PM		On-Street	Off-Street
	On-Street	Off-Street	Residents	Employee	Visitors	Marina	On-Street	Off-Street	On-Street	Off-Street	On-Street	Off-Street	On-Street	Off-Street	Surp./Def.	Surp./Def.
A	67	375	380	6	12		12	234	7	376	12	276	7	353	60	-1
B	32	160	162	4	7		7	101	4	161	7	119	4	151	28	-1
C	33	160	162	4	7		7	101	4	161	7	119	4	151	29	-1
D	7	0	0	0	0		0	0	0	0	0	0	0	0	7	0
E	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
F	13	164	166	3	6		6	103	4	165	6	121	3	154	9	-1
G	79	480	283	25	52		51	195	32	293	52	227	29	275	47	187
H	32	0	0	0	0		0	0	0	0	0	0	0	0	32	0
J	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
K	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
L	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
M	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
N	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0
Marina			0	0	0	18		18		18		18		18	0	-18
Subtot	**263**	**1339**	**1153**	**42**	**85**	**18**	**83**	**751**	**52**	**1174**	**85**	**879**	**47**	**1102**	**211**	**165**
Total	**1602**						**834**		**1226**		**964**		**1149**		**376**	

Build-Out:

Parcel	Parking Supply		Parking Demand				Shared Parking Analysis: Weekday 2:00 PM		Weekday 8:00 PM		Saturday 2:00 PM		Saturday 8:00 PM		On-Street	Off-Street
	On-Street	Off-Street	Residents	Employees	Customers	Marina	On-Street	Off-Street	On-Street	Off-Street	On-Street	Off-Street	On-Street	Off-Street	Surp./Def.	Surp./Def.
A	67	375	380	6	12		12	234	7	376	12	276	7	353	60	-1
B	32	160	162	4	7		7	101	4	161	7	119	4	151	28	-1
C	33	160	162	4	7		7	101	4	161	7	119	4	151	29	-1
D	33	160	162	4	7		7	101	4	161	7	119	4	151	29	-1
E	36	86	87	5	10		9	57	6	88	10	67	5	83	30	-2
F	13	164	166	3	6		6	103	4	165	6	121	3	154	9	-1
G	79	480	283	25	52		51	195	32	293	52	227	29	275	47	187
H	39	390	339	22	42		41	225	26	346	42	263	23	324	13	44
J	6	294	296	8	15		14	185	9	294	15	217	8	276	-3	0
K	26	339	314	11	21		20	199	13	314	21	234	11	295	13	25
L	20	180	146	9	18		18	97	11	149	18	113	10	139	9	31
M	36	360	338	3	6		6	206	4	333	6	243	3	313	32	27
N	34	300	304	9	18		18	191	11	303	18	225	10	285	23	-3
Marina			0	0	0	60		60		60		60		60	0	-60
Subtot	**454**	**3448**	**3139**	**113**	**222**	**60**	**216**	**2053**	**136**	**3204**	**222**	**2401**	**122**	**3009**	**318**	**244**
Total	**3902**						**2268**		**3340**		**2624**		**3132**		**562**	

APPENDIX B

Carey & Co. Historic Resources Evaluations for Philbrick Boat Works

Introduction

Carey & Co. has reviewed the Notice of Intent to Submit an Oakland Landmark and S-7 Combining Zone Application Form for the Philbrick Boat building at 603 Embarcadero (Port of Oakland Building H-103), reviewed our preliminary findings and reevaluated the building for potential historic significance at the local level (i.e., Oakland Landmark eligibility). Based on a review of the Notice of Intent Form and supporting materials, a site visit, and additional archival research, it is Carey & Co.'s professional opinion that the building does not warrant Oakland Landmark status nor is it eligible for the National Register of Historic Places or the California Register of Historical Places.

Initially, Carey & Co. included the building in its Historic Resource Evaluation for the Oak to 9th Avenue Redevelopment Project dated August 15, 2005. The evaluation found that:

> The property at 603 Embarcadero does not appear to be individually eligible for listing on the NRHP or CRHR. The Oakland Cultural Heritage Survey did not rate the building, and it is Carey & Co.'s professional opinion that the property does not individually appear to be of Oakland Landmark quality. Since it is not listed or eligible for inclusion on federal, state, or local lists, the property is not considered a historic resource under CEQA Guidelines Section 15064.5(a)(1).
>
> To be potentially eligible for listing on the NRHP or CRHR, a building must usually be over 45-50 years old, must have historic significance, and must retain its physical integrity. Since this building was constructed approximately 70 years ago, it meets the age requirement. However, it does not appear to possess sufficient historic significance for listing. In Carey & Co.'s opinion, under NRHP Criterion A/CRHR Criterion 1 archival research yielded no information indicating an association with significant historic events. Under NRHP Criterion B/CRHR Criterion 2, archival research yielded no information indicating an association with significant historic individuals or entities. Under NRHP Criterion C/CRHR Criterion 3, the building's mid-20th century industrial vernacular style does not sufficiently embody the distinctive characteristics of the style, type, or period. Archival research provided no indication that the building has the potential to yield exceptionally important information (NRHP Criterion D/CRHR Criterion 4). Since physical integrity is based on historic significance, and the building does not appear to possess historic significance, its physical integrity can not be evaluated.
>
> Similarly, in Carey & Co.'s opinion the property at 603 Embarcadero does not appear to be of Oakland Landmark quality because it is not an

outstanding or especially fine architectural example and it does not possess extreme or major historical importance.

Reevaluation

In December, 2005 Carey and Co. performed additional research on the Philbrick Boat building at 603 Embarcadero (Port of Oakland Building H-103). Following this research and a site visit, we completed the Oakland Landmarks Preservation Advisory Board (LPAB) evaluation sheet and tally sheet, as well as the Oakland Cultural Heritage Survey (OCHS) evaluation sheet and tally sheet (see attachments).

Carey & Co.'s rating followed the LPAB Evaluation Criteria and Ratings, contained in Appendix D of the Historic Preservation Element of the Oakland General Plan, dated September 1993. The ratings are based on the "Guidelines for Determination of Eligibility for Landmark Designations" contained in Appendix 3 of the Oakland General Plan. To be eligible as an individual Oakland Landmark, it must be rated "A" or "B" under the Oakland rating system. An "A" rated property is an "outstanding architectural example or extreme historical importance," a "B" rating is an "especially fine architectural example, major historical importance."

Carey & Co.'s tally score was 17.55, earning the building a "C" rating (see attached tally sheet). Therefore it is not eligible for Oakland Landmark Status. As this score differs from the score previously assigned to it (36 points or "A" rating) by OCHS in their preliminary review, a discussion of our methodology is presented below.

Methodology

Under Criterion A - Architecture - Exterior/Design (criterion # 1), Carey & Co. rated the building as "FP" or "undistinguished" because it has no clearly identifiable visual or design value as called for under the guidelines. We did not judge the Interior (criterion # 2) because the interior was inaccessible to researchers, and therefore we did not evaluate its method of construction. For Construction (criterion # 3), Builder (criterion # 4) and Style/Type (criterion # 5) we gave it an "FP" or "no particular interest" for its structure and surface materials, designer, and style/type.

Under criteria B – History - Person (criterion # 6), Event (criterion # 7) and Patterns (criterion # 8), we gave it a "G" since the building is associated with the life of a person (Don Philbrick) of "tertiary" importance to Oakland's maritime history but intimately connected with the building. Research has confirmed that Don Philbrick was builder of wooden boats since he was a teenager in 1934. The supporting materials attached to the Notice of Intent Form prepared by the building's current tenant, Russ Donovan states that Philbrick began operating out of the subject building in 1946. (Various sources give slightly different date. A newspaper article dated 1982 says he worked at this location for 38 years, which would make it 1944. The "5th Avenue Peninsula Self Guided Tour"

brochure gives the date as 1947. City Directories for Oakland were not produced for the years 1943-1966.)

Carey & Co. conducted research for the Philbrick Boat Works at the California Historical Society, Oakland Main Library, U.C. Berkeley Newspaper Room, Bancroft Library, the Oakland Tribune Library, and the Internet. As a result of these searches, two newspaper articles were found about the Philbrick Boat Works (a third citation lists Philbrick in the Port of Oakland's *Port Progress* Nov/December 1981 issue, but the copy is missing from the Oakland Library, it could not be found at Bancroft, and the Port of Oakland cannot find its copy.)

The article from the Oakland Tribune, dated April 4, 1978, said that Don Philbrick came back from semi-retirement "to teach the dying art of wooden boat building" to his business partner's sons. A later article in 1982 quotes him as saying that he is the only one of three custom, wooden boat builders in the country. He said he worked alone in the building, although in the 1950s he had six employees. The information that was submitted in support of the Notice of Intent Form contains other facts about Philbrick and it portrays him as an interesting figure in the wooden boat building industry.

However, contrary to the Notice of Intent Form's supporting information, the Philbrick Boat Works was not the subject of a display at the Oakland Museum of California, according to Inez Brooks-Myers, a 30-year veteran of the Museum[1]. The Philbrick Boat Works may or may not have been mentioned in exhibits about Oakland's maritime past or in a display about yachting in the 1970s (such records are in deep storage and are not available), but its boats were not displayed in the Museum according to Brooks-Myers. The Philbrick Boat Co. is listed on a web site of Wooden Boatbuilding Companies of the Past (www.classicboat.com/classic-woodenboats) but it does not contain any other information.

However, assuming all the information provided in the Notice of Intent Form and supporting materials are accurate, Philbrick's role in Oakland's history does not rise to the level of even "tertiary historical importance" for Oakland Landmark purposes, i.e., having "a prominent role in the development of a particular neighborhood or of a particular ethnic group or segment of the community." No claim is made that Don Philbrick helped establish the Oakland waterfront or that he helped establish, promote or develop even the local boat building industry. At the peak of his business he employed only six people, and therefore, had a relatively minor role in the history of Oakland's waterfront.

Carey & Co. accepted the building's date (criterion # 9) of 1935 as stated in the Notice of Intent Forms' supporting materials, and gave it a rating of "G" or "established between 1906 and 1945." In terms of the building's relationship to its site (criterion # 10), it

[1] Telephone communication, Richard Brandi, Carey & Co. with Inez Brooks-Myers, Oakland Museum of California, December 8, 2005.

received an "E" rating, i.e., "has not been moved," since the building has remained in the same location since its original construction.

Under Criterion C, Context, we rated the building "FP" for both Continuity (criterion # 11) and Familiarity (criterion # 12) as the building is not located in an "area of primary or secondary importance" and the building "is not particularly conspicuous or familiar," following the guidelines.

Under Criterion D, Integrity, we rated Condition (criterion # 13) a "P" as it exhibits considerable surface and structural problems particularly along the south façade and part of the north façade that is visible from the west. Finally, the exterior alterations (criterion # 14) we rated "G," for minor changes to the exterior.

In addition, Carey & Co. applied the OCHS Evaluation Criteria and Rating system to the property, which is very similar to the LPAB Evaluation Criteria and Rating system. The evaluation tally score produced a rating of 14.25, or "D," which is below the threshold for consideration of local historic significance (see attached tally sheet).

Conclusion

In summary, after conducting a site visit, performing additional historical research, and completing the LPAB and OCHS evaluation and tally sheets, it is Carey & Co.'s professional opinion that the Philbrick Boat Building at 603 Embarcadero is not eligible as a City of Oakland Landmark.

References

1. Notice of Intent to Submit an Oakland Landmark and S-7 Combining Zone Application Form for the Philbrick Boat building.
2. *Oakland Tribune*, February 17, 1982.
3. *Oakland Tribune* April 4, 1978.
4. "The 5th Avenue Peninsula Self-Guided Tour," Center for Land Use Interpretation, undated.
5. www.Classic.boat.com/classic-wooden-boats.

Site Photos, December, 2005

Entrance on Embarcadero *(Carey & Co. December 2005)*

Southeast corner *(Carey & Co. December 2005)*

North elevation *(Carey & Co. December 2005)*

Northwest corner *((Carey & Co. December 2005)*

Southwest corner *(Carey & Co. December 2005)*

LPAB FORM 3 1

City of Oakland -- Landmarks Preservation Advisory Board
EVALUATION SHEET FOR LANDMARK ELIGIBILITY

Address 603 Embarcadero

Name Philbricks Boat Works

A. ARCHITECTURE				
1. Exterior/Design	E	VG	G	(FP)
2. Interior	E	VG	G	FP
3. Construction	E	VG	G	(FP)
4. Designer/Builder	E	VG	G	(FP)
5. Style/Type	E	VG	G	(FP)
B. HISTORY				
6. Person/Organization	E	VG	(G)	FP
7. Event	E	VG	(G)	FP
8. Patterns	E	VG	(G)	FP
9. Age	E	VG	G	(FP)
10. Site	(E)	VG	G	FP
C. CONTEXT				
11. Continuity	E	VG	G	(FP)
12. Familiarity	E	VG	G	(FP)
D. INTEGRITY				
13. Condition	E	VG	G	(FP)
14. Exterior Alterations	E	VG	(G)	FP

Evaluated by _____ Date _____

STATUS

Rating: _____

City Landmark Eligibility: ☐ Eligible ☑ Not eligible

National Register Status: ☐ Listed ☐ In process
☐ Determined eligible ☐ Appears eligible
☑ Appears ineligible

Site of Opportunity ☐

This evaluation sheet was accepted by the Landmarks Preservation Advisory Board at its meeting of _____.
(Date)

Attest: _____
(Secretary)

Oakland Cultural Heritage Survey
Oakland City Planning Department

EVALUATION SHEET

ES

Common (and Historic) Name(s) Phil bricks Boat Works
Address/Location 603 Embarcadero

A. VISUAL QUALITY/DESIGN
1. Exterior — E VG G (FP)
2. Interior (list best spaces first)
Space 1 — E VG G FP
Space 2 — E VG G FP
Other Spaces — E VG G FP
3. Construction — E VG G (FP)
4. Designer/Builder — E VG G (FP)
5. Type/Style — E VG G (FP)
6. Supportive Elements — E VG G (FP)

B. HISTORY/ASSOCIATION
7. Person/Organization — E VG (G) FP
8. Event — E VG (G) FP
9. Patterns — E VG (G) FP
10. Age — E VG (G) FP

C. CONTEXT
11. Continuity — E VG (G) FP
12. Familiarity — E VG G (FP)

D. INTEGRITY
13. Condition — E G (F) P
14. Exterior Alterations — E (G) F P
15. Interior Alterations
Space 1 — E G F P
Space 2 — E G F P
Other Spaces — E G F P
16. Structural Removals — E G F P
17. Site — (E) G F P

E. REVERSIBILITY
18. Exterior Alterations — E G F P
19. Interior Alterations
Space 1 — E G F P
Other Spaces — E G F P

Evaluated by Carey + Co Date December 2005

Reviewed by _____ Date _____ ☐ Approved ☐ See Comment Sheet
Reviewed by _____ Date _____ ☐ Approved ☐ See Comment Sheet
Reviewed by _____ Date _____ ☐ Approved ☐ See Comment Sheet
Reviewed by _____ Date _____ ☐ Approved ☐ See Comment Sheet
Reviewed by _____ Date _____ ☐ Approved ☐ See Comment Sheet

STATUS/RATING

Rating: Present status: ☐A ☐B ☐C ☑D ☐E ☐Not rated
Contingency status: ☐a ☐b ☐c ☐d ☐e ☐Not rated ☐Not applicable
Contingency factor: ☐(1) ☐(2) ☐(3) ☐Site of opportunity

Composite rating

National Register (individual): ☐Listed (1) ☐Determined eligible (2) ☐Appears eligible (3) ☐Potential if restored (4b) ☐Potential when over 50 years old (4d) ☑None of the above (6)

NR (as part of group or district only): ☐Listed (1D) ☐Determined eligible (2D) ☐Appears eligible (3D) ☐Potential if restored (4Db) ☐Potential when over 50 (4Dd) ☐AdI (5D) ☑None of the above (6) ☐Other

Composite eligibility

SHRI: ☐Primary resource (NR § 1, 2, or 3) ☐Contingency Primary (NR §4..) ☐District Contributor (NR §3D) ☐Contingency Contributor (NR §4D..) ☐AdI (NR §5D) ☐Noncontributor (NR §6) ☐Ineligible (NR §6)

City Landmark: ☐Listed ☐In S-7 Zone ☐On Study List ☐None of the above

This form has been adapted from the San Francisco Downtown Inventory, prepared for the Foundation for San Francisco's Architectural Heritage by Charles Hall Page and Associates, and Harold Kalman's The Evaluation of Historic Buildings.

Rev. 6/88

Oakland Cultural Heritage Survey
Oakland City Planning Department

EVALUATION TALLY SHEET ET

Address _____

					Column I		Column II
16	8	4	0	1. Exterior	Survey Rating		National Register Eligibility
8	4	2	0	2. Interior			
4	2	1	0	(a) Space 1			
2	1	1	0	(b) Space 2			
10	5	3	0	(c) Other Spaces			
6	3	2	0	3. Construction			
10	5	3	0	4. Designer/Builder			
8	4	2	0	5. Type/Style			
				6. Supportive Elements			
				A. VISUAL QUALITY/DESIGN TOTAL (40 Maximum)	0		
20	10	5	0	7. Person/Organization			
20	10	5	0	8. Event			
12	6	3	0	9. Patterns			
8	4	2	0	10. Age *			
				B. HISTORY/ASSOCIATION TOTAL (40 Maximum)	15		
8	4	2	0	11. Continuity			
20	10	5	0	12. Familiarity			
				C. CONTEXT TOTAL (20 Maximum)	2		
				PRELIMINARY TOTAL (Sum of A, B, and C: 100 Maximum)	17		
--	-5%	-5%	-10%	13. Condition (From A, B, and C total)	0.85		
--	-20%	-40%	-80%	14. Exterior Alterations *			
--	-10%	-20%	-40%	(a) From A and C total (excl. 2)	0.40		
				(b) From B total	1.50		
--	-20%	-40%	-80%	15. Interior Alterations *			
--	-20%	-40%	-80%	(a) Space 1			
--	-20%	-40%	-80%	(b) Space 2			
				(c) Other Spaces			
--	-40%	-60%	-80%	16. Structural Removals *			
--	-25%	-38%	-50%	(a) From A and C total			
--	-25%	-38%	-50%	(b) From B total			
				17. Site * (from B total)			
				D. INTEGRITY DEDUCTIONS	2.75		
				ADJUSTED TOTAL (Preliminary Total minus Integrity Deductions)	14.25		
(3)	(3)	(2)	(2)	18. Reversability of Item 14 (Exterior)			
				19. Reversability of Item 15 (Interior)			
(3)	(3)	(2)	(2)	(a) Space 1			
(3)	(3)	(2)	(2)	(b) Space 2			
(3)	(3)	(2)	(2)	(c) Other Spaces			

RATING (FROM COLUMN I TOTALS):

Present Status (Adjusted Total): ☐ A (41+) ☐ B (28-40) ☐ C (18-27) ☑ D (11-17) ☐ E (0-10)

Contingency Status (Preliminary Total plus higher ratings for certain items):

☐ A (41+) ☐ B (28-40) ☐ C (18-27) ☐ D (11-17) ☐ E (0-10) ☐ Not applicable

Contingency Factors: ☐ (1) More significant information is learned about the property's history, design, or development (specify evaluation criteria and contingency score for each criterion: _____). ☐ (2) Existing (exterior) (interior) alterations are reversed; feasibility doubtful or unknown (line 18 or 19 rated "F" or "P") ☐ (3) Existing (exterior) (interior) alterations are reversed; feasibility appears good (line 18 or 19 rated "E" or "G").

ELIGIBILITY (FROM COLUMN II TOTALS):

National Register (individual): ☐ Listed (check Federal Register) ☐ Determined Eligible (check Federal Register) ☐ Appears eligible (Adjusted Total 28+ except *) ☐ Potential if restored (Preliminary total 28+ and line 14 is "P" or "F" except *) ☐ Potential when over 50 years old (Preliminary Total 28+ and property is less than 50years old except *) ☑ None of the above

National Register (as part of Group or District only): ☐ Listed (check Federal Register) ☐ Determined eligible (check Federal Register) ☐ Appears eligible (line 11 is "E" or "VG" except *) ☐ Appears eligible if restored (line 11 if "E" or "VG" and line 14 is "P" except *) ☐ Appears eligible when more than 50 years old (line 11 is "E" or "VG" and property is less than 50 years old except *) ☑ None of the above

City Landmark: ☐ Listed (per LM list dated ___/___/___) ☐ In S-7 zone ☐ On Study List (per SL list dated ___/___/___) ☐ None of the above.

*The National Register generally excludes properties that are less than 50 years old (#10), have been severly altered, (#14, 15, & 16), or have been moved (#17) unless a moved property is significant primarily for architectural value or as the most important surviving structure associated with a person or event.

This form has been adapted from the San Francisco Downtown Inventory, prepared for the Foundation for San Francisco's Architectural Heritage by Charles Hall Page and Associates, and Harold Kalman's The Evaluation of Historic Buildings.

Rev. 6/86

603 Embarcadero
Philbrick Boat Works

Notice of Intent to Submit an Oakland Landmark and S-7 Preservation Combining Zone Application Form for Preliminary Determination of Landmark Eligibility

Comments on Planning Staff Recommendations
Staff Report, January 9, 2006

Prepared by Carey & Co. Inc.

The Oakland Landmarks Preservation Advisory Board (LPAB) is considering taking action on the eligibility of 603 Embarcadero for Landmark or Heritage Property designation. A Notice of Intent to Submit an Oakland Landmark Combining Zone Application Form has been submitted. In addition, planning staff has prepared a LPAB Preliminary Evaluation Sheet for determination of Landmark Eligibility as well as an Oakland Cultural Heritage Survey (OCHS) Evaluation Tally Sheet. Finally, Carey & Co. also completed the LPAB Preliminary Evaluation Sheet and OCHS Evaluation Tally Sheet.

In summary, the planning staff's LPAB Preliminary Evaluation Sheet resulted in an overall rating of 35.9 (high) to 14.7 (low), with an average of 25.3. Carey & Co.'s rating was 17.55. Planning staff's averaged rating places the property in category "B"; Carey's in category "C". For the OCHS Evaluation Tally Sheet, planning staff's rating is 25, or "C". Carey & Co.'s result was 14.55 or "D". The LPAB is asked to make a final determination on these ratings.

LPAB Preliminary Evaluation Sheet

The differences between the planning staff's ratings and that of Carey & Co. appear in several categories. In Architecture, while Carey & Co. placed no value on the building's architecture, which yielded no points, planning staff came up with a range of 2 to 9 points. There are three areas of disagreement: Exterior/Design, Construction and Style/Type.

Under Exterior/Design, the range for the staff evaluation is between FP and G. "A 'G' rating is appropriate for properties, which have any clearly identifiable visual or design value." We would argue that in the case of 603 Embarcadero, the building is "Undistinguished" and therefore should be rated FP. In this case, we have a utilitarian structure with numerous additions to the original structure. Although the dates and association of these modifications are not currently documented, we do not believe that they would rise to the status of contributing features that have gained significance on their own over time from a design standpoint. *Suggested Rating: 0*.

For Construction, the LPAB is asked to decide between FP, G and VG. The former is Carey & Co.'s rating. This conclusion was reached because, in our opinion, the building is not significant example of a particular structural, or surface material, or method of construction. Even if there were some value in this category, it would be for the structural materials alone and not surface materials or method of construction. In our view, the choice is narrowed to FP or G. *Suggested Rating: 0 to 2*.

Style/Type is defined as "Significance as an example of a particular type, style or convention." Staff's rating is between G (Good example of any type, style, or convention) and VG (Especially fine or very early example if many survive; good example if few survive). Carey & Co. did not see the building as particularly significant and gave a rating of FP. It is not significant example of a warehouse or light industrial building and, architecturally, with respect to style and type, it is of no particular interest. *Suggested Rating: 0 to 2*.

Under Context, planning staff rated the property from FP to G. Carey & Co.'s rating was FP. For Continuity, this rating was reached because of our opinion that the property is not compatible with an area of primary importance and also is not located in an area of primary or secondary importance. For Familiarity, Carey & Co.'s rating of FP is based on our opinion that 603 Embarcadero is not a symbol, and not a conspicuous or familiar feature in the region, city or neighborhood. *Suggested Rating for both Continuity and Familiarity: 0*.

The Integrity of the structure is important to all evaluations, as these points are a deduction. For Exterior Alterations, the staff circled 0% ("No changes or very minor alterations which do not change the overall character.") and 25% ("Minor changes to overall character."). In our view, the starting point for this evaluation is what constitutes the historic resource. If we assume that the original structure were to be the resource, and subsequent alterations and additions as not contributing to its overall architectural significance, the selection of a rating would have to be between G, Minor changes to overall character and F, Major changes to overall character. *Suggested Rating: 25% to 50%*.

Based on the above discussion and the Suggested Ratings, the high and low Adjusted Totals range from 12.15 to 13.68 (See attached matrix). The resulting average is 12.92 placing it in "C". Note that the average for the staff's tally is 23.14. Twenty-three is the low threshold for B. However, if the same Integrity deductions used in the Suggested Ratings are applied to the staff ratings, the Adjusted Total for the high rating would fall to 16.65, a "C".

OCHS Evaluation Tally Sheet

Planning staff's rating of 25 confers a C status to the property. In this evaluation, staff notes that this is an "Ad hoc conversion of LM rating to OCHS rating=C." As with the LPAB Evaluation, ranges are assigned, but there are fewer of them.

In Visual Quality/Design, Supportive Elements is unique to the OCHS evaluation sheet and not found on the LPAB Preliminary Evaluation Sheet. Therefore an ad hoc transfer of ratings is not possible. The staff gives Supportive Elements a 4, which corresponds to VG, or "One or several especially fine or unusual supportive elements." The guideline states that "A supportive element should generally be considered 'especially fine or unusual' if the element is notable enough to warrant a separate evaluation." Assuming that the Supportive Elements at 603 Embarcadero are the associated fences, walls and outbuildings, a rating of FP or G could be supported, but not VG. *Suggested Rating: 0 to 2*.

For the other categories, we converted our suggested ratings for the LPAB Evaluation into those shown on the attached matrix under OCHS Evaluation Tally Sheet. We used ranges when they corresponded to the suggested ratings for the LPAB Evaluation.

The Preliminary Total prepared by staff does not include Integrity Deductions. In completing the LPAB Preliminary Evaluation Sheet, staff's evaluation included Integrity Deductions for both Condition and Exterior Alterations. Similar deductions should be made on the OCHS Evaluation Tally Sheet. Assuming similar deductions as used in the LPAB Evaluation, the attached ratings matrix uses a range of 3% to 5% for Condition and 0% to 20% and 0% to 10% for Exterior Alterations. The results place the property in either C (staff rating with deductions) and D (Suggested Ratings). However, if the same Integrity deductions used in the Suggested Ratings are applied to the staff ratings, the Adjusted Total for the high rating would fall to 16.85, a "D".

LPAB Preliminary Evaluation Sheet

	Staff Ratings		Suggested Ratings	
Architecture	High	Low	High	Low
Exterior	3	0	0	0
Interior	0	0	0	0
Construction	3	0	2	0
Designer/Builder	0	0	0	0
Style/Type	3	2	2	0
Total	9	2	4	0
History				
Person	8	8	8	8
Event	0	0	0	0
Patterns	9	5	9	5
Age	2	2	2	2
Site	4	4	4	4
Total	23	19	23	19
Context				
Continuity	1	0	0	0
Familiarity	4	0	0	0
Total	5	0	0	0
Preliminary Total	37	21	27	19
Integrity				
Condition (3-5%)	1.85	0.63	1.35	0.57
Exterior Alterations*	9.25	0	13.5	4.75
Total Combined	11.1	0.63	14.85	5.32
Adjusted Total	25.9	20.37	12.15	13.68
Average	23.14		12.92	
Status/Rating	B		C	

*0%-25% for staff rating. 25%-50% for Suggested Rating

Apply 50% to Staff Ratings	
Condition (5%)	1.85
Exterior Alterations (50%)	18.5
Total Combined	20.35
Adjusted Total	16.65

OCHS Evaluation Tally Sheet

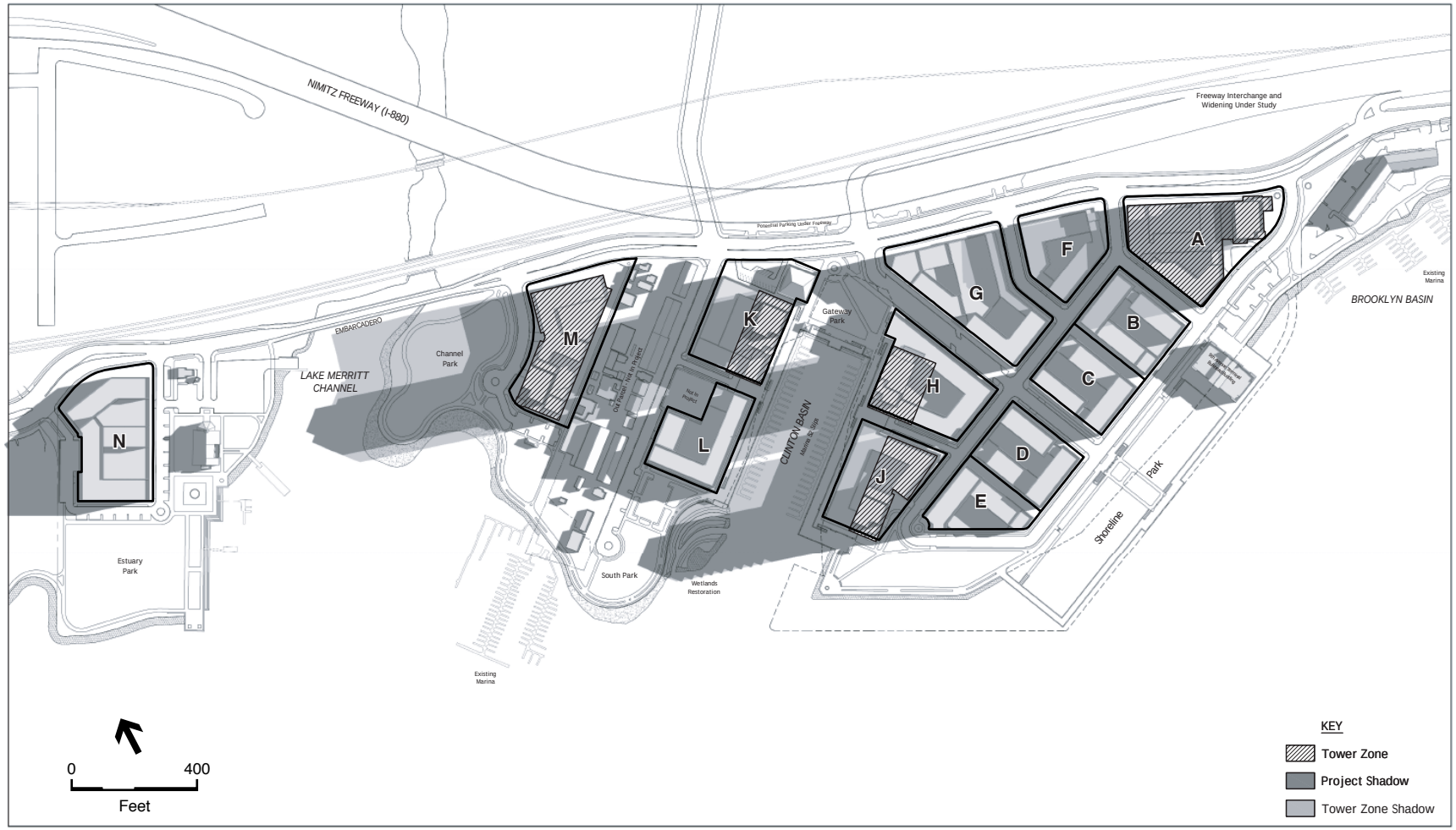
	Staff Ratings		S
Architecture	High	Low	
Exterior	0	0	
Interior	0	0	
Construction	3	3	
Designer/Builder	0	0	
Style/Type	3	3	
Supportive Elements	4	4	
Total	10	10	
History			
Person	5	5	
Event	0	0	
Patterns	3	3	
Age	2	1	
Total	10	9	
Context			
Continuity	2	0	
Familiarity	5	5	
Total	7	5	
Preliminary Total	27	24	
Integrity			
Condition	1.35	0.72	
A. Exterior Alterations*	3.4	0	
B. Exterior Alterations**	1	0	
Total Combined	5.75	0.72	
Adjusted Total	21.25	23.28	
Average	22.27		
Status/Rating	C		

*0%-20% for staff rating. 20%-40% for Suggested Rat
**0%-10% for staff rating. 10%-20% for Suggested R

Apply 40% and 20% to Staff Ratings	
Condition (5%)	1.35
A. Exterior Alterations (40%)	6.8
B. Exterior Alterations (20%)	2
Total Combined	10.15
Adjusted Total	16.85

APPENDIX C

Project Shadow Diagrams from Draft EIR

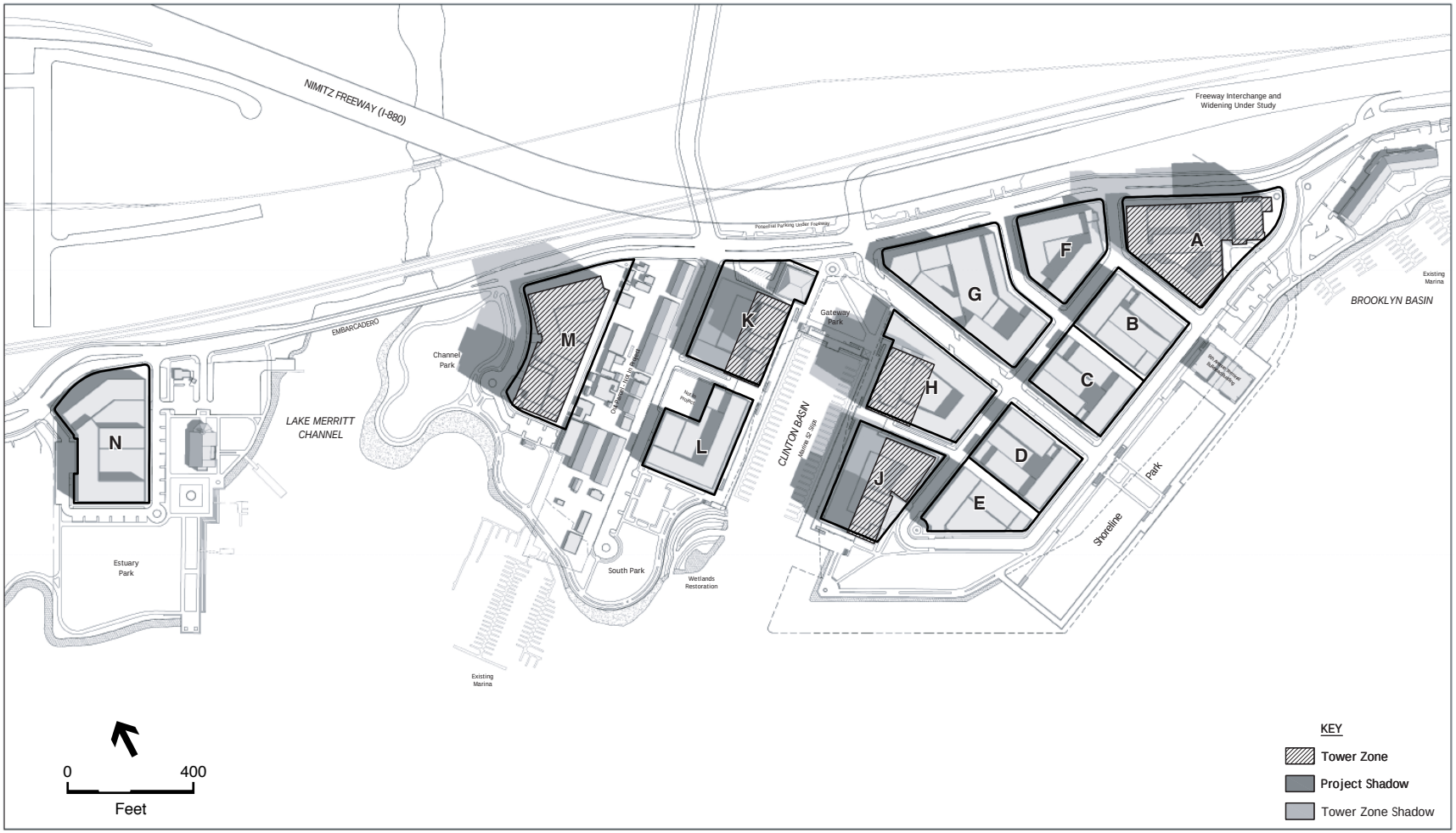


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-20

March Shadow Patterns: 9 am

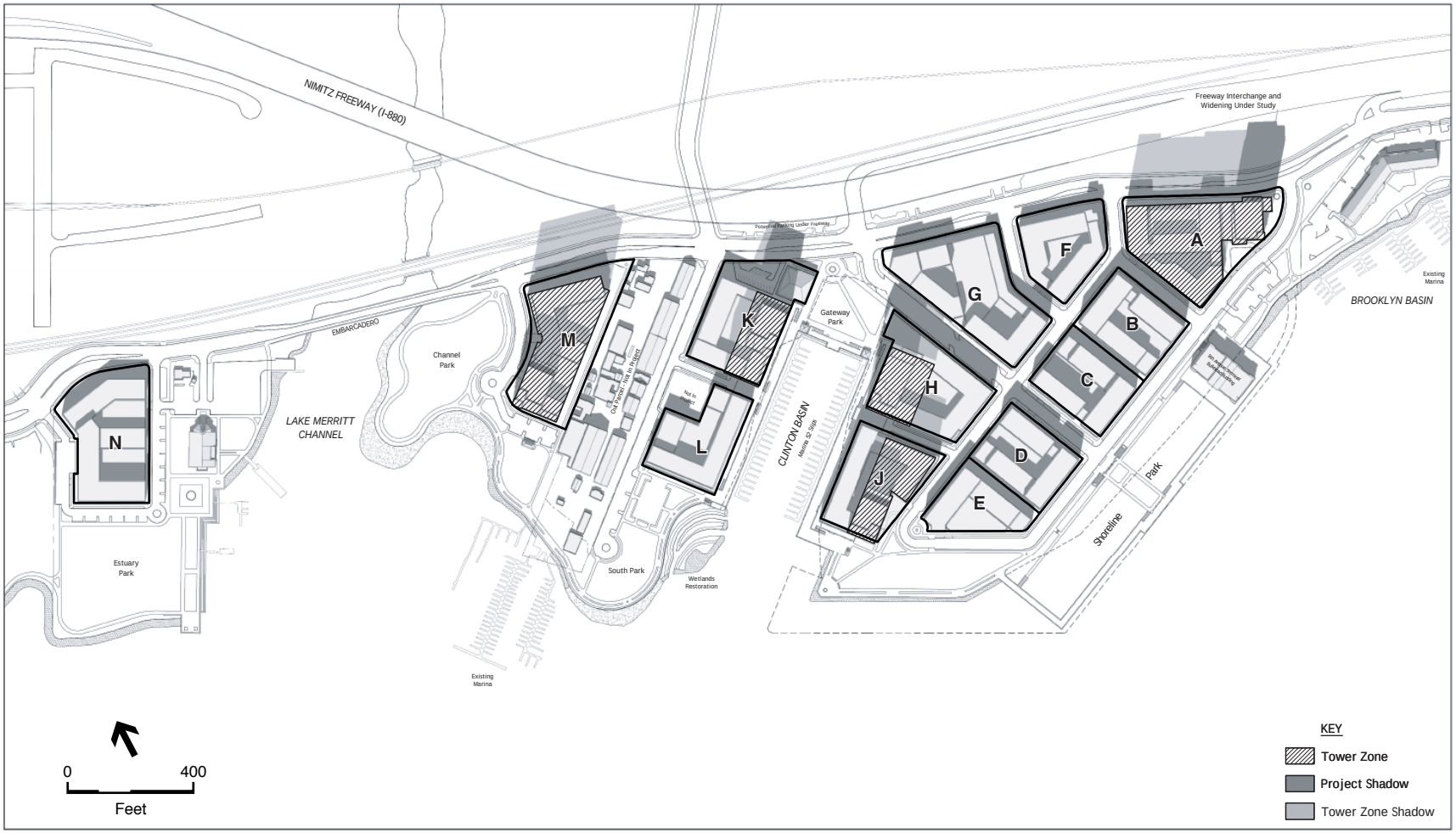


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-21

March Shadow Patterns: 12 noon

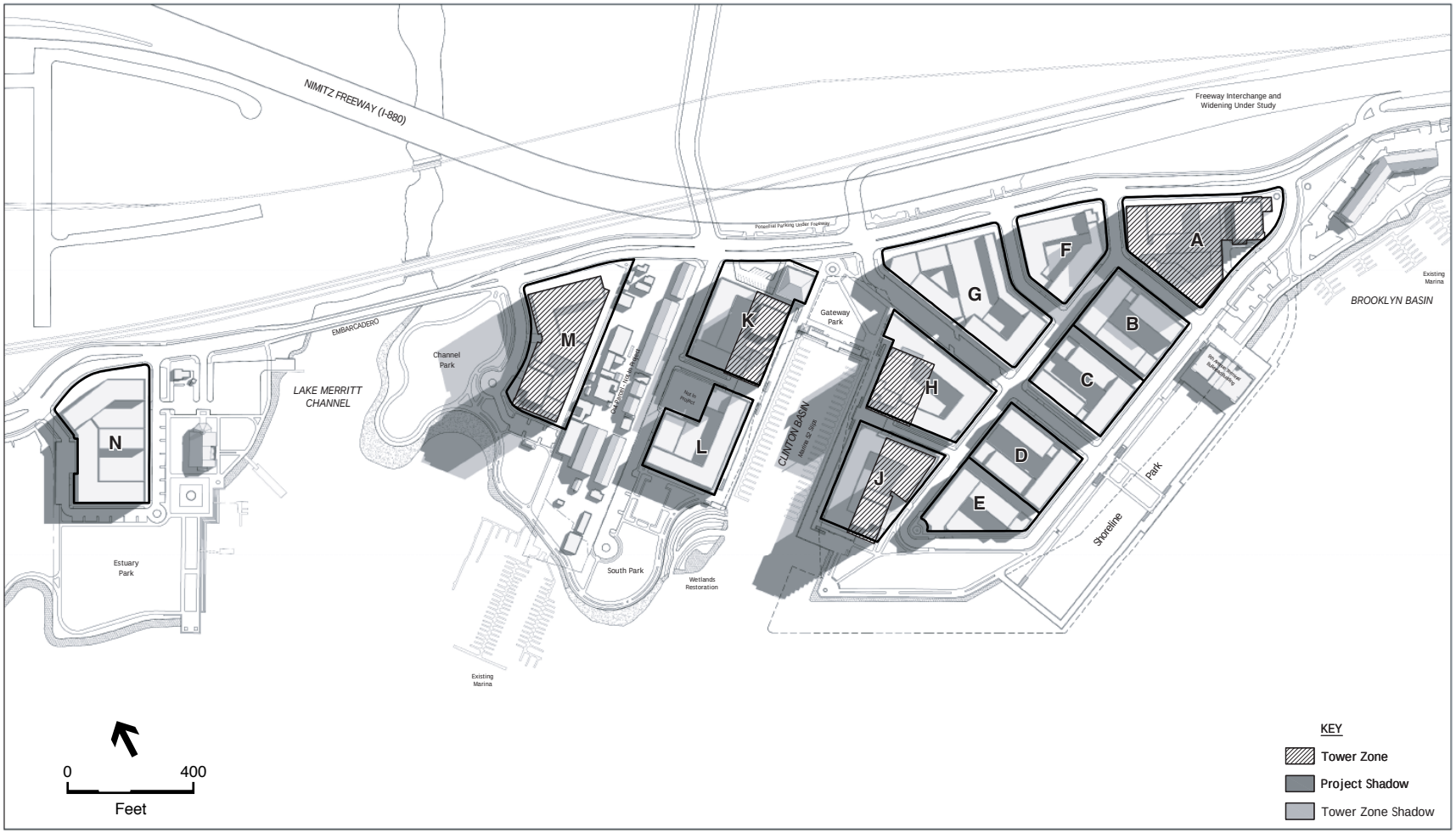


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-22

March Shadow Patterns: 3 pm

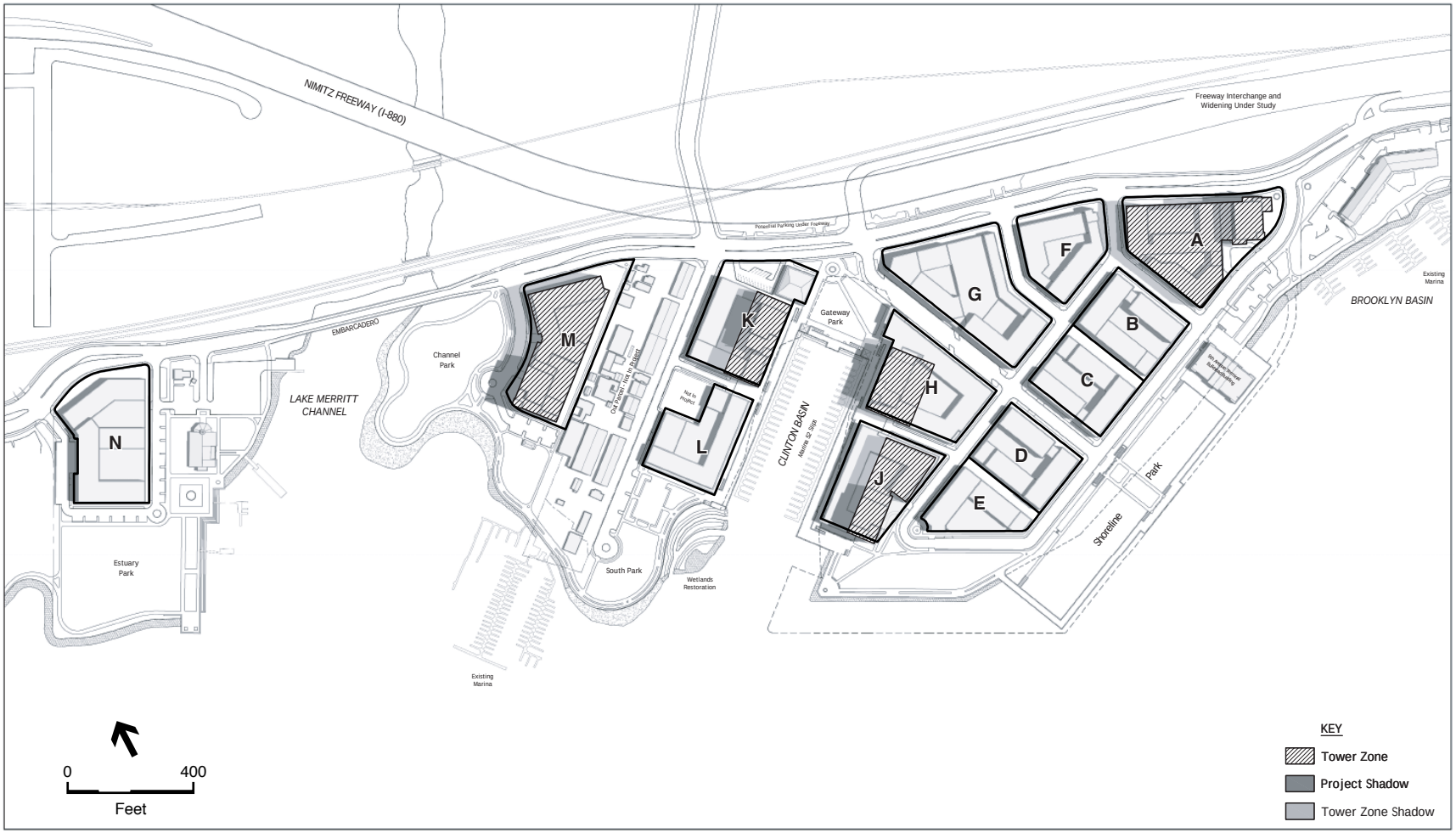


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-23

June Shadow Patterns: 9 am

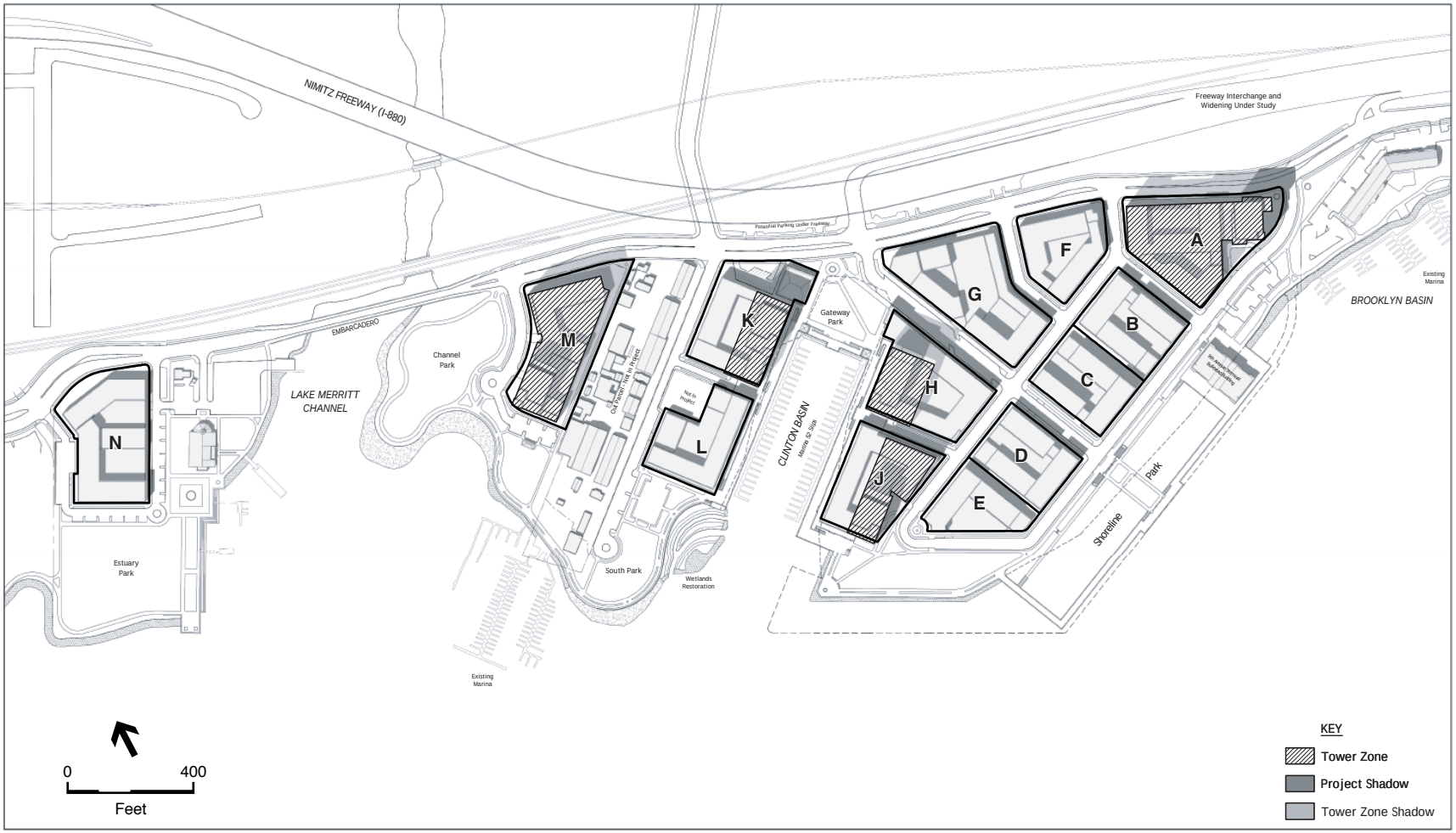


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-24

June Shadow Patterns: 12 noon

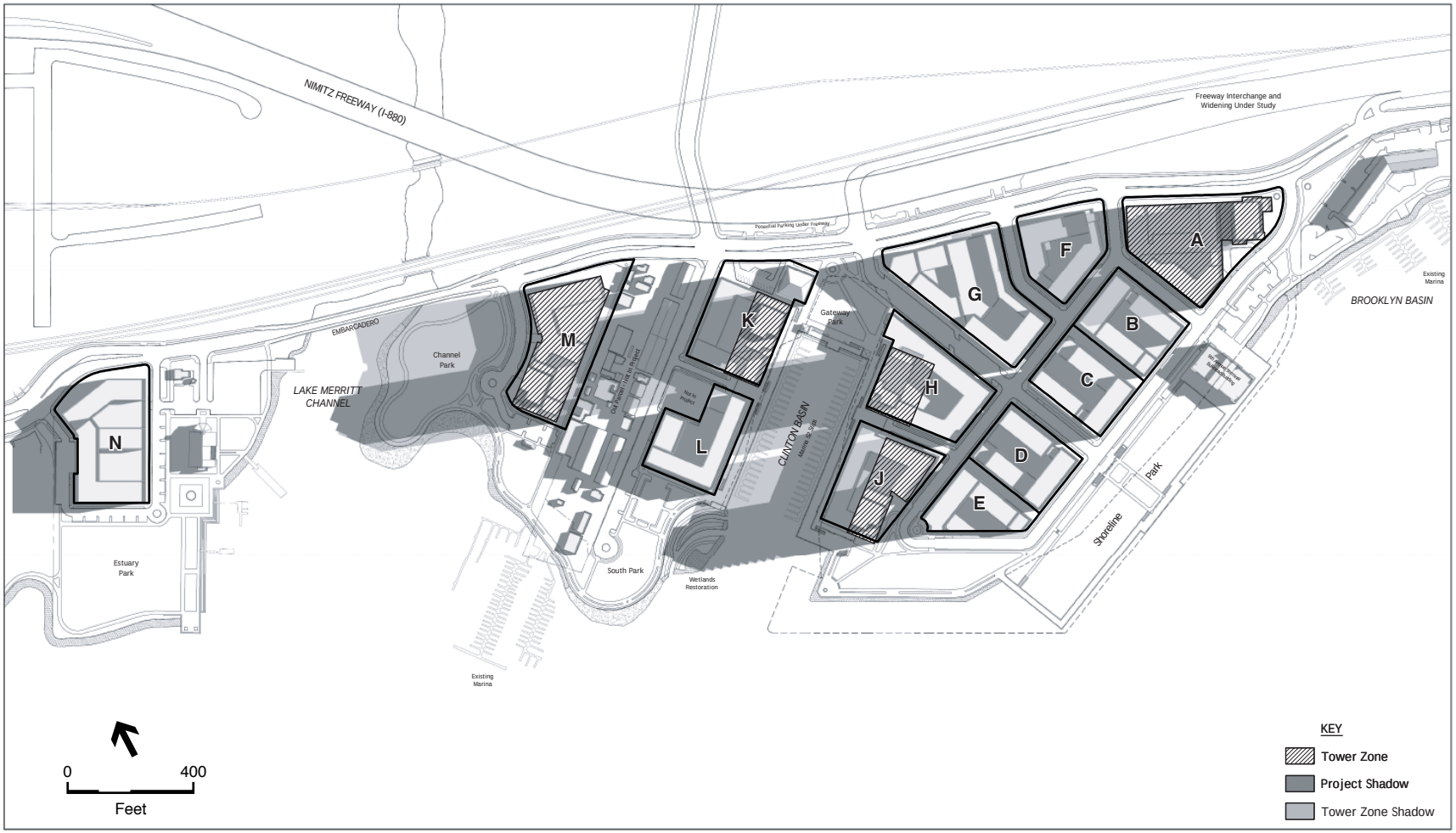


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-25

June Shadow Patterns: 3 pm

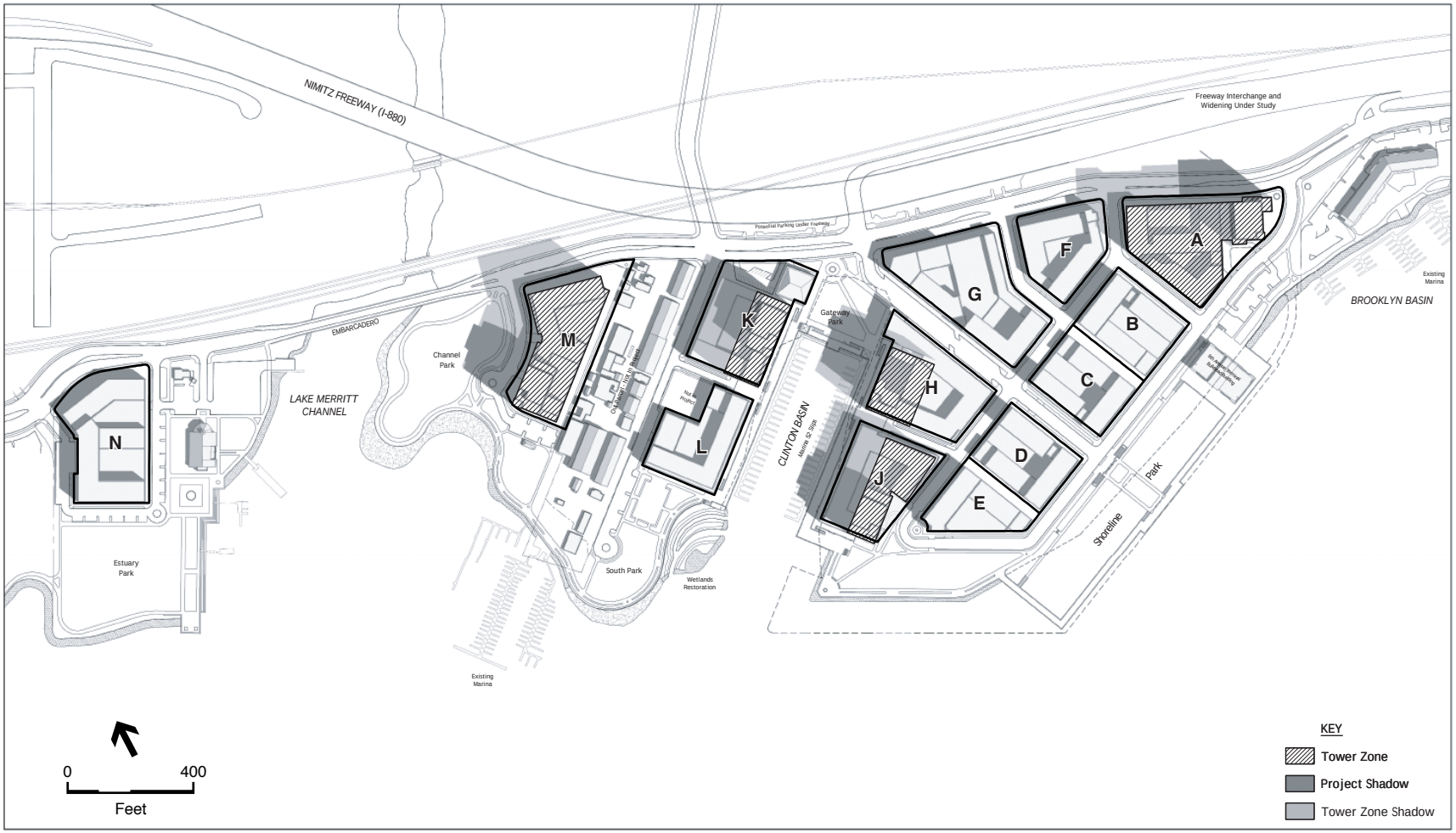


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-26

September Shadow Patterns: 9 am

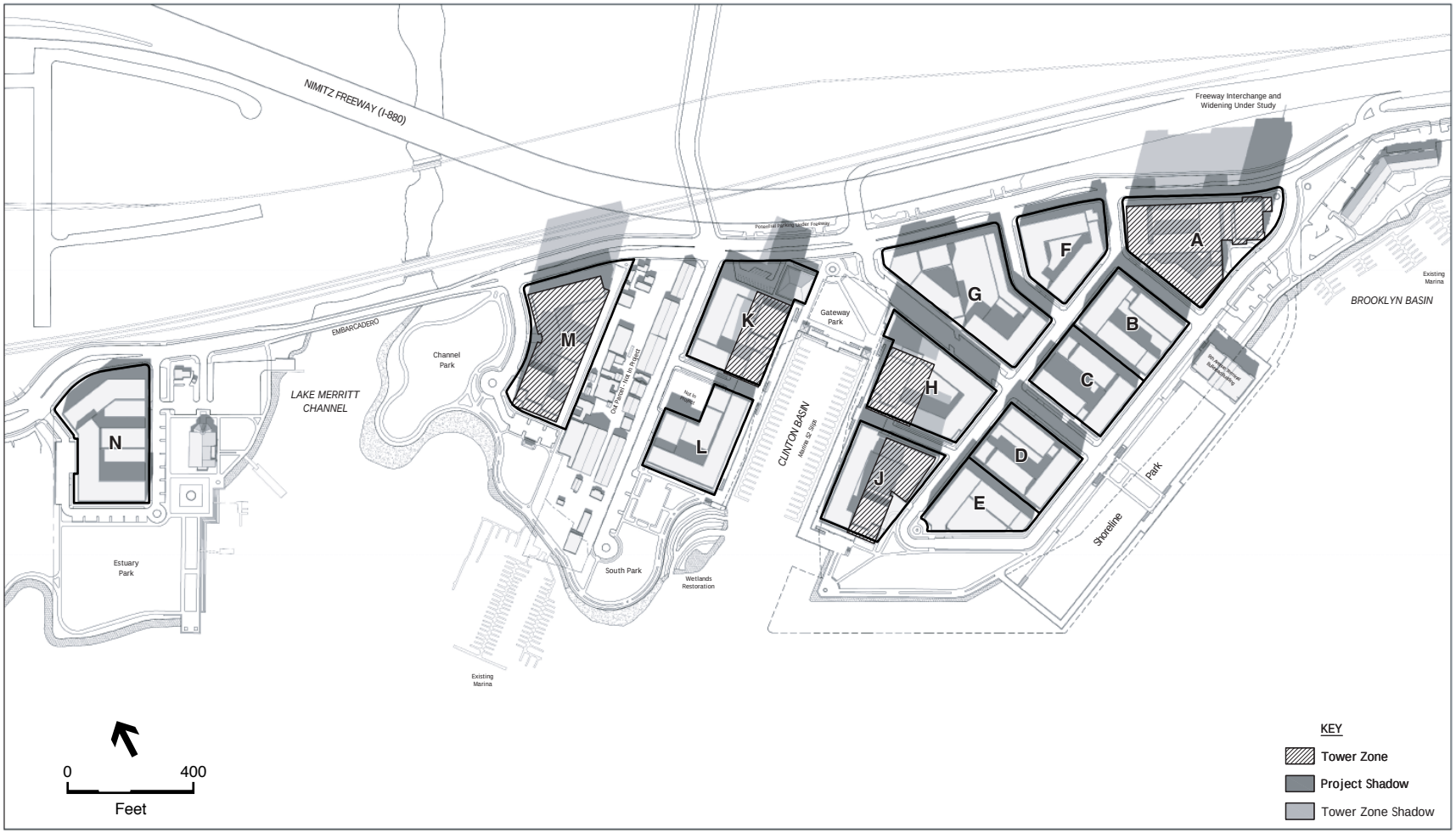


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-27

September Shadow Patterns: 12 noon

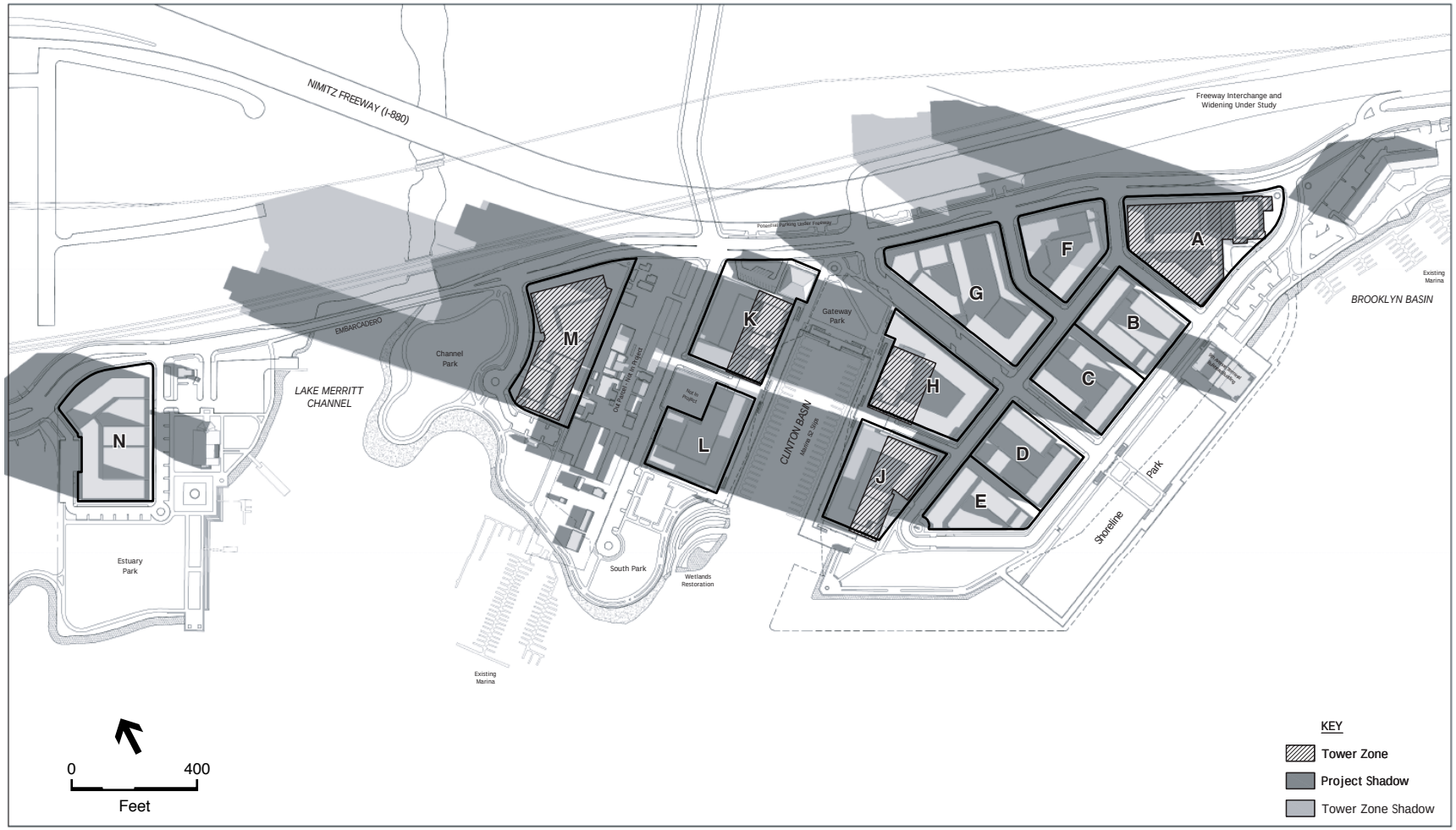


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-28

September Shadow Patterns: 3 pm

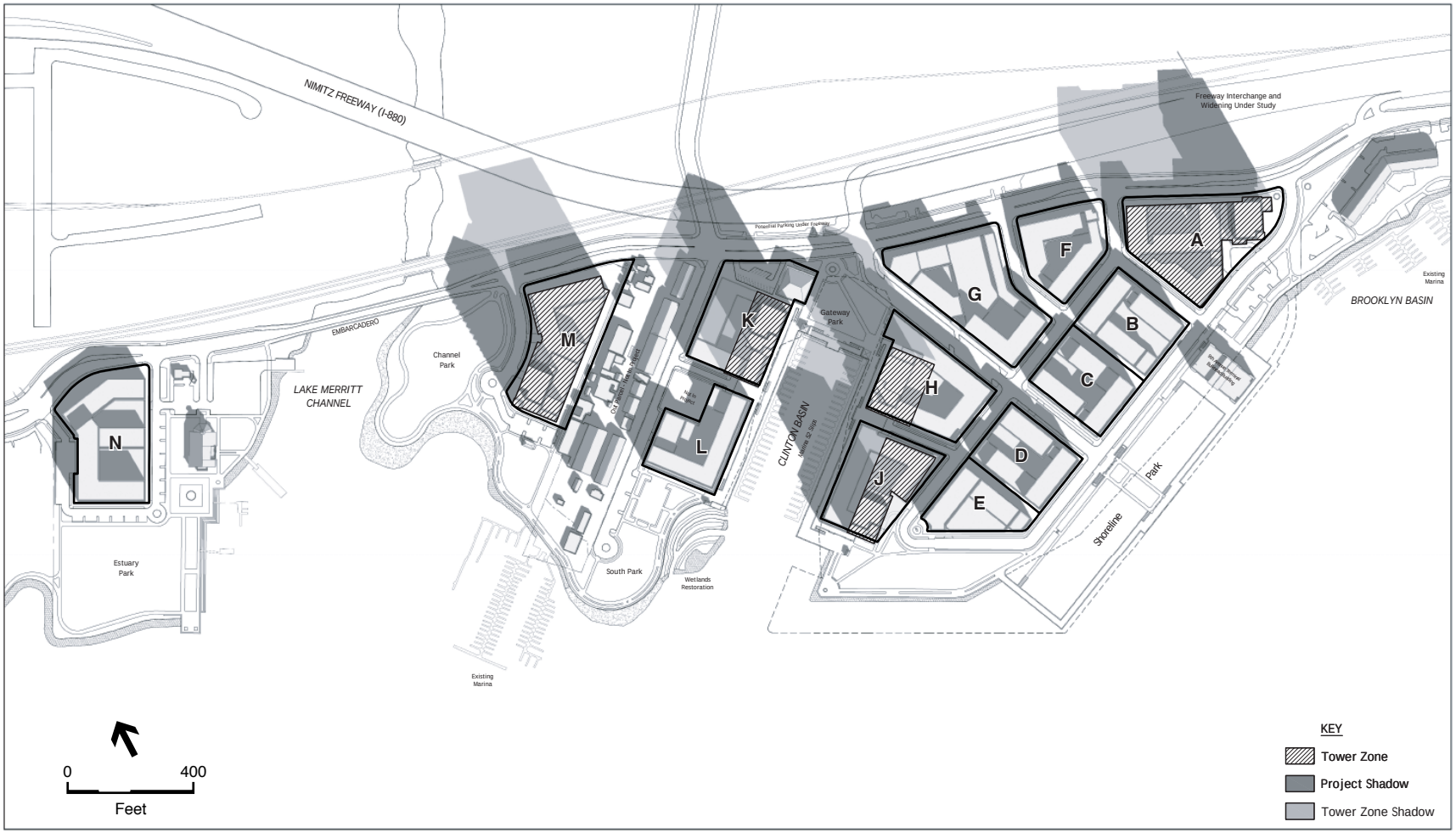


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-29

December Shadow Patterns: 9 am

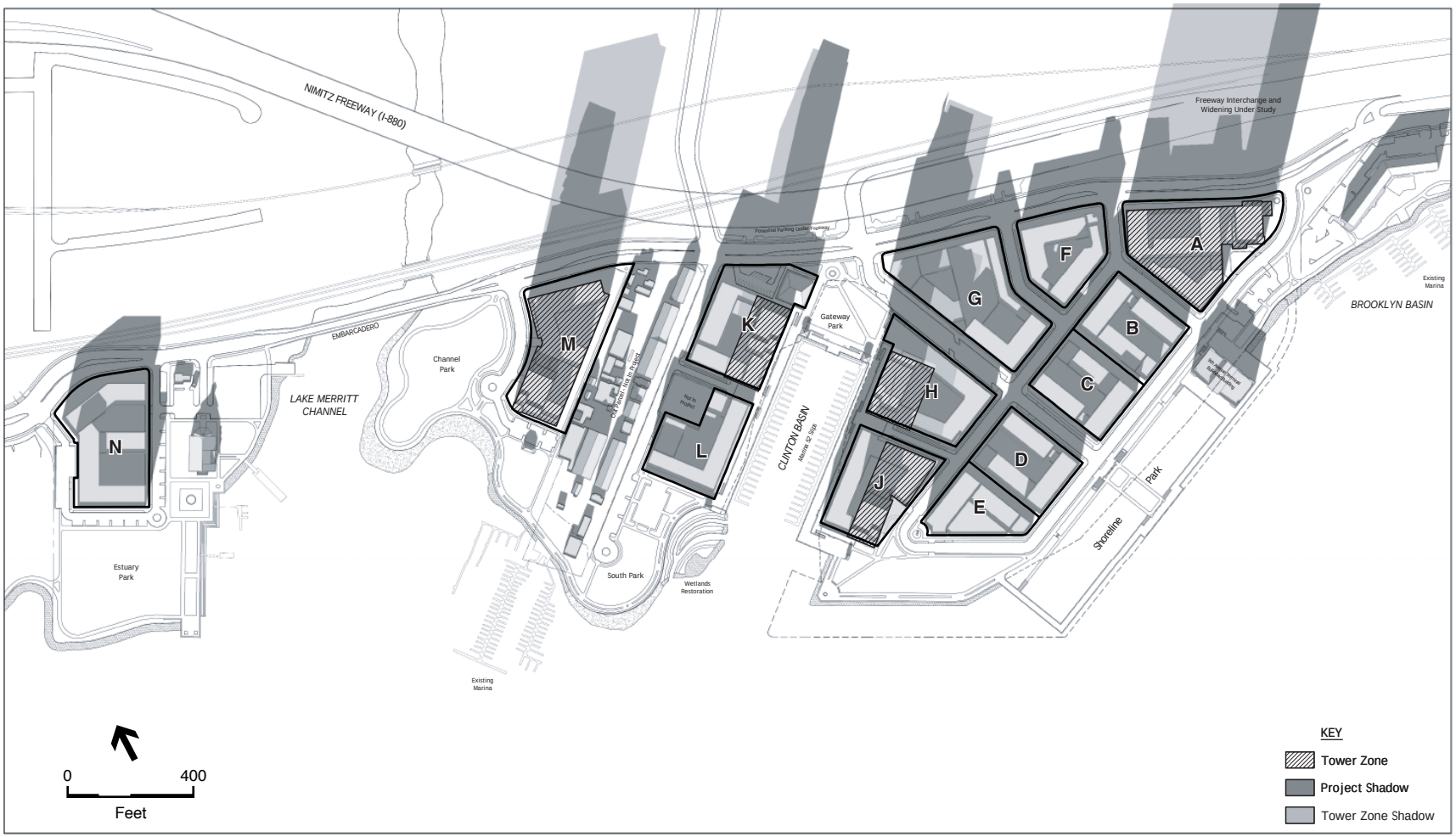


SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-30

December Shadow Patterns: 12 noon



SOURCE: Environmental Vision

Oak to Ninth Avenue . 202622

Figure IV.K-31

December Shadow Patterns: 3 pm

APPENDIX D

Enclosures to December 22, 2005 Comment Letter from Public Utilities Commission (Letter M)

Mailed 7/01/2005

Decision 05-06-056 June 30, 2005

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation for the purpose of establishing a list for the fiscal years 2004-2005 and 2005-2006 of existing and proposed crossings at grade of city streets, county roads or state highways in need of separation, or projects affecting the elimination of grade crossings by removal or relocation of streets or railroad tracks, or existing separations in need of alterations or reconstruction in accordance with Section 2452 of the Streets and Highways Code.	Investigation 03-07-009 (Filed July 10, 2003)

FINAL OPINION ESTABLISHING PRIORITY LIST FOR 2005 – 2006 FISCAL YEAR

Summary

This Final Order adopts the California Grade Separation Priority List for fiscal year 2005-2006, as required by Streets and Highways Code Section 2452. The 2004-2005 Priority List, established by Decision (D.) 04-06-020, dated June 9, 2004, requires no revision. This Order also closes Investigation 03-07-009.

Background and Procedural History

By D.04-06-020, dated June 9, 2004, we adopted the State Grade Separation Program Priority List for fiscal years 2004-2005 and 2005-2006. The Priority List established the relative priorities for funding qualified projects to eliminate or alter hazardous highway-rail crossings. Projects for construction of new grade separations, alteration of existing grade separations, and elimination of highway-

rail at-grade crossings by removal or relocation of streets or railroad tracks are included in the Priority List.

Section 190 of the Streets and Highways Code requires the State annual budget to include $15 million for funding of these projects. Section 2450 *et seq.* of the Code sets out the procedure for administering these funds, and Section 2453 gives the California Transportation Commission (CTC) responsibility for allocating (distributing) the funds to qualified projects. Section 2452 requires that the Commission, by July 1 of each year, establish the Priority List for qualified projects for use by CTC for the new fiscal year.

The Fiscal Year 2004–2005 Priority List

By D.04-06-020, we established a two-year Grade Separation Priority List. Caltrans has notified the Commission staff that no funds were allocated to the projects on the list during 2004-2005. Staff has prepared the 2005-2006 Priority List which is the same as the 2004-2005 list.

Assignment of Proceeding

Geoffrey F. Brown is the Assigned Commissioner and Kenneth K. Henderson is the assigned Administrative Law Judge in this proceeding

Comments on the Draft Decision

Pursuant to Pub. Util. Code § 311(g)(2), the otherwise applicable 30-day period for public review and comment is being waived. There were no contested issues in this phase of the proceeding.

Findings of Fact

1. Caltrans informed the Commission staff that no projects received allocations from the fiscal year 2004–2005 Priority List.

2. Staff has prepared the list for the second year which is the same list as adopted for the first year in the two year period.

3. CTC will use the Priority List to allocate funds to qualified projects in fiscal year 2005-2006.

Conclusion of Law

Appendix A should be adopted by our Final Order as the Fiscal Year 2005-2006 Grade Separation Priority List in this proceeding

FINAL ORDER

IT IS ORDERED that:

1. Pursuant to California Streets and Highways Code Section 2452, the Grade Separation Priority List attached as Appendix A is established for fiscal year 2005–2006, in order of priority, of projects which the Commission determines to be most urgently in need of separation or alteration.

2. The Executive Director shall furnish a certified copy of this decision to the California Department of Transportation and the California Transportation Commission.

3. The Executive Director shall furnish a certified copy of this decision to the California Department of Transportation and the California Transportation Commission.

4. Investigation 03-07-009 is closed.

This order is effective today.

Dated June 30, 2005, at San Francisco, California.

MICHAEL R. PEEVEY
President
GEOFFREY F. BROWN
SUSAN P. KENNEDY
DIAN M. GRUENEICH
Commissioners

Commissioner John A. Bohn, being necessarily absent, did not participate.

APPENDIX A: Priority List for Fiscal Year 2005-2006 Rank

Rank	Agency	Crossing Location	PUC ID	DOT ID	Railroad	VEH	TRN	LTRN	Cost Share	AH/WC	BD/ HC	VS/ SR	RS/ AS	CG/P OF	PT/ AP	OF/ DE	SCF/SF	Priority Index
1	City of Santa Fe Springs	Rosecrans Ave/ Marquardt Ave	2-157.8	027656A	BNSF	34211	133	0	5000	22	5	3	4	10.8	9	8	39.8	20970.1
2	City of Santa Fe Springs	Norwalk Blvd/ Los Nietos Rd	BBJ-497.28 & 2-153.1	027649P&027650J	BNSF	32754	165	0	10000	6	2	3	4	23.8	9	9	50.8	3833.9
3	City of Santa Fe Springs	Valley View Ave.	2-158.4	027657G	BNSF	33926	133	0	5000	3	2	3	4	11.4	9	12	41.4	3651.1
4	City of Riverside	Chicago Ave.	2B-8.1	026476Y	BNSF	11549	102	0	5000	8	3	3	4	11.2	3	3	27.2	2147.6
5	Los Angeles County DPW	Fairway Dr.	3-23.4	810883N	UPRR	32062	50	0	5000	5	1	2	5	9.5	4	10.5	32.0	1955.7
6	San Mateo County Transportation Authority	San Bruno Ave. (City of San Bruno)	105E-11.0 105E-11.1 105E-11.4	754869P 754870J 754871R	PCJPB	25365	88	0	5000	3	1	0	4	31.2	10	8	54.2	1839.9
7	City of Los Angeles	Valley Blvd..	B-485.8	746859N	UPRR	24566	57	0	5000	3	3	2	1	12.2	0	11	29.2	1149.4
8	City of Riverside	Mary St.	2B-13	026499F	BNSF	13248	81	0	5000	4	2	2	4	9.3	5	4	26.3	1099.3
9	San Mateo County Transportation Authority	South Linden Ave. (City of South San Francisco)	105E-10.2 105E-10.6	754866U 754867B	PCJPB	11594	88	0	5000	4	1	0	4	21.2	10	6	42.2	1062.5

APPENDIX A: Priority List for Fiscal Year 2005-2006 Rank

Rank	Agency	Crossing Location	PUC ID	DOT ID	Railroad	VEH	TRN	LTRN	Cost Share	AH/WC	BD/ HC	VS/ SR	RS/ AS	CG/P OF	PT/ AP	OF/ DE	SCF/SF	Priority Index
10	San Bernardino Associated Governments	University Parkway	2-76.6	026106V	BNSF	16095	94	0	5000	2	4	3	4	11	1	8	31.0	938.8
11	Los Angeles County DPW	Nogales St.	3-22.4	811479J	UPRR	43678	50	0	5000	1	1	1	5	10.3	4	14	35.3	908.9
12	San Joaquin County	West Lane	D-92.8	752897L	UPRR	24715	28	0	5000	5	1	1	2	8.8	1	9.5	23.3	853.7
13	City of Irvine	Sand Canyon Ave	101OR-182.9	026765A	SCRRA	20480	63	0	5000	2	1	4	7	8	8	10	38.0	812.1
14	Los Angeles County DPW	El Segundo Blvd.	BBH-492.6 84L-10.4	747868R	UPRR/ LACMTA	16875	8	252	5000	5	2	1	2	12	10	12	39.0	711.3
15	City of Riverside	Iowa Ave.	2B-7.3	026472W	BNSF	15715	102	0	5000	1	4	3	4	10.2	3	4	28.2	669.4
16	City of Riverside	Columbia Ave.	2B-7.9	026475S	BNSF	10118	102	0	5000	2	3	3	4	7.4	3	4	24.4	643.6
17	City of Ontario	Miliken Ave.	B-525.4	746964P	UPRR	23333	33	0	5000	3	1	3	4	6	1	8	23.0	639.0
18	City of Camarillo	Las Posas-Upland Road	E-419.0	912013V	UPRR	17046	41	0	5000	3	1	3	4	7	4	6.5	25.5	584.6

APPENDIX A: Priority List for Fiscal Year 2005-2006 Rank

Rank	Agency	Crossing Location	PUC ID	DOT ID	Railroad	VEH	TRN	LTRN	Cost Share	AH/WC	BD/ HC	VS/ SR	RS/ AS	CG/P OF	PT/ AP	OF/ DE	SCF/SF	Priority Index
19	Greater Bakersfield Separation of Grade District	Morning Drive	B-317.50	757413M	UPRR	13000	43	0	5000	4	1	3	4	9.68	0	4	21.7	580.7
20	City of Riverside	3rd Street	2B-9.5/3-57.9	026480N	BNSF/ UPRR	13340	102	0	5000	1	3	0	4	9.32	3	4	23.3	567.6
21	San Diego Association of Governments	Leucadia Blvd..	106-236.5	026827V	SDNR/ NCTD	13163	50	0	5000	3	1	2	6	7.1	7	4	27.1	553.6
22	San Mateo County Transportatio n Authority	Poplar Avenue (City of San Mateo)*	105E-17.2B 105E-17.3B 105E-17.4B 105E-17.5B	754896L 754897T 754898A 754899G	PCJPB	21394	88	0	5000	24	38	2	3.1	30	29	32	164.1	540.6
23	City of Riverside	Streeter Ave.	3-53.8	811008U	UPRR	12658	44	0	5000	3	3	1	4	12	4	8	32	477.6
24	City of Lathrop	Lathrop Rd.	D-82.1	752781K	UPRR	10497	24	0	5000	7	3	1	4	11	2	6	27.0	430.1
25	City of Riverside	Brockton Ave.	3-55.0	811010V	UPRR	14043	44	0	5000	2	2	2	4	9	4	5	26.0	396.7
26	Alameda Corridor-East Construction Authority	Brea Canyon Rd.	3-24.9	810886J	UPRR	17200	50	0	5000	1	1	2	5	9	3	5	25	369.0

APPENDIX A: Priority List for Fiscal Year 2005-2006 Rank

Rank	Agency	Crossing Location	PUC ID	DOT ID	Railroad	VEH	TRN	LTRN	Cost Share	AH/WC	BD/ HC	VS/ SR	RS/ AS	CG/P OF	PT/ AP	OF/ DE	SCF/SF	Priority Index
27	City of Bakersfield	Baker-Truxtun-Beale	Consolidation 2-885.6 2-885.75 2-885.77 2-885.95 2-886.2 2-886.4	028281T 028283G 028284N 028285V 028288R 028289X	BNSF	24620	31	0	15448	5	2	3	0	57.9	0	6.5	69.4	365.8
28	City of Los Angeles	North Spring St.*	101VY-1.36A & 101EB-481.48A	027606W&811042B	SCRRA	16863	89	0	5000	10	0	5	0.2	4	5	7	31.2	331.4
29	Los Angeles County DPW	Turnbull Cyn Rd.	3-17.2	810867E	UPRR/ SCRRA	14924	50	0	5000	1	3	1	5	10.6	10.6	5	28.6	327.0
30	City of Camarillo	Adolfo Rd.	E-417.9	753765E	UPRR	17019	41	0	5000	1	1	2	4	7	4	4	22.0	301.1
31	San Mateo County Transportation Authority	25th Ave. (City of San Mateo)	105E-19.7	754910E	PCJPB	13412	88	0	5000	0	1	1	5	11.2	10	5	33.2	269.3
32	City of Riverside	Riverside Ave.	3-55.6	811012J	UPRR	13680	44	0	5000	1	2	0	4	11.1	4	5	26.1	266.8
33	City of Los Angeles	North Main St.	101VY-1.17 & 101RI-481.7	027607D & 811040M	SCRRA	12628	89	0	5000	0	2	1	0	21.5	8	9	41.5	266.3
34	City of Riverside	Magnolia Ave.	3-55.2	811011C	UPRR	23418	44	0	5000	0	2	1	4	9.1	4	7	27.1	233.2
35	Los Angeles County DPW	Sierra Hwy/Barrel Springs Rd	101VY-65.58 101VY-65.77	750600W & 750644W	SCRRA	8507	23	0	5000	3	1	3	5	7.8	4	5	25.8	182.3

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Rank	Agency	Crossing Location	PUC ID	DOT ID	Railroad	VEH	TRN	LTRN	Cost Share	AH/WC	BD/ HC	VS/ SR	RS/ AS	CG/P OF	PT/ AP	OF/ DE	SCF/SF	Priority Index
36	City of Pico Rivera	Passons Blvd & Serapis Ave.	2-151.45 & 2-151.3	027643Y & 027644F	BNSF	2604	125	0	10000	3	2	0	6	23.2	9	7	47.2	177.4
37	San Bernardino Associated Governments	Hunts Lane	B-541.0	747168J	UPRR	15766	48	0	5000	0	5	3	4	8	1	5	26.0	177.4
38	City of Fremont	Warren Ave.	DA-36.2 & 4G-6.7	750073E&833885S	UPRR/ VTA	9527	26	0	5000	2	2	1	1	13	0	6.5	23.5	172.1
39	City of Fremont	Paseo Padre Pkwy, High St, Main St, Washington Blvd	Consolidation DA-32.1&4G-2.6,SA-32.65,DA-32.7,DA-32.8&4G-3.2	750056N&833878G,750057V,750058C, 750059J&833879N,	UPRR/ VTA	51959	12	0	5000	0	2	1	1	30.1	0	7.5	41.6	166.3
40	City of Bakersfield	El Toro Viejo	2-892.0	Proposed	BNSF	7575	49	0	2760	0	1	3	6	4	4	2	20.0	154.5
41	San Bernardino County	Lenwood Road	2-5.7	026062X	UPRR & BNSF	4490	99	0	10304	2	5	5	2	7.2	1	3	23.2	152.6
42	City of Encinitas	D & E Street	106-237.95 & 106-237.9	026830D & 026829J	NCTD	10940	50	0	20000	2	1	0	6	19	7	6	39.0	121.1
43	City of Riverside	Palm Ave.	3-54.8	811009B	UPRR	10754	44	0	5000	0	2	1	4	9	4	3	23	117.6
44	Kern County	Hageman Rd (2-895.2)	2-895.2	028376B	BNSF	9000	49	0	5000	0	1	5	6	8.7	4	4.5	29.2	117.4
45	Kern County	Olive Drive	B-308.9	756945M	UPRR	18700	22	0	5000	0	1	3	4	8.8	0	7	23.8	106.1

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46	Los Angeles County DPW	Slauson Ave./Long Beach Ave-West	BBH-487.42&2H-2.83	747839F & 027952L	UPRR/ BNSF/ LACMTA	38286	8	0	5000	0	1	1	0	15	0	12	29	90.3
47	San Bernardino County	National Trails Hwy @Oro Grande*	2-30.6B	reconstructio n	BNSF	6391	86	0	10268	6	8	0	5.2	3	8	6	36.2	89.7
48	San Bernardino County	Vista Road	2-22.0	026068N	UPRR & BNSF	2280	99	0	9760	1	2	5	2	7	1	2	19.0	65.3
49	Kern County	Snow Road	B-307.4	756948H	UPRR	7600	21	0	5000	0	1	5	4	8.0	0	7	25.0	56.9
50	San Bernardino County	Glen Helen Pkwy	BB-480.1 & 2-71.0	747017U & 026103A	UPRR & BNSF	2280	99	0	11905	0	5	5	2	11.7	1	0	24.7	43.7
51	King City	First St./ Bitterwater Rd.	E-163.4	752123M	UPRR	5702	9	0	5000	0	1	0	5	12.2	1	6.5	25.7	36.0
52	City of Bakersfield	Hageman Rd. (2-111.6)	2-116.6	Proposed	BNSF	15080	2	0	1530	0	1	5	0	2.2	0	5	13.2	32.9
53	City of Vista	Vista Village Dr. Main Street	106E-9.15 & 9.2	917847T,027 566B	SDNR/ NCTD	40531	1	0	20000	2	2	2	0	14.3	2	8	28.3	34.4
54	City of Vista	Escondido Ave.	106E-10.1	027569W	SDNR/ NCTD	42526	1	0	5000	0	1	1	0	8.6	0	8	18.6	27.1
55	King City	Pearl Street	E-163.8	752121Y	UPRR	1023	9	0	5000	0	1	0	5	13	1	5	25.0	26.8

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56	City of Vista	N. Melrose Dr.	106E-7.5	026993M	SDNR/ NCTD	27434	1	0	5000	0	1	3	0	9.0	0	7	20.0	25.4
57	Los Angeles County DPW	Flores Street	3A-9.7	Proposed	UPRR	11000	4	0	5000	0	1	1	0	5.08	0	3	10.08	18.9
58	City of Vista	Mar Vista Dr.	106E-11.2	027570R	SDNR/ NCTD	10120	1	0	5000	0	1	1	0	7.9	0	5	14.9	16.9

Note: VEH- Vehicle, TRN – Train, LRT – Light Rail Trains, COST Share – Project Cost Share (a cost of more than $5 million is permitted for qualified projects per S&H Code Section 2454 (h) for multi-year funding)

Formula For Crossing Nominated For Separation Or Elimination:

***AH** – Accident History* ***BD** – Crossing Blocking Delay*

***VS** –Vehicular Speed Limit* ***RS** – Rail Speed Limit*

***CG** – Crossing Geometrics* ***PT** – Passenger trains*

***SCF**- Special Conditions Factor* ***OF**-Other Factors (Passenger Buses, School Buses, Hazmat Trains/Trucks, Community Impact)*

*Formula For Existing Separations Nominated For Alteration or Reconstruction:

WC – Width Clearance *HC-Height Clearance*
SR – Speed Reduction *AS – Accidents Near Structure*
POF – Probability of Failure *AP – Accident Potential*
DE – Delay Effects *SF - Separation Factor*

(END OF APPENDIX A)

ALJ/KKH/jva **Mailed 8/2/2005**

Decision 05-08-001

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation for the purpose of establishing a list for the fiscal years 2004-2005 and 2005-2006 of existing and proposed crossings at grade of city streets, county roads or state highways in need of separation, or projects affecting the elimination of grade crossings by removal or relocation of streets or railroad tracks, or existing separations in need of alterations or reconstruction in accordance with Section 2452 of the Streets and Highways Code.	Investigation 03-07-009 (Filed July 10, 2003)

ORDER CORRECTING ERROR

It has come to my attention that there was an inadvertent error in the preparation of Appendix A to Decision 05-06-056, on page 6 "Rank 53"of the Final Opinion Establishing Priority List for 2005 – 2006 Fiscal Year. Ordering Paragraph 3 on page 4 is a duplication of Ordering Paragraph 2 on page 3.

Therefore, pursuant to the authority granted in Resolution A-4661, **IT IS ORDERED** that the Ordering Paragraph 3 on page 4 should be deleted and a corrected copy is attached. Appendix A on page 6 attached hereto is modified with the bolded portions representing the changes.

Dated August 1, 2005, at San Francisco, California.

/s/ STEVE LARSON

STEVE LARSON
Executive Director

199987

ALJ/KKH/jva

Mailed 7/01/2005

Decision 05-06-056 June 30, 2005

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation for the purpose of establishing a list for the fiscal years 2004-2005 and 2005-2006 of existing and proposed crossings at grade of city streets, county roads or state highways in need of separation, or projects affecting the elimination of grade crossings by removal or relocation of streets or railroad tracks, or existing separations in need of alterations or reconstruction in accordance with Section 2452 of the Streets and Highways Code.	Investigation 03-07-009 (Filed July 10, 2003)

FINAL OPINION ESTABLISHING PRIORITY LIST FOR 2005 – 2006 FISCAL YEAR

Summary

This Final Order adopts the California Grade Separation Priority List for fiscal year 2005-2006, as required by Streets and Highways Code Section 2452. The 2004-2005 Priority List, established by Decision (D.) 04-06-020, dated June 9, 2004, requires no revision. This Order also closes Investigation 03-07-009.

Background and Procedural History

By D.04-06-020, dated June 9, 2004, we adopted the State Grade Separation Program Priority List for fiscal years 2004-2005 and 2005-2006. The Priority List established the relative priorities for funding qualified projects to eliminate or alter hazardous highway-rail crossings. Projects for construction of new grade separations, alteration of existing grade separations, and elimination of highway-

rail at-grade crossings by removal or relocation of streets or railroad tracks are included in the Priority List.

Section 190 of the Streets and Highways Code requires the State annual budget to include $15 million for funding of these projects. Section 2450 *et seq.* of the Code sets out the procedure for administering these funds, and Section 2453 gives the California Transportation Commission (CTC) responsibility for allocating (distributing) the funds to qualified projects. Section 2452 requires that the Commission, by July 1 of each year, establish the Priority List for qualified projects for use by CTC for the new fiscal year.

The Fiscal Year 2004–2005 Priority List

By D.04-06-020, we established a two-year Grade Separation Priority List. Caltrans has notified the Commission staff that no funds were allocated to the projects on the list during 2004-2005. Staff has prepared the 2005-2006 Priority List which is the same as the 2004-2005 list.

Assignment of Proceeding

Geoffrey F. Brown is the Assigned Commissioner and Kenneth K. Henderson is the assigned Administrative Law Judge in this proceeding

Comments on the Draft Decision

Pursuant to Pub. Util. Code § 311(g)(2), the otherwise applicable 30-day period for public review and comment is being waived. There were no contested issues in this phase of the proceeding.

Findings of Fact

1. Caltrans informed the Commission staff that no projects received allocations from the fiscal year 2004–2005 Priority List.

2. Staff has prepared the list for the second year which is the same list as adopted for the first year in the two year period.

3. CTC will use the Priority List to allocate funds to qualified projects in fiscal year 2005-2006.

Conclusion of Law

Appendix A should be adopted by our Final Order as the Fiscal Year 2005-2006 Grade Separation Priority List in this proceeding

FINAL ORDER

IT IS ORDERED that:

1. Pursuant to California Streets and Highways Code Section 2452, the Grade Separation Priority List attached as Appendix A is established for fiscal year 2005–2006, in order of priority, of projects which the Commission determines to be most urgently in need of separation or alteration.

2. The Executive Director shall furnish a certified copy of this decision to the California Department of Transportation and the California Transportation Commission.

3. Investigation 03-07-009 is closed.

This order is effective today.

Dated June 30, 2005, at San Francisco, California.

MICHAEL R. PEEVEY
President
GEOFFREY F. BROWN
SUSAN P. KENNEDY
DIAN M. GRUENEICH
Commissioners

Commissioner John A. Bohn, being necessarily absent, did not participate.

APPENDIX A: Priority List for Fiscal Year 2005-2006 Rank

Rank	Agency	Crossing Location	PUC ID	DOT ID	Railroad	VEH	TRN	LTRN	Cost Share	AH/WC	BD/ HC	VS/ SR	RS/ AS	CG/P OF	PT/ AP	OF/ DE	SCF/SF	Priority Index
1	City of Santa Fe Springs	Rosecrans Ave/ Marquardt Ave	2-157.8	027656A	BNSF	34211	133	0	5000	22	5	3	4	10.8	9	8	39.8	20970.1
2	City of Santa Fe Springs	Norwalk Blvd/ Los Nietos Rd	BBJ-497.28 & 2-153.1	027649P&027650J	BNSF	32754	165	0	10000	6	2	3	4	23.8	9	9	50.8	3833.9
3	City of Santa Fe Springs	Valley View Ave.	2-158.4	027657G	BNSF	33926	133	0	5000	3	2	3	4	11.4	9	12	41.4	3651.1
4	City of Riverside	Chicago Ave.	2B-8.1	026476Y	BNSF	11549	102	0	5000	8	3	3	4	11.2	3	3	27.2	2147.6
5	Los Angeles County DPW	Fairway Dr.	3-23.4	810883N	UPRR	32062	50	0	5000	5	1	2	5	9.5	4	10.5	32.0	1955.7
6	San Mateo County Transportation Authority	San Bruno Ave. (City of San Bruno)	105E-11.0 105E-11.1 105E-11.4	754869P 754870J 754871R	PCJPB	25365	88	0	5000	3	1	0	4	31.2	10	8	54.2	1839.9
7	City of Los Angeles	Valley Blvd..	B-485.8	746859N	UPRR	24566	57	0	5000	3	3	2	1	12.2	0	11	29.2	1149.4
8	City of Riverside	Mary St.	2B-13	026499F	BNSF	13248	81	0	5000	4	2	2	4	9.3	5	4	26.3	1099.3
9	San Mateo County Transportation Authority	South Linden Ave. (City of South San Francisco)	105E-10.2 105E-10.6	754866U 754867B	PCJPB	11594	88	0	5000	4	1	0	4	21.2	10	6	42.2	1062.5

APPENDIX A: Priority List for Fiscal Year 2005-2006 Rank

Rank	Agency	Crossing Location	PUC ID	DOT ID	Railroad	VEH	TRN	LTRN	Cost Share	AH/WC	BD/ HC	VS/ SR	RS/ AS	CG/P OF	PT/ AP	OF/ DE	SCF/SF	Priority Index
10	San Bernardino Associated Governments	University Parkway	2-76.6	026106V	BNSF	16095	94	0	5000	2	4	3	4	11	1	8	31.0	938.8
11	Los Angeles County DPW	Nogales St.	3-22.4	811479J	UPRR	43678	50	0	5000	1	1	1	5	10.3	4	14	35.3	908.9
12	San Joaquin County	West Lane	D-92.8	752897L	UPRR	24715	28	0	5000	5	1	1	2	8.8	1	9.5	23.3	853.7
13	City of Irvine	Sand Canyon Ave	101OR-182.9	026765A	SCRRA	20480	63	0	5000	2	1	4	7	8	8	10	38.0	812.1
14	Los Angeles County DPW	El Segundo Blvd.	BBH-492.6 84L-10.4	747868R	UPRR/ LACMTA	16875	8	252	5000	5	2	1	2	12	10	12	39.0	711.3
15	City of Riverside	Iowa Ave.	2B-7.3	026472W	BNSF	15715	102	0	5000	1	4	3	4	10.2	3	4	28.2	669.4
16	City of Riverside	Columbia Ave.	2B-7.9	026475S	BNSF	10118	102	0	5000	2	3	3	4	7.4	3	4	24.4	643.6
17	City of Ontario	Miliken Ave.	B-525.4	746964P	UPRR	23333	33	0	5000	3	1	3	4	6	1	8	23.0	639.0
18	City of Camarillo	Las Posas-Upland Road	E-419.0	912013V	UPRR	17046	41	0	5000	3	1	3	4	7	4	6.5	25.5	584.6

APPENDIX A: Priority List for Fiscal Year 2005-2006 Rank

Rank	Agency	Crossing Location	PUC ID	DOT ID	Railroad	VEH	TRN	LTRN	Cost Share	AH/WC	BD/ HC	VS/ SR	RS/ AS	CG/P OF	PT/ AP	OF/ DE	SCF/SF	Priority Index
19	Greater Bakersfield Separation of Grade District	Morning Drive	B-317.50	757413M	UPRR	13000	43	0	5000	4	1	3	4	9.68	0	4	21.7	580.7
20	City of Riverside	3rd Street	2B-9.5/3-57.9	026480N	BNSF/ UPRR	13340	102	0	5000	1	3	0	4	9.32	3	4	23.3	567.6
21	San Diego Association of Governments	Leucadia Blvd..	106-236.5	026827V	SDNR/ NCTD	13163	50	0	5000	3	1	2	6	7.1	7	4	27.1	553.6
22	San Mateo County Transportatio n Authority	Poplar Avenue (City of San Mateo)*	105E-17.2B 105E-17.3B 105E-17.4B 105E-17.5B	754896L 754897T 754898A 754899G	PCJPB	21394	88	0	5000	24	38	2	3.1	30	29	32	164.1	540.6
23	City of Riverside	Streeter Ave.	3-53.8	811008U	UPRR	12658	44	0	5000	3	3	1	4	12	4	8	32	477.6
24	City of Lathrop	Lathrop Rd.	D-82.1	752781K	UPRR	10497	24	0	5000	7	3	1	4	11	2	6	27.0	430.1
25	City of Riverside	Brockton Ave.	3-55.0	811010V	UPRR	14043	44	0	5000	2	2	2	4	9	4	5	26.0	396.7
26	Alameda Corridor-East Construction Authority	Brea Canyon Rd.	3-24.9	810886J	UPRR	17200	50	0	5000	1	1	2	5	9	3	5	25	369.0

APPENDIX A: Priority List for Fiscal Year 2005-2006 Rank

Rank	Agency	Crossing Location	PUC ID	DOT ID	Railroad	VEH	TRN	LTRN	Cost Share	AH/WC	BD/ HC	VS/ SR	RS/ AS	CG/P OF	PT/ AP	OF/ DE	SCF/SF	Priority Index
27	City of Bakersfield	Baker-Truxtun-Beale	Consolidation 2-885.6 2-885.75 2-885.77 2-885.95 2-886.2 2-886.4	028281T 028283G 028284N 028285V 028288R 028289X	BNSF	24620	31	0	15448	5	2	3	0	57.9	0	6.5	69.4	365.8
28	City of Los Angeles	North Spring St.*	101VY-1.36A & 101EB-481.48A	027606W&811042B	SCRRA	16863	89	0	5000	10	0	5	0.2	4	5	7	31.2	331.4
29	Los Angeles County DPW	Turnbull Cyn Rd.	3-17.2	810867E	UPRR/ SCRRA	14924	50	0	5000	1	3	1	5	10.6	10.6	5	28.6	327.0
30	City of Camarillo	Adolfo Rd.	E-417.9	753765E	UPRR	17019	41	0	5000	1	1	2	4	7	4	4	22.0	301.1
31	San Mateo County Transportation Authority	25th Ave. (City of San Mateo)	105E-19.7	754910E	PCJPB	13412	88	0	5000	0	1	1	5	11.2	10	5	33.2	269.3
32	City of Riverside	Riverside Ave.	3-55.6	811012J	UPRR	13680	44	0	5000	1	2	0	4	11.1	4	5	26.1	266.8
33	City of Los Angeles	North Main St.	101VY-1.17 & 101RI-481.7	027607D & 811040M	SCRRA	12628	89	0	5000	0	2	1	0	21.5	8	9	41.5	266.3
34	City of Riverside	Magnolia Ave.	3-55.2	811011C	UPRR	23418	44	0	5000	0	2	1	4	9.1	4	7	27.1	233.2
35	Los Angeles County DPW	Sierra Hwy/Barrel Springs Rd	101VY-65.58 101VY-65.77	750600W & 750644W	SCRRA	8507	23	0	5000	3	1	3	5	7.8	4	5	25.8	182.3

APPENDIX A: Priority List for Fiscal Year 2005-2006 Rank

Rank	Agency	Crossing Location	PUC ID	DOT ID	Railroad	VEH	TRN	LTRN	Cost Share	AH/WC	BD/ HC	VS/ SR	RS/ AS	CG/P OF	PT/ AP	OF/ DE	SCF/SF	Priority Index
36	City of Pico Rivera	Passons Blvd & Serapis Ave.	2-151.45 & 2-151.3	027643Y & 027644F	BNSF	2604	125	0	10000	3	2	0	6	23.2	9	7	47.2	177.4
37	San Bernardino Associated Governments	Hunts Lane	B-541.0	747168J	UPRR	15766	48	0	5000	0	5	3	4	8	1	5	26.0	177.4
38	City of Fremont	Warren Ave.	DA-36.2 & 4G-6.7	750073E&833885S	UPRR/ VTA	9527	26	0	5000	2	2	1	1	13	0	6.5	23.5	172.1
39	City of Fremont	Paseo Padre Pkwy, High St, Main St, Washington Blvd	Consolidation DA-32.1&4G-2.6,SA-32.65,DA-32.7,DA-32.8&4G-3.2	750056N&833878G,750057V,750058C, 750059J&833879N,	UPRR/ VTA	51959	12	0	5000	0	2	1	1	30.1	0	7.5	41.6	166.3
40	City of Bakersfield	El Toro Viejo	2-892.0	Proposed	BNSF	7575	49	0	2760	0	1	3	6	4	4	2	20.0	154.5
41	San Bernardino County	Lenwood Road	2-5.7	026062X	UPRR & BNSF	4490	99	0	10304	2	5	5	2	7.2	1	3	23.2	152.6
42	City of Encinitas	D & E Street	106-237.95 & 106-237.9	026830D & 026829J	NCTD	10940	50	0	20000	2	1	0	6	19	7	6	39.0	121.1
43	City of Riverside	Palm Ave.	3-54.8	811009B	UPRR	10754	44	0	5000	0	2	1	4	9	4	3	23	117.6
44	Kern County	Hageman Rd (2-895.2)	2-895.2	028376B	BNSF	9000	49	0	5000	0	1	5	6	8.7	4	4.5	29.2	117.4
45	Kern County	Olive Drive	B-308.9	756945M	UPRR	18700	22	0	5000	0	1	3	4	8.8	0	7	23.8	106.1

APPENDIX A: Priority List for Fiscal Year 2005-2006 Rank

Rank	Agency	Crossing Location	PUC ID	DOT ID	Railroad	VEH	TRN	LTRN	Cost Share	AH/WC	BD/ HC	VS/ SR	RS/ AS	CG/P OF	PT/ AP	OF/ DE	SCF/SF	Priority Index
46	Los Angeles County DPW	Slauson Ave./Long Beach Ave-West	BBH-487.42&2H-2.83	747839F & 027952L	UPRR/ BNSF/ LACMTA	38286	8	0	5000	0	1	1	0	15	0	12	29	90.3
47	San Bernardino County	National Trails Hwy @Oro Grande*	2-30.6B	reconstruction	BNSF	6391	86	0	10268	6	8	0	5.2	3	8	6	36.2	89.7
48	San Bernardino County	Vista Road	2-22.0	026068N	UPRR & BNSF	2280	99	0	9760	1	2	5	2	7	1	2	19.0	65.3
49	Kern County	Snow Road	B-307.4	756948H	UPRR	7600	21	0	5000	0	1	5	4	8.0	0	7	25.0	56.9
50	San Bernardino County	Glen Helen Pkwy	BB-480.1 & 2-71.0	747017U & 026103A	UPRR & BNSF	2280	99	0	11905	0	5	5	2	11.7	1	0	24.7	43.7
51	King City	First St./ Bitterwater Rd.	E-163.4	752123M	UPRR	5702	9	0	5000	0	1	0	5	12.2	1	6.5	25.7	36.0
52	City of Bakersfield	Hageman Rd. (2-111.6)	2-116.6	Proposed	BNSF	15080	2	0	1530	0	1	5	0	2.2	0	5	13.2	32.9
53	City of Vista	Vista Village Dr. Main Street	106E-9.15 & 9.2	917847T,027566B	SDNR/ NCTD	40531	1	0	20000	2	**1**	2	0	14.3	**0**	8	**25.3**	**31.4**
54	City of Vista	Escondido Ave.	106E-10.1	027569W	SDNR/ NCTD	42526	1	0	5000	0	1	1	0	8.6	0	8	18.6	27.1
55	King City	Pearl Street	E-163.8	752121Y	UPRR	1023	9	0	5000	0	1	0	5	13	1	5	25.0	26.8

APPENDIX A: Priority List for Fiscal Year 2005-2006 Rank

Rank	Agency	Crossing Location	PUC ID	DOT ID	Railroad	VEH	TRN	LTRN	Cost Share	AH/WC	BD/ HC	VS/ SR	RS/ AS	CG/P OF	PT/ AP	OF/ DE	SCF/SF	Priority Index
56	City of Vista	N. Melrose Dr.	106E-7.5	026993M	SDNR/ NCTD	27434	1	0	5000	0	1	3	0	9.0	0	7	20.0	25.4
57	Los Angeles County DPW	Flores Street	3A-9.7	Proposed	UPRR	11000	4	0	5000	0	1	1	0	5.08	0	3	10.08	18.9
58	City of Vista	Mar Vista Dr.	106E-11.2	027570R	SDNR/ NCTD	10120	1	0	5000	0	1	1	0	7.9	0	5	14.9	16.9

Note: VEH- Vehicle, TRN – Train, LRT – Light Rail Trains, COST Share – Project Cost Share (a cost of more than $5 million is permitted for qualified projects per S&H Code Section 2454 (h) for multi-year funding)

Formula For Crossing Nominated For Separation Or Elimination:

***AH** – Accident History* ***BD** – Crossing Blocking Delay*

***VS** –Vehicular Speed Limit* ***RS** – Rail Speed Limit*

***CG** – Crossing Geometrics* ***PT** – Passenger trains*

***SCF**- Special Conditions Factor* ***OF**-Other Factors (Passenger Buses, School Buses, Hazmat Trains/Trucks, Community Impact)*

*Formula For Existing Separations Nominated For Alteration or Reconstruction:

WC – Width Clearance *HC-Height Clearance*
SR – Speed Reduction *AS – Accidents Near Structure*
POF – Probability of Failure *AP – Accident Potential*
DE – Delay Effects *SF - Separation Factor*

(END OF APPENDIX A)

CHAPTER 19 GRADE SEPARATION

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CHAPTER 19 GRADE SEPARATION PROGRAM

19.1 INTRODUCTIONS

The intent of the Grade Separation Program is to improve safety and expedite the movement of vehicles by eliminating highway-rail crossing at grade with a grade separation. Grade separation means a structure which actually separates the vehicle roadway from the railroad tracks.

The grade separation project can include the grade separation and all approaches, ramps, connections, drainage, and other construction items required to make the grade separation operable and to effect the separation the vehicle roadway from the railway tracks. Grade separation projects may also include provisions for separations of non-motorized traffic from vehicular roadway and the railroad tracks. If a separation of non-motorized traffic is not to be included in the project, there shall be a finding that the separation of non-motorized traffic is not in the public interest. This finding shall be signed by the local agency Public Works Director, Chief Engineer or highest registered Civil Engineer in that agency.

On any project where there is only one railroad track in existence, the project shall be built so as to provide for expansion to two tracks when the Grade Separation Program Manager determines that the project is on an existing or potential major railroad passenger corridor. Such projects may consist of:

1. The alteration or reconstruction of existing grade separations.
2. The construction of new grade separation to eliminate existing or proposed grade crossings
3. The removal or relocation of highways or railroad tracks to eliminate existing grade crossings.

19.2 PROJECT INITIATION

PRIORITY LIST

Prior to July 1 of each year, the Public Utilities Commission will establish a list, in order of priority, of projects which the commission determines to be most urgently in need of separation or alteration. The priority list will be determined on the basis of criteria established by the Public Utilities Commission, see Exhibit 19-A PUC's Priority List Criteria.

As to projects of otherwise equal priority, the commission will give greater priority to grade separation projects for which the amount contributed by a local agency is equal to or greater than 50 percent of the cost of the project.

19.3 PROJECT ALLOCATIONS

California Transportation Commission will make allocations for projects contained in the latest priority list for preliminary engineering and construction costs on the basis of the following:

(a) An allocation of 80 percent of the estimated cost of the project shall be made; except that whenever contributions from other sources exceed 20 percent of the estimated cost, the allocation shall be reduced by the amount of local contribution in excess of 20 percent of the estimated cost.

(b) An allocation of 50 percent of the estimated cost of the project shall be made for a proposed crossing.

(c) No allocation shall be made in excess of 50 percent of the estimated cost of the project unless the grade crossing to be eliminated has been in existence for at least 10 years prior to the date of allocation.

(d) On projects which eliminate an existing crossing, or alter or reconstruct an existing grade separation, no allocation shall be made unless the railroad agrees to contribute 10 percent of the cost of the project.

(e) Where a project does not include a grade separation, but eliminates existing grade crossing or crossings, the allocation shall not exceed the estimated allocation that would have been made for the grade separation which is no longer needed because of the elimination of the grade crossing by the project and which is indicated on the priority list to be urgently in need of grade separation.

(f) Where the project includes the separation of a highway and a railroad passenger service operated by a city or county, the operating agency shall contribute 20 percent of the cost of the project. The priority listing for such projects shall be in accordance with criteria established for such railroad passenger service by the Public Utilities Commission.

(g) Notwithstanding subdivisions (a) to (f), inclusive, the total of such allocations for a single project shall not exceed five million dollars ($5,000,000) without specific legislative authorization, except that the amount for a single project may be increased to either (1) an amount that includes the Federal construction cost index increase each year since 1976, or (2) an amount which does not exceed one third of the total funds appropriated for grade separation projects for the year of allocation, whichever amount is less, as determined each year by the Public Utilities Commission.

(h) Notwithstanding subdivisions (a) to (g), inclusive, a single project in excess of five million dollars ($5,000,000), but not exceeding twenty million dollars ($20,000,000), shall be considered without specific legislative authority, if the project:

(1) is included in the Public Utilities Commission's priority list of projects scheduled to be funded,
(2) eliminates the need for future related grade separation projects,
(3) provides projected cost savings of at least 50 percent to the State or local jurisdiction, or both of them, by eliminating the need for future projects, and
(4) alleviates traffic and safety problems or provides improved rail service not otherwise possible.

Projects approved pursuant to this subdivision shall be funded over a multi year period, not to exceed five years, and the allocation for any one of those years shall not exceed the amount prescribed by subdivision (g) for a single project. An agency which has received an allocation for a project approved pursuant to this subdivision shall not be eligible for an allocation for another project under this subdivision for a period of 10 years from the date of approval of that project. Not more than one-half of the total allocation available in any one fiscal year for grade separation projects may be

used for the purposes of this subdivision.

(i) Notwithstanding any of the above provisions of this section or any other provision of law, when the State or local agency uses funds derived from Federal sources in financing its share of project costs, the railroad contribution, where required by Federal law or regulation, shall be computed pursuant to Federal law. However, the allocation made pursuant to this chapter shall be computed as though such matching contribution was derived from nonFederal sources and shall be computed as though the railroad had made its contribution pursuant to state law rather than pursuant to Federal law. Where the contribution of the railroad is computed according to Federal law or regulation because of the use of Federal funds in the allocation for a project, the allocation shall be increased by the amount the share of the railroad is reduced below 10 percent of the estimated cost of the project.

SPECIAL ALLOCATIONS

PITTSBURG TRACK REMOVAL AND GRADE CROSSING ELIMINATION PROJECT

The planned removal of trackage of the Sacramento Northern Railway, the construction of substitute tracks and track connections, the elimination of 10 existing grade crossings, the acquisition of necessary rights-of-way, and all necessary associated work and appurtenances, to enable Sacramento Northern Railway trains to operate via existing trackage of the Atchison, Topeka & Santa Fe Railway, in and adjacent to the City of Pittsburg, is eligible for Grade Separation funds. The Public Utilities Commission will determine to what extent, if any, the railroad shall contribute to the project. Such eligibility will not be contingent on whether the railroad agrees to contribute, and the California Highway Commission shall not deny an allocation on such grounds.

The Legislature determined it is necessary to enact special legislation regarding the Pittsburgh track removal and grade crossing elimination project because of the existence of the following special facts and circumstances:

- The predominant traffic carried by the Sacramento Northern Railway consists of high explosives, bombs, shells, and ammunition destined for the United States Navy ammunition depot at Port Chicago.
- Such trains traverse residential areas, cross 10 streets at grade, and constitute a grave hazard to the life and safety of the residents of Pittsburg.
- Sacramento Northern Railway is willing to remove its tracks and operate its trains via the tracks of the Atchison, Topeka & Santa Fe Railway, which is already partially grade separated and which offers a safer route
- Sacramento Northern Railway will sacrifice certain of its own facilities, will receive no benefits, and therefore does not have to contribute any portion of the cost incidental to the removal of its trackage or for the construction of substitute track connections and appurtenances or for the acquisition of rights-of-way.

AMTRAK CONTRIBUTIONS

Whenever the National Railroad Passenger Corporation (AMTRAK) contributes an amount equal to one-third of the total cost to the State or local agencies for a grade separation project, or any lesser percentage, the California Transportation Commission may agree to reduce proportionately the cost to the participating parties.

Any such grade separation project may be assigned a priority by the Public Utilities

Commission that is higher than the priorities assigned to all other such projects for which the National Railroad Passenger Corporation (AMTRAK) has not made a contribution.

19.4 PROCEDURES FOR PAYMENT OF WORK

AGREEMENTS

After an allocation is made to a local agency by the commission, the local agency and Caltrans will enter into an agreement concerning the handling and accounting of funds, including procedures to permit prompt payment for the work accomplished. The procedures providing for payment of work accomplished shall be drawn in such a manner as to avoid the necessity for the local agency to utilize funds in an amount greater than the local agency's share of the project costs. Such agreement may establish procedures for the programming of the work of the project in order to assure optimum cash flow utilization of funds made available by the Legislature.

ALLOCATION FOR COSTS

PRELIMINARY ENGINEERING

Pre-construction costs (engineering, right-of-way, preparation of environmental impact reports, and utility relocation) expended by a local agency prior to any allocation shall be included in the total cost of the project even though the costs were expended prior to an allocation. Allocations shall be made for pre-construction costs to a local agency that submits evidence satisfactory to the Department that the local agency will be able to meet the requirements for an allocation for construction costs, and that pre-construction costs will exceed the local share of the cost of the project. A local agency may also proceed with the advertising for bids and the construction of a project without prejudice to its right to receive an allocation if an allocation is within the same fiscal year that the construction contract was awarded.

CONSTRUCTION

An allocation for construction costs, including pre-construction costs if not already allocated, shall be made to a local agency only if it furnishes evidence satisfactory to the Grade Separation Program Manager that all necessary orders of the Public Utilities Commission have been executed, that sufficient local funds will be made available as the work of the project progresses, that all necessary agreements with affected railroad or railroads have been executed that, if required, all environmental impact reports have been prepared and approvals obtained, and that all other matters prerequisite to the award of the construction contract can be accomplished within one year after the allocation.

COST INCREASE

Except as noted below, allocations shall remain available until expended. If a construction contract has not been awarded within one year after an allocation for construction costs, the CTC may order the allocation canceled and such funds returned to the program for allocation to other projects. All or any part of an allocation for pre-construction costs may be canceled upon a finding that insufficient progress is being made to complete the project. When an allocation is canceled, the local agency shall repay any funds received from the program. The Grade Separation Program

Manager shall determine, with input from the local agency, repayment schedule.

PRIORITY LIST

If the actual and necessary cost of the project exceeds the estimate, the allocations made for such project may be augmented proportionately by a supplemental allocation. A supplemental allocation will be made if the CTC is satisfied that funds would have been allocated for the project had the actual costs, instead of the original allocation, been used in determining the projects ranking on the priority list.

If more projects comply are eligible than can be financed from funds set aside for the Grade separation program, allocations shall be made to those projects highest on the priority list, see Exhibit A. The CTC may make allocations for any project on the priority list when it determines, at the time of allocation, that sufficient funds are available for all projects which are higher on the priority list and which are, or are reasonably expected to go to construction during the fiscal year.

From funds remaining after allocations for projects higher on the priority list, the CTC will offer to allocate the remaining funds for the next eligible project on the priority list, even though the amount of the remaining funds is less than the amount the local agency is entitled to for that project. The CTC, in the next fiscal year, will allocate to the local agency an additional amount equal to the difference between the amount the local agency was eligible to receive and the amount of the reduced allocation.

ADVANCE CONSTRUCTION

A project that is on the priority list may be constructed by a local agency prior to the time that it reaches a high enough priority for funding under this chapter. The project shall retain its eligibility for listing on subsequent priority lists established by the PUC by applying the traffic, accident other conditions existing at the project location at the time immediately preceding the start of construction. If the project subsequently reaches a high enough priority, funds shall be allocated and paid to the local agency under the terms of the agreement and on the basis of the cost of construction of the project. To be eligible for subsequent funding both of the following requirements shall be met:

- The work on the project shall be performed under terms and conditions established in an agreement between Caltrans and the project sponsor executed prior to start of construction of the project.
- The project has received approval of the CTC prior to start of construction of the project.

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation for the purpose of establishing a list for the fiscal years 1996-97 and 1997-98 of existing and proposed crossings at grade of city streets, county roads, or state highways most urgently in need of separation, or projects effecting the elimination of grade crossings by removal or relocation of streets or railroad tracks, or existing separations in need of alteration or reconstruction as contemplated by Section 2452 of the Streets and Highways Code.	F I L E D PUBLIC UTILITIES COMMISSION JULY 19, 1995 SAN FRANCISCO OFFICE I.95-07-003

ORDER INSTITUTING INVESTIGATION

By July 1 of each year, the California Public Utilities Commission (Commission) is required pursuant to Streets and Highways (S&H) Code Section 2452 to establish and furnish to the California Transportation Commission (CTC) a priority list of railroad grade separation projects most urgently in need of separation, including the elimination of existing or proposed grade crossings, the elimination of grade crossings by removal or relocation of streets or railroad tracks, and existing grade separations most urgently in need of alteration or reconstruction. The list, based on criteria established by the Commission, includes projects on city streets, county roads, and state highways which are not freeways as defined in S&H Code Section 257.

Funding for projects included on each annual priority list is provided by S&H Code Section 190, and the basis for allocation and state requirements are contained in S&H Code Sections 2450-2461. On projects which eliminate an existing crossing or alter or reconstruct an existing grade separation, an allocation of 80% of the estimated cost of the project is made, with the local agency and railroad each contributing 10%. An allocation of 50% of the estimated cost of the project is made for a proposed crossing project, with the remaining 50% contributed by the local agency.

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Subsequent to the Commission's issuance of the Annual Grade Separation Priority List, applications to California Department of Transportation (CALTRANS) for an allocation of funds are accepted no later than April 1 of each fiscal year. Requirements of filing an application for an allocation of funds are more specifically set forth in the California Administrative Code, Title 21, Chapter 2, Subchapter 13, Grade Separation Projects- Applications for Allocations or Supplemental Allocations. A copy of Subchapter 13 is attached as Appendix 1.

Interim Decision (D.) 88-06-050, dated June 17, 1988, instituted a two-year program in which nominations are submitted and hearings are held every other year. In the alternate year, the Commission will submit a list to the CTC which has been revised to delete those projects actually funded for the fiscal year in which the hearings are held. Interim D. 94-06-026, dated June 22, 1994, established the 37th annual priority list of projects for the 1994- 95 fiscal year. Final D. 95-06-020 dated June , 1995, established the 38th annual priority list for fiscal year 1995-96. This list will expire on June 30, 1996 necessitating the establishment of a new priority list for the 1996-97 and 1997-98 fiscal years.

ALL AGENCIES CONTEMPLATING THE POSSIBLE NOMINATION OF A PROJECT FOR FISCAL YEAR 1997-98 **ARE HEREBY PLACED ON NOTICE THAT THERE WILL BE NO SEPARATE PROCEEDINGS FOR FISCAL YEAR** 1997-98**. THEREFORE, TO ASSURE ELIGIBILITY FOR FUNDING OF A PROJECT DURING FISCAL YEAR** 1997-98**, IT MUST BE NOMINATED FOR THIS INVESTIGATION**.

The Commission will consider projects nominated by cities, counties, cities and counties, CALTRANS, and the various railroad companies operating within the state for inclusion on the 1996-97 and 1997-98 Grade Separation Priority Lists. In addition, the Commissions Railroad Safety Branch Special Projects staff may nominate projects which it deems urgently in need of separation but have not been nominated by other agencies or railroad companies.

The Commission is responsible for establishing criteria to be used in determining the priority of the projects nominated for separation or alteration. By Decision 90-06-058, we adopted a new formula as shown on Appendix 2. The Safety & Enforcement Division proposes to use the same formula in evaluating the 1996-97 and 1997-98 nominations.

S&H Code Section 2460.7 authorizes a local agency to construct a project on the priority list prior to the time that it reaches a high enough position for funding. The following conditions will be applied to prioritize grade separation projects on which construction has commenced:

1 The project must have been nominated for the fiscal year during which construction commenced.

2. The project must be renominated for the fiscal year during which funding consideration is desired.

3. The nomination must include the same data as included in the nomination for the fiscal year during which construction commenced with the exception of construction cost data.

4. Cost data included in the nomination shall be:

   a. Final costs for completed projects.

   b. Currently anticipated final costs for projects still under construction.

5. All projects nominated under the provisions of Section 2460.7 shall also comply with the filing requirements set forth in this order.

For Investigations prior to I93-07-032 for establishing the grade separation priority list, the Order Instituting Investigation (OII) was mailed to all cities and counties. However, usually less than 50 such agencies actually participated in the OII by filing nominations. To reduce reproduction, handling and mailing costs, the Safety & Enforcement Division mailed the notice appearing on Appendix 3 to cities, counties and other interested parties. Those agencies interested in this investigation were requested to return the bottom portion of the notice so that this OII would then be mailed to them. This OII will also appear on the Commission's Daily and Transportation Calendars. We believe this to be fair and sufficient notice of this investigation.

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O R D E R

IT IS ORDERED that:

1. An investigation on the Commission's own motion is instituted for the purpose of establishing a new priority list for fiscal years 1996-97 and 1997-98 of existing or proposed railroad grade crossings of public streets, roads, or highways most urgently in need of separation, projects effecting the elimination of grade crossings by removal or relocation of streets or railroad tracks, and existing separation structures most urgently in need of alteration or reconstruction as required by Streets and Highways (S&H) Code Section 2452.

2. The Executive Director shall serve a copy of this order on the following:

Every city or county that returns the bottom portion of the OII notification (Appendix 3)

Every railroad corporation

California Department of Transportation

California Transportation Commission

League of California Cities

County Supervisors Association

3. Public agencies or railroad corporations desiring to have a particular crossing(s), separation(s) considered for inclusion in the 1996-97 and 1997-98 list, to be established under S&H Code Section 2452, shall file the original and four copies of their nomination(s) with the California Public Utilities Commission, Docket Office, 505 Van Ness Avenue, San Francisco, CA 94102. After filing, the Docket Office shall transmit four copies of each nomination to the Railroad Safety Branch. In D. 94-06-026 we stated that we will begin our investigation in July 1995 to allow staff the required time for its field investigation and analysis and to prepare for the Priority Lists proceedings. Therefore, we will also require all parties to send a copy of their nomination(s) to the Railroad Safety Branch at the time the nominations are tendered for filing with the Commission's Docket office. All nominations shall be received by the California Public Utilities Commission in San Francisco no later than 4:00 p.m. on September 1, 1995. Each nominating body is also required to provide two copies of its nomination(s) to CALTRANS, one copy to the appropriate railroads (see addresses contained in Appendix 4), one copy to each of the additional parties listed in Appendix 4, and any other affected party.

4. Each nomination shall include the following data:

a. A statement indicating the need for the project.

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b. A statement indicating that the nominating agency can or cannot complete the pre-allocation requirements, as set forth in S&H Code Section 2456, prior to April 1, 1995 for fiscal year 1996-97 and prior to April 1, 1996 for fiscal year 1997-98.

c. A location map of the project, on paper 8-1/2 inches by 11 inches in size (scale 1" = 500'±), showing existing streets, highways, and railroads. The proposed alignment of the grade separation shall also be shown.

d. Two current photographs (size, 8 inches by 10 inches) of the crossing, one from each direction of approach. At least one original set of these photographs shall be included in the nomination copy set sent to the Railroad Safety Branch.

e. A statement indicating the type of project.

f. For existing or proposed crossings nominated for separation or elimination, a completed Nomination Form GSN-1 (Appendix 5).

g. For proposed crossing projects, a discussion of the physical practicability of constructing an at-grade crossing in the general area of the proposed separation. The discussion shall be supported by a plan and centerline profile of an at-grade crossing reproduced on paper 8-1/2 inches by 11 inches in size. No discussion of economic feasibility is required. Only a description of the physical features of the surrounding terrain which would allow the construction of an at-grade crossing is required. If sufficient evidence is not presented that construction of an at-grade crossing is practicable, the project will be excluded from the list.

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h. For existing grade separations nominated for alteration or reconstruction, a completed Nomination Form GSN-2 (Appendix 6).

I. A description of the existing and proposed separation structures, including acute structural deficiencies, shall be included with the nomination.

j. Data submitted in the nomination must be based on verifiable facts occurring on or before the nomination filing date. Speculative data involving events anticipated to occur at some time in the future will not be considered.

k. Agencies nominating projects shall file, with their nomination, prepared testimony which fully supports the nomination. Nominating agencies shall promptly furnish a copy of their nomination and prepared testimony to any party making a written request to the nominating agency. The use of prepared testimony is required to reduce hearing time and expedite the proceeding for the benefit of all concerned.

l. All nominations shall be verified by the nominating party. Verification may be made before a notary public or by certification or declaration under penalty of perjury.

m. All information relating to the urgency of the project shall be filed with the nomination in affidavit form.

n. Railroad Safety Branch Special Projects Staff nominations may be filed at any time prior to hearing and may exclude listed item to be adduced through the OII process.

5. Nominations shall not include multiple projects which are separate and distinct and clearly severable. The combining of severable projects precludes the Commission from effectively determining which projects are most urgently in need of separation or alteration as required by S&H Code Section 2452. Projects for the elimination of existing grade crossings and for the elimination of proposed grade crossings shall not be combined in a single nomination. (See D.86-06-073 at pp. 17-19.)

6. If a nomination is to be considered as a project for the elimination of existing grade crossings, and eligible for 80 percent funding, all data included in the nomination must be premised on all of the crossings proposed to be closed.

7. A nominating agency may elect to exclude preconstruction costs (engineering, right-of-way, preparation of environmental impact reports, and utility relocation), which are not sufficient to meet S&H Code Section 2454 requirements; that is, those preconstruction cost which are less than the local agency share of the total costs. In order for preconstruction costs to be eligible for exclusion, the funds must have been expended on or before February 28th of the year in which the hearings are being held. The involved agency may be required to submit evidence in support of the fact that the funds have been expended. To the extent that preconstruction costs are excluded from a project's cost for the purpose of a nomination, the costs will be considered as non-participating; that is, the railroad will not be required to contribute 10 percent of the excluded preconstruction costs.

8. In addition to submitting the Grade Separation Nomination Form, each party, or its representative, nominating a crossing for inclusion in the Grade Separation Priority List is required to appear in person at either the San Francisco or Los Angeles hearings to present evidence concerning its nomination. Supplemental data may be submitted at the hearings in support of a nomination. The data may include facts not known at the time of nomination filing date, such as crossing accidents occurring after the nomination filing date but on or before January 31st of the year during which the hearings are held. Verification of all supplemental data must be received by the staff no later than one week after the last scheduled day of hearing.

9. Appearance schedules will be published after all nominations have been received. Appearances will be limited to one witness per project.

10. Agencies anticipating the need for an allocation greater than $5,000,000 should be prepared to present evidence at the Grade Separation Priority List hearings to justify the additional award.

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S&H Code Section 2454 (g) states:

"(g) Notwithstanding the provisions of Subdivisions (a) to (f), inclusive, the total of such allocations for a single project shall not exceed five million dollars ($5,000,000) without specific legislative authorization, except that the amount for a single project may be increased to either (1) an amount that includes the Federal construction cost index increase each year since 1976, or (2) an amount which does not exceed one-third of the total funds appropriated for grade separation projects for the year of allocation, whichever amount is less, as determined each year by the Public Utilities Commission."

11. Failure to supply all of the requested information or to appear before the Commission will constitute grounds for exclusion of a project from the 1996-97 and 1997-98 Grade Separation Priority List.

12. Public hearings in the investigation will be held before the assigned Administrative Law Judge at dates, times, and locations to be announced.

This order is effective today.
Dated July 19,1995, at San Francisco, California.

DANIEL Wm. FESSLER
President
P. GREGORY CONLON
JESSIE J. KNIGHT, JR.
HENRY M. DUQUE
Commissioners

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APPENDIX 1
Sheet 1 of 5

GRADE SEPARATION

TITLE 21 Department of Transportation
(Register 82, No. 34--8-21-82)

SUBCHAPTER 13, GRADE SEPARATION PROJECTS -- APPLICATIONS FOR ALLOCATIONS OR SUPPLEMENTAL ALLOCATION

Article 1. Applications

1552. Last Date to File.

April 1 of each fiscal year is the last date on which applications for allocation of grade separation funds in that fiscal year can be filed; provided, however, if April 1 is a Saturday, Sunday, or a State of California holiday, then the last date of filing shall be the next business day following April 1. Filing is accomplished by filing the application with the Department of Transportation in the manner hereafter stated.

1553. Place to File.

The complete application in triplicate must be received in the Office of the District Director of Transportation, State of California, in the transportation district in which the applicant is located, no later than 4:00 p.m. on the last day for filing.

1554. Contents of Application.

The complete application must include a written request for an allocation in a specified monetary amount along with copies of each of the following attached to it:

(a) All necessary orders of the Public Utilities Commission of the State of California. Necessary orders of the Public Utilities Commission include:

(1) An order authorizing construction of the project;

(2) A statement of the applicant's position on the annual priority list established by the Public Utilities Commission pursuant to Streets and Highways Code Section 2452;

APPENDIX 1
Sheet 2 of 5

GRADE SEPARATION (Cont.)

(3) In case the applicant and affected railroad or railroads cannot agree as to the apportionment of the cost of the project between them, an order apportioning such cost pursuant to Public Utilities Commission Code Section 1202.5, but in no case shall an allocation be made unless the railroad or railroads contribute no less than the amount required by Section 2454 of the Streets and Highways Code, except as may be otherwise provided by law.

(b) All necessary agreements with the affected railroad or railroads fully executed by railroad or railroads and applicant. The necessary agreements with the railroad include:

(1) Permission to enter upon railroad right of way for construction, or, in lieu thereof, an order of the Public Utilities Commission or of a court of competent jurisdiction authorizing such entry for construction purposes;

(2) A description of the project on a plan setting forth the area and items of the project and the particular area and items of the project to which the railroad or railroads agree to contribute;

(3) The percentage of railroad's or railroads' contribution to the cost of the area and items to which railroad or railroads agree to contribute;

(4) Identification and estimated cost of the area and items to which railroad or railroads do not contribute;

(5) Agreement that railroad or railroads shall contribute a minimum of 10 percent of the cost of the project without a maximum dollar limitation on the railroad's contribution, except that the contribution may be less than 10 percent of the cost of the project where expressly so provided by law.

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Sheet 3 of 5

GRADE SEPARATION (Cont.)

(6) When two or more railroads are affected by a project, their combined contribution must be a minimum of 10 percent of the cost of the project without a maximum dollar limitation on the combined contribution, except that such combined contribution may be less than 10 percent of the cost of the project when expressly so provided by law.

(c) A certified resolution by the applicant's governing body authorizing the filing of an application.

(d) Certified resolution by the applicant's governing body stating that all matters prerequisite to the awarding of the construction contract can be accomplished within one year after allocation of the funds for the project by the California Transportation Commission.

(e) A certified resolution by applicant's governing body stating that sufficient local funds will be made available as the work of the project progresses.

(f) Copies of all necessary Environmental Impact Reports or Negative Declarations, with a certified Notice of Determination and approval or acceptance of these documents by the Lead Agency. In cases where an Environmental Impact Statement or Negative Declaration has been prepared for the project pursuant to the requirements of the National Environmental Policy Act of 1969 and implementing regulations thereto, such documents may be submitted in lieu of an approved Environmental Impact Report or Negative Declaration and Notice of Determination, provided the Environmental Impact Statement or Negative Declaration fully develops the factors required in Title 14, Section 15143, of the State Administrative Code including Title 20, Section 17.1 (d) (2), of the State Administrative Code and such Environmental Impact Statement or Negative Declaration has received Federal approval.

(g) General plan of the project, including profiles and typical sections.

(h) Project cost estimate, which is to be broken down to construction, preliminary and construction engineering, work by railroad forces, right of way costs, and utility relocation.

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APPENDIX 1
Sheet 4 of 5

GRADE SEPARATION (Cont.)

1555. Project Limitation.

Participation of the grade separation fund is limited to only that portion of the project which, in the determination of the California Transportation Commission, is necessary to make the grade separation operable and to effect the separation of grades between the highway and the railroad track or tracks, or necessary to effect the relocation of track or highway. Off-track maintenance roads shall be nonparticipating unless the existing access for maintenance purposes is severely impaired by the project. Participating items include, but are not limited to, approaches, ramps, connections, drainage, erosion control of slopes, such as ivy, iceplant, and rye grass, and preconstruction costs, such as right of way acquisition, preparation of environmental impact reports and utility relocation, necessary to make the grade separation operable. In any dispute as to scope of project or qualification of an item, the decision of the California Transportation Commission shall be conclusive.

1556. Allocation Limitation.

Initial allocation of grade separation funds by the California Transportation Commission shall be limited to that based upon applicant's estimate of cost of project specified by applicant and utilized by the Public Utilities Commission of the State of California in establishment of applicant's priority pursuant to Streets and Highways Code Section 2452 of the State of California, and in no case shall an original and supplemental allocation for a single project exceed a total of five million dollars ($5,000,000) without specific legislative authorization in effect for the project at the final date and time for filing an application. A planned project must be a complete and operable project, and effect the separation of grades, relocation of the highways or railroad, in order to qualify for an allocation.

Article 2. Supplemental Allocation

1557. Last Date to File.

The last date on which an application for a supplemental allocation can be filed for the subsequent fiscal year is May 1 of the current calendar year. If May 1 is a Saturday, Sunday or a State of California holiday, then the last date of filing shall be the next business day following May 1. A formal application must be filed by the applicant, accompanied with the project final report.

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GRADE SEPARATION (Cont.)

1558. Place to File.

The complete application in triplicate must be received in the Office of the District Director of Transportation, State of California, in the transportation district in which the applicant is located, no later than 4:00 p.m. on the last day for filing.

1559. Contents of Application.

The application must include a written request for a supplemental allocation in a specified amount along with copies of each of the following attached thereto.

(a) A certified resolution by the applicant's governing body certifying that:

(1) Applicant has authority to make request for supplemental allocation;

(2) The project has been completed and has been accepted by the governing body;

(3) The actual and final cost of the project has been determined and is set forth in the supplemental application;

(4) All costs set forth in the request for a supplemental allocation were necessary to make the grade separation operable and effect the separation of grades or the relocation of track or highway.

(5) That railroad or railroads have contributed 10 percent of the cost of the project unless a lesser contribution is expressly provided by law.

(b) Evidence that funds would have been allocated for the project had the actual cost been used by the Public Utilities Commission of the State of California in determining the project's ranking on the priority list.

(c) A final accounting of the cost of the project with a statement explaining in detail why the original allocation was not sufficient.

APPENDIX 2
Sheet 1 of 6

FORMULA FOR CROSSINGS NOMINATED FOR SEPARATION OR ELIMINATION

$$P = \frac{V\ (T + 0.1xLRT)}{C \times F}\ (AH + BD) + SCF$$

Where:

P = Priority Index Number
V = Average 24-Hour Vehicular Volume
C = Total Cost of Separation Project (In Thousands of Dollars)
T = Average 24-Hour Train Volume
F = Cost Inflation Factor (Use F = 11 for 1992-93 & 1995-94 F.Y. Priority List Based on the Current Construction Cost Index)
AH = Accident History
BD = Blocking Delay at Crossing
SCF = Special Conditions Factor

SCF = VS + RS + CG + AR + PT + OF

here:

	Points Possible
VS = Vehicular Speed Limit	0 - 5
RS = Railroad Prevailing Maximum Speed	0 - 7
CG = Crossing Geometrics	0 - 7
AR = Alternate Route Availability	0 - 5
PT = Passenger Trains	0 - 10
OF = Other Factors	0 - 16
Total Points	0 - 50

POINTS IN EACH CATEGORY ARE ASSIGNED ACCORDING TO THE FOLLOWING SCHEDULE:

AH = Accident History (10 Years)
Each reportable train-involved accident

Points = (1 + 2 x No. Killed + No. Injured) x PF*

*PF = Protection Factor for:

Std. #9 = 1.0
Std. #8 = 0.4
Std. #3 = 0.2
Std. #1 = 0.1

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APPENDIX 2
Sheet 2 of 6

Note 1. No more than three points shall be allowed for each accident prior to modification by the protection factor.

Note 2. Each Accident shall be rated separately and modified by a factor appropriate to the protection in existence at the time of the accident.

BD = Crossing Blocking Delay Per Train
(Total Minutes per Day - T)

Minutes	Points
0 - .49	0
.5 - .99	.5
1.0 - 1.49	1.0
1.5 - 1.99	1.5
2.0 - 2.49	2.0
2.5 - 2.99	2.5
3.0 - 3.49	3.0
3.5 - 3.99	3.5
4.0 - 4.49	4.0
4.5 - 4.99	4.5
5.0 - 5.49	5.0
5.5 - 5.99	5.5
6.0 - 6.49	6.0
6.5 - 6.99	6.5
7.0 - 7.49	7.0
7.5 - 7.99	7.5
8.0 - 8.49	8.0
8.5 - 8.99	8.5
9.0 - 9.49	9.0
9.5 - 9.99	9.5
10 +	10.0

VS = Vehicular Speed Limit

MPH	Points
0 - 30	0
31 - 35	1
36 - 40	2
41 - 45	3
46 - 50	4
51 - 55	5

APPENDIX 2
Sheet 3 of 6

RS = Railroad Maximum Speed

MPH	Points
0 - 25	0
26 - 35	1
36 - 45	2
46 - 55	3
56 - 65	4
66 - 75	5
76 - 85	6
86 +	7

CG = Crossing Geometrics

0 - 7 points based on relative severity of physical conditions, i.e., grade, alignment, site distance, etc.

AR = Alternate Route Availability

Distance (Feet)	Points
0 - 1,000	0
1,001 - 2,000	1
2,001 - 3,000	2
3,001 - 4,000	3
4,001 - 5,000	4
5,001 +	5

PT = Passenger Trains

No. of Trains Per Day	Points
1 - 2	1
3 - 5	2
6 - 10	3
11 - 20	4
21 - 30	5
31 - 40	6
41 - 50	7
51 - 60	8
61 - 70	9
71 +	10

OF = Other Factors
0 - 16 points based on:
secondary accidents, emergency vehicle usage, passenger buses, school buses, hazardous materials trains and trucks, community impact.

APPENDIX 2
Sheet 4 of 6

FORMULA FOR EXISTING SEPARATIONS NOMINATED FOR ALTERATION OR RECONSTRUCTION

$$P = \frac{V\ (T + 0.1xLRT)}{C \times F} + SCF$$

Where:

P = Priority Index Number
V = Average 24-Hour Vehicular Volume
C = Total Cost of Separation Project (In Thousands of Dollars)
T = Average 24-Hour Train Volume
F = Cost Inflation Factor (Use F = 11 for 1992-93 & 1995-94 F.Y. Priority List Based on the Current Construction Cost Index)
SCF = Special Conditions Factor

SCF = WC + HC + SR + LL + AS + PF

Where:

	Points Possible
WC = Width Clearance	0 - 10
HC = Height Clearance	0 - 10
SR = Speed Reduction or Slow Order	0 - 5
LL = Load Limit	0 - 5
AS = Accidents At or Near Structure	0 - 10
PF = Probability of Failure and Other Factors	0 - 30
Total Possible	0 - 70

POINTS IN EACH CATEGORY ARE ASSIGNED ACCORDING TO THE FOLLOWING SCHEDULE:

WC = Width Clearance

Width (feet)	Points
16' + 12(N)	0
12' but less than 16' + 12(N)	2
8' but less than 12' + 12(N)	4
0" but less than 8' = 12(N)	6
11(N) but less than 12(N)	8
Less than 11(N)	10

N = Number of Traffic Lanes

APPENDIX 2
Sheet 5 of 6

HC = Separation Height Clearance

Underpass

Height (feet)	Points
15' and above	0
14' but less than 15'	4
13' but less than 14'	8
Less than 13'	10

Overpass

Height (feet)	Points
22 1/2' and above	0
20' but less than 22 1/2	4
18' but less than 20'	8
Less than 18'	10

SR = Speed Reduction or Slow Order	Points
None	0
Moderate	2
Severe	5

LL = Load Limit	Points
None	0
Moderate	2
Severe	5

AS = Accidents at or Near Structure (10 years)

Number	Points
0 - 10	0
11 - 20	1
21 - 30	2
31 - 40	3
41 - 50	4
51 - 60	5
61 - 70	6
71 - 80	7
81 - 90	8
91 - 100	9
100 +	10

APPENDIX 2
Sheet 6 of 6

PF = Probability of Failure and other factors

0-30 points based on:

(a) Probability of Failure
(b) Accident Potential
(c) Delay Effects

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APPENDIX 3

IMPORTANT NOTICE

June 30, 1995

TO: CITIES, COUNTIES AND INTERESTED PARTIES-
Re: Establishment of the 1996-97 & 1997-98 Grade Separation Priority List under Streets and Highways Code Section 2452.

The Commission is anticipating the issuance of an Order Instituting Investigation (OII) for the purpose of establishing the 1996-97 and 1997-98 priority list of railroad/highway grade separation projects eligible for state funding. The Department of Transportation (Caltrans) uses this list to allocate $15,000,000 ($5 million maximum per project) each fiscal year to assist local governments in financing grade separation projects.

If you are interested in the grade separation priority list program and would like to receive the OII, please detach the bottom portion of this letter and return it no later than July 20, 1995. The OII includes an explanation of the grade separation priority list program, the application and the requirements for filing. The OII also includes the criteria and formula used to rank all nominations. **If your agency wishes to nominate grade separation project(s) for inclusion on the priority list, you must return this form and actively participate in the investigation in the manner set forth in the OII.** Unless we hear from you, the OII will not be mailed to your agency.

If you have any questions, please contact Tack Joe at (415) 557-9884, Rosa Munoz at (213) 897-5790 or Tom Enderle at (415) 557-9889.

Very Truly Yours,

Tom Enderle, Senior Transportation Engineer
Safety & Enforcement Division

Mail to: California Public Utilities Commission
Attn: Tack Joe, Railroad Safety Branch
505 Van Ness Avenue
San Francisco, CA 94102

Please place me/my agency on the mailing list for the Order Instituting Investigation to establish the 1996-97 and 1997-98 Railroad/Highway Grade Separation Priority List.

AGENCY NAME_____

ADDRESS_____

CITY _____ ZIP CODE_____

CONTACT PERSON NAME_____

TITLE_____TELEPHONE NUMBER(_____)_____

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APPENDIX 4
Sheet 1 of 2

ADDRESS LIST
GRADE SEPARATION NOMINATION

This is a partial listing, only. Applicants are still responsible to serve copies of their nominations on the railroad(s) involved in their proposals.

RAILROADS

Dan A. Barringer, G.M.
Amador Railroad Company
909 Terminal Sales Bldg.
Portland, OR 97205

Annette L. Polte General Manager
Amador Central Railroad Co.
P.O. Box 66
Martell, CA 95654

L.E. Mueller, General Manager
Burlington Northern Railroad Co.
2000 First Interstate Center
Seattle, WA 98104

G. J. Allen, General Manager
California Western Railroad
(DBA: Mendocino Coast Railway)
P.O. Box 907
Fort Bragg, CA 95437

Steve Crook, General Manager
North Coast Railroad Co.
P. O. Box 2014
Eureka, CA 95502

R. A. Igo, General Manager
Harbor Belt Line Railroad
Box A
P.O. Wilmington, CA 90748

Richard Levin, President
Levin-Richmond Ter. Corp
(Parr Terminal Railroad)
402 Wright Avenue
Richmond, CA 94804

Neil Peterson, - Exec. Dir.
Los Angeles County Transportation Commission - RCC
818 W. 7th Street, Suite 1100
Los Angeles, CA 90017

Jeff E. Forbis, Pres & CEO
McCloud Railway
P. O. Box 1500
McCloud, CA 96057

James L. Beard, President
Modesto & Empire Traction Co.
P. O. Box 3106
Modesto, CA 95353

Tom Schueler, Dir. of Engr
Port of Sacramento
Sacramento-Yolo Port
District Belt Railroad
P. O. Box 815
West Sacramento, CA 95691

A.G. Beckman, Dir. of Oprns
Port of Stockton
Stockton Public Belt Railroad
P. O. Box 2089
Stockton, CA 95201

Thomas G. Matoff, Gen Manager
Sacramento Regional Transit
Dist. Light Rail Project
P.O. Box 2110
Sacramento, CA 95812-2110

Dennis Kling, General Manager
San Diego and Imperial Valley RR
743 Imperial Avenue
San Diego, CA 92101

Peter Tereschuk, Vice President
San Diego Trolley, Inc.
1255 Imperial Ave. Suite 900
San Diego, CA 92101

Lawrence Reuter, Dir. of Trans.
Santa Clara Co Transportation Agency
101 West Younger Avenue
San Jose, CA 95110

APPENDIX 4
Sheet 2 of 2

ADDRESS LIST
GRADE SEPARATION NOMINATION

Mrs. Sue J. Sword, President & Manager
Santa Maria Valley Railroad Company
P. O. Box 340
Santa Maria, CA 93456

Jerry Gregg, Exec. V.P.
Sierra Railroad Company
13645 Tuolumne road
Sonora, CA 95370

Ken A. Moore, V.P. - Operations
Southern Pacific Transportation Co.
One Market Plaza
San Francisco, CA 94105

Greg N. Carney, V.P. & COO
Stockton Terminal & Eastern Rr.
1330 North Broadway Avenue
Stockton, CA 95205

Roy Ketring, Special Project Mgr.
The Atchison, Topeka and Santa Fe Railway Company
740 E. Garnegie Drive
San Bernardino, CA 92408-3571

Mark C. Demetree, Pres
Trona Railway Company
13068 Main St.
Trona, CA 93562

E. C. May General Manager
Union Pacific Railroad Co.
406 W. First South
Salt Lake City, UT 84101

Carmen Chappell, President
Ventura County Railway Co.
P.O. Box 432
Oxnard, CA 93032

L. T. Cecil, V.P. & G.M.
Yreka Western Railroad Co.
P. O. Box 660
Yreka, CA 96097

CALTRANS
(Send one copy to each addressee)

J. E. Robert, Chief
Division of Structures
Department of Transportation
State of California
Attn: Jack Boda
P.O. Box 942874
Sacramento, CA 94274-0001

E. C. Bonnstetter, Attorney
Department of Transportation
State of California
P.O. Box 1438
Sacramento, CA 95812-1438

ADDITIONAL PARTIES
(Send one copy to each addressee)

Jeff S. Asay, Staff Attorney
Union Pacific Railroad Compay
5500 Ferguson Dr., Ste. J
Los Angeles, CA 90022

General Attorney
Southern Pacific Transp. Co.
Southern Pacific Building
One Market Plaza
San Francisco, CA 94105

Curtis Ballantyne, Attorney
Santa Fe Southern Pacific Corp.
35th Floor, Union Bank Square
445 S. Figueroa Street
Los Angeles, CA 90071

(For Orange County appl. only)
Roger Hohnbaum, Manager
EMA/Transportation Programs
County of Orange
P. O. Box 4048
Santa Ana, CA 92702-4048

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation for the purpose of establishing a list for the fiscal years 1995-94 and 1996-97 of existing and proposed crossings at grade of city streets, county roads, or state highways most urgently in need of separation, or projects effecting the elimination of grade crossings by removal or relocation of streets or railroad tracks, or existing separations in need of alteration or reconstruction as contemplated by Section 2452 of the Streets and Highways Code.	No. _____

Nomination for Separation or elimination of existing or proposed railroad grade crossing

Nomination by City/County of _____

in compliance with I._____

Location Name (street) _____

Railroad Company _____

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APPENDIX 5
Sheet 2 of 7

NOMINATION REQUIREMENTS

The Order Instituting Investigation (OII) sets forth the requirements for all nominations. Please carefully review the OII and attach all of its required data and information as separate sheets to this nomination form. The following is a summary of the data required by Ordering Paragraph No. 4:

a. A statement indicating the need for the project.

b. A statement refunding ability to complete pre-allocation requirements.

c. Location map of the project.

d. Two photographs (8″ X 10″).

e. A statement indicating the type of project.

g. For proposed crossing projects, a discussion of the physical practicability of constructing an at-grade crossing.

j. Data submitted in the nomination must be based on verifiable facts occurring on or before the nomination filing date.

k. Prepared testimony fully supporting the nomination.

1. All nominations shall be verified by the nominating party.

m. All information relating to the urgency of the project shall be filed with the nomination in affidavit form.

In addition to the above, please provide the following information:

1. As part of the need statement, please describe the community impact of the existing at-grade crossing and the proposed separation.

2. Describe and discuss each of the following as it applies to your crossing: limited waiting area for the vehicles, traffic signals located near the tracks, parallel road to the track(s), visibility of upcoming crossing, noise impediment, frequently used entrances or exits near the crossing, curvature of roadway or tracks which might hinder the normal observance of possible approaching trains, and other hazard causing elements.

3. Describe the current status of the project, i.e., preliminary engineering, design, PUC grade separation application, right of way negotiations/purchase, notice of determination, an environmental impact document, any discussions, negotiations and/or agreements with the railroad, etc.

4. If your agency has received any governing body (city council/board of supervisors, etc.) approval, plans attach resolution or other documentation. Also, please discuss the availability and source of local matching funds.

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Sheet 2 of 7

APPENDIX 5
Sheet 3 of 7

NOMINATION FOR SEPARATION OR ELIMINATION OF EXISTING OR PROPOSED RAILROAD GRADE CROSSING

1. Nominating Agency:

Name _____
Address _____
City _____
County _____ ZIP Code _____

2. Contact Person: Primary / Alternate

Name _____/ _____
Title _____/ _____
Telephone ( ) _____/( ) _____

Consultant Name _____
Title _____
Company Name _____
Telephone ( ) _____

3. Crossing Number and Location:

PUC Crossing No. _____
Street Name _____
City _____
County _____
Railroad Co. Name _____

EXPLANATION

Public Utilities (PUC) crossing numbers are assigned to all crossings. The number may be obtained from the Commission staff.

4. Number of Each Type of Railroad Track:

Main _____
Branch _____
Passing _____
Siding/Spur _____
Other (specify) _____

If unknown, the type of track may be obtained from the railroad company.

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APPENDIX 5
Sheet 4 of 7

EXPLANATION

5. TYPE OF CROSSING PROTECTION:

Stop Signs	_____	Gates	_____
Crossbucks	_____	Bells	_____
Wigwags	_____	Lights	_____
Flagman	_____	Stop sign	_____

Other _____

Check all protection that exist at the crossing presently. Specify **other** in the space provided.

6. Approach Roadway:

Width (feet) _____
Number of lanes _____

Within 200 feet on either side of the crossing.

7. Crossing Roadway:

Width (feet) _____
Number of lanes _____

On the roadway pavement at the crossing.

8. Crossing Skew Angle:

Degrees _____

Describe the angle which the roadway crosses the perpendicular of the track(s)

9. Elevated Surface Profile of Roadway:

Direction _____
Change in Height _____ (in)
Direction _____
Change in Height _____ (in)

From each side of the approach at a point 30 ft from the closest rail,measure the difference in height from the top of the rail to the surface of the road.

10. Average Daily Motor Vehicle Volume:

Vehicle Count (ADT) _____
Date of Count _____

An average 24-hour day count is required. All counts must be done after January 1, 1995.

Description of data collection methods: _____

_____
_____
_____
_____
_____
_____
_____

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Appendix 5
Sheet 5 of 7

EXPLANATION

11. Average Daily Train (ADT) Volume:

Passenger _____
Through freight _____
Switching _____
Light rail _____
Other (specify below) _____
TOTAL TRAINS _____

The ADT should be obtained by a written request from the railroad, otherwise,specify the source of information below. Staff recommends that the ADT be confirmed by direct observations.

Description of data collection methods: _____

12. Speed:

Motor Veh. (Posted MPH) _____
Train (MPH) _____

The train speed should be the maximum speed attained at the crossing. This data may be obtained from the railroad company or by properly operated radar equipment.

Description of data collection methods: _____

13. Accidents:

Train-vehicle _____
Vehicle-vehicle _____
Vehicle-object _____

A 10-year accident history of each type of accident that may be attributed to the presence of the grade crossing.

Description of data collection methods: _____

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APPENDIX 5
Sheet 6 of 7

EXPLANATION

14. Crossing Blocking Delay:

Date count was done _____
Number of delays _____
Total time delay _____

Count must be performed after January 1, 1995, Show the total time in minutes per day the warning devices are activated. The data may be obtained by installation of a signal activation monitoring devise or an average delay per train based on direct observation.

Description of data collection methods: _____

15. Nearest alternative route ___(feet)

The nearest alternate route as measured along the centerline of the railroad track.

16. Average number of crossings per day:

School bus	_____	Other bus	_____
Haz Mat Trucks	_____	Ambulance	_____
Haz Mat Trains	_____	Police	_____
Other	_____		

Show the number of average crossing per day for each type of vehicle. Specify other below.

Description of data collection methods: _____

17. Type of Project Proposed: (check one)

Underpass _____
Overpass _____
Other (specify) _____

If **Other**, please describe below

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APPENDIX 5
Sheet 7 of 7

EXPLANATION

18. For Proposed crossing:(check one)

At grade crossing is practical and feasible _____
At grade crossing is not practical and feasible _____

In the narrative section, show sufficient evidence that construction of an at-grade crossing is, or is not physically practical and feasible

19. Contribution:

Contribution by the city or county equal to or greater than 50% of the cost the project. (yes/no) _____

20. Estimated Project Cost (April 1, 1995)

Right-of-way allowance.....$_____
Preliminary Engineering....$_____
Construction Engineering...$_____
Total Engineering.....$_____
Bridge Construction.....$_____
Railroad work.....$_____
Highway approaches and connections.....$_____
Utility relocation.....$_____
Contingencies.....$_____
Removing existing crossing (where applicable).....$_____
Total construction cost....$_____
Total Project cost.....$_____

The estimated project cost shall be as of April 1, 1995. The cost shall be itemize as shown and any item left blank shall be. explained The estimated cost shall be limit to that portion of the project which is necessary to make the grade separation operable and to effect the separation of grades between the highway and the railroad tracks. The project cost shall be rounded to the nearest thousand dollars.

Note: For projects involving more than one crossing, complete the appropriate form for each individual crossing and also show a summary for the complete project.

Appendix 6
Sheet 1 of 6

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation for the purpose of establishing a list for the fiscal years 1996-97 and 1997-98 of existing and proposed crossings at grade of city streets, county roads, or state highways most urgently in need of separation, or projects effecting the elimination of grade crossings by removal or relocation of streets or railroad tracks, or existing separations in need of alteration or reconstruction as contemplated by Section 2452 of the Streets and Highways Code.	No. _____

Nomination for alteration or reconstruction of existing grade separation

Nomination by City/County of _____

in compliance with I. _____

Location Name (street) _____

Railroad Company _____

DUE DATE: September 1, 1995

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APPENDIX 6

Sheet 2 of 6

NOMINATION REQUIREMENTS

The Order Instituting Investigation (OII) sets forth the requirements for all nominations. Please carefully review the OII and attach all of its required data and information as separate sheets to this nomination form. THe following is a summary of the data required by Ordering Paragraph No.4:

a. A statement indicating the need for the project.

b. A statement regarding ability to complete pre-allocation requirements.

c. Location map of the project.

d. Two photographs.

e. A statement indicating the type of project.

i. A description of the existing and proposed separation structures, including acute structural deficiencies.

j. Data submitted in the nomination must be based on verifiable facts occurring on or before the nomination filing date.

k. Prepared testimony fully supporting the nomination.

l. All nominations shall be verified by the nominating party.

m. All information relating to the urgency of the project shall be filed with the nomination in affidavit form.

In addition to the above, please provide the following information:

1. Describe the current status of the project, i.e., preliminary engineering, designs right of way negotiations/purchase, notice of determination, any discussions negotiations and/or agreements with the railroad, etc.

2. If your agency has received any governing body (city council/board of supervisors, etc.) approval, please attach resolution or other documentation. Also, please discuss the availability and source of local matching funds.

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Appendix 6
Sheet 3 of 6

NOMINATION FOR ALTERATION OR RECONSTRUCTION OF EXISTING GRADE SEPARATION

1. Nominating Agency:

Name _____
Address _____
City _____
County _____ ZIP Code _____

2. Contact Person: Primary / Alternate

Name _____ / _____
Title _____ / _____
Telephone ( ) _____ / ( ) _____

Consultant Name _____
Title _____
Company Name _____
Telephone ( ) ___

3. Crossing Number and Location:

PUC Crossing No. _____
Street Name _____
City _____
County _____
Railroad Co. Name _____
_____

EXPLANATION

Public Utilities Commission (PUC) crossing numbers are assigned to all crossings. The crossing numbers are generally painted on the warning device. However if necessary, the numbers may be obtained from the Commission staff.

4. Horizontal Structure Clearance:

Width (Feet) _____
Number of lanes _____

Show he roadway width available for vehicular. traffic

5. Vertical Structure Clearance:

Overpass (Feet) _____
Underpass (Feet) _____

For overpass, measure from top of rail to bottom of structure. For underpass,measure from pavement to bottom of structure.

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APPENDIX 6
Sheet 4 of 6

EXPLANATION

6. Center Divider:

Yes ____ No___

Self explanatory

7. Speed Reduction (quantitative)**:**

Vehicle _____
Railroad Slow Order _____
Total time delay _____

Quantitatively identify any vehicular speed reduction which may be due to the presence of the structure. Information regarding a railroad slow order may be obtained from the railroad company.

Description of data collection methods: _____

8. Load Limit:

Vehicle _____
Railroad _____

Show any vehicular or railroad load limit restriction at the structure.

Description of data collection methods: _____

9. Railroad Track Type (indicate number)**:**

Main _____
Branch _____
Passing _____
Siding/Spur _____
Other _____

If unknown, the type of track may be obtained from the railroad company. Please describe other types of tracks below

Description of data collection methods: _____

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Sheet 5 of 6

EXPLANATION

10. Average Daily Vehicle Volume:

Vehicle Count (ADT) _____
Date of Count _____

An average 24-hour day count is required. All counts must be done after January 1,1995.

Description of data collection methods: _____

11. Average Daily Train Volume:

Passenger _____
Through freight _____
Switching _____
Light rail _____

TOTAL TRAINS _____

It is preferred that the data be obtained by a written request to the railroad,otherwise the source of information in the narrative.
It is advised that the data be confirmed by direct observation.

Description of data collection methods: _____

12. Secondary Accidents:

Vehicle-vehicle _____
Vehicle-object _____

A 10-year accident history of the number of secondary accidents which may be attributed to the presence of the grade separation structure.

Explain the type of accidents occurring and the source of information: _____

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Sheet 6 of 6

EXPLANATION

13. Contribution:

Contribution by the city or county equal to or greater than 50% of the cost the project? Yes_____ No_____

14. Estimated Project Cost (April 1, 1995)

Right-of-way allowance.....$_____
Preliminary Engineering....$_____
Construction Engineering...$_____
Total Engineering.....$_____
Bridge Construction.....$_____
Railroad work.....$_____
Highway approaches and connections.....$_____
Utility relocation.....$_____
Contingencies.....$_____
Removing existing crossing (where applicable).....$_____
Total construction cost....$_____
Total Project cost.....$_____

The estimated project cost shall be as of April 1, 1995. The cost shall be itemized as shown and any item left blank shall be explained. The estimated cost shall be limited to that portion of the project which is necessary to make the grade separation operable and to effect the separation of grades between the highway and the railroad tracks.The project cost shall be rounded to the nearest thousand dollars.

Note: For projects involving more than one crossing, complete the appropriate form for each individual crossing and also show a summary for the complete project.

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Grade Separation Program

Rail Crossings Engineering Section, CPUC

August 2005

Introduction

The Grade Separation Program is a state funding program to grade separate highway-rail crossings. A highway-rail crossing is the intersection of railroad track with any type of highway or pathway used by vehicles and/or pedestrians. Crossings are classified as either grade-separated or at-grade. Grade-separated crossings are where either the highway or the railroad track crosses over or under the other at different elevations, typically using a bridge structure. The elevation difference allows trains to travel through grade-separated crossings at the same time as highway users. At-grade crossings are where the highway and railroad tracks are at the same elevation, thereby creating a potential conflict between trains and highway users. At-grade highway-rail crossings pose significant public safety hazards to California's motorists and pedestrians.

The California Public Utilities Commission (hereinafter referred to as the Commission or CPUC) has jurisdiction over the safety of highway-rail crossings in California. The Rail Crossings Engineering Section (RCES) reviews projects for the safe design of crossings and recommends safety measures, such as automatic warning devices, to mitigate hazards for at-grade crossings users.

The optimal safety improvement for an at-grade highway-rail crossing is the complete separation of the railroad tracks from the roadway through construction of a grade-separation structure. Replacement of at-grade crossings with grade-separated crossings eliminates the fatalities and injuries that often result from collisions between train and highway users. It also eliminates blocking delays that cause traffic congestion, reduces the intrusive noise from train horns and automatic warning devices, and can improve emergency response times.

The Grade Separation Program helps local agencies finance the high costs of grade separating highway-rail crossings, thereby improving public safety and convenience throughout California.

Contents

1. Background
2. Eligible Projects
3. Funding
4. Formulas
5. Current Priority List
6. Next Call for Projects
7. Commission and Caltrans Contacts
8. Past Allocations
9. Decision Tools for Grade Separations
10. Caltrans Guidelines for Grade Separation Allocations
11. Relevant Streets & Highways Code

1. Background

The Commission establishes and furnishes to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) a funding priority list of grade crossing projects most urgently in need of separation or alteration. Section 190 of the California Streets and Highways Code (referred to as S&H Code) requires the State's annual budget to include $15 million for funding these projects. Section 2450 *et seq.* of the S&H Code sets out the procedure for administering these funds, and Section 2453 gives the CTC responsibility for allocating the funds to qualified projects.

S&H Code Section 2452 requires the Commission, by July 1 of each year, to establish the priority list for projects and furnish it to the CTC for use in the fiscal year beginning on that date. Our procedure is to promulgate the list for the first fiscal year by issuing an interim decision, and then to revise the list for the second year by deleting projects for which funds were actually allocated in the first. The Commission adopts the revised list by final decision in the second year of the proceeding, and begins the funding cycle again the following year by instituting a new proceeding.

In accordance with S&H Code Section 2452, the Commission is responsible for establishing criteria to be used in determining the priority of projects nominated for separation or alteration. The formula weighs vehicular and train volumes at crossings along with project costs, and considers a variety of special factors such as accident history, site visibility, the angle of the tracks to the road crossing geometry, blocking delays and other relevant factors. Staff conducts field inspections and performs safety evaluations.

Interested local agencies are responsible for submitting nominations with the required information. These agencies must be ready to share in the project's cost. The Commission requires applicants to attend the formal public hearings and provide testimony in support of their proposals.

2. Eligible Projects

The Commission will consider projects for the Grade Separation Priority List that are nominated by a city, a county, a separation-of- grade district, and any public entity providing rail passenger transportation services.

Eligible projects include: (1) projects for grade separation of existing or proposed crossings of city streets, county roads, or state highways, (2) grade crossings in need of elimination by removal or relocation of streets or railroad tracks, or (3) existing separations in need of alteration or reconstruction.

Section 2450(a) of the S&H Code states:

> *"Grade separation" means the structure which actually separates the vehicular roadway from the railroad tracks.*

Although projects comprised of multiple grade separations are eligible, a project nomination shall not include multiple projects that are separate, distinct and clearly severable. The combination of severable projects into a single nomination would preclude the Commission from effectively determining which projects are most urgently in need of separation or alteration as required by S&H Code Section 2452. Furthermore, a single nomination cannot combine projects for both the elimination of existing grade crossings and the elimination of proposed grade crossings.

If a project qualifies as a multiple crossing or consolidation project, the overall priority is affected by a combined weighting of factors at each crossing. The factors include roadway traffic counts, number of accidents, and crossing geometrics. Multiple crossing or consolidation projects may qualify for more than the usual $5 million maximum allocation.

3. Funding

Section 190 of the S&H Code requires the State's annual budget to include $15 million for funding qualified projects on the Grade Separation Priority List Program as ranked by the Commission.

For a project that eliminates an existing crossing or alters or reconstructs an existing grade separation, an allocation of 80% of the estimated cost of the project is made, with the local agency and railroad each contributing 10%. For a project that plans a grade separation of a proposed new crossing (currently no existing crossing), an allocation of 50% of the estimated project costs is made, with the remaining 50% contributed by the local agency.

Subsequent to the Commission's issuance of the Priority List, the California Department of Transportation (Caltrans) accepts applications for an allocation of funds on or before April 1 of each fiscal year. Guidelines on applying for Caltrans allocations are posted at the following website:
http://www.dot.ca.gov/hq/LocalPrograms/lam/prog_g/g19gdsep.pdf.

Caltrans distributes the available funding according to the priority ranking established annually by the CPUC. The project on the list with the highest priority, and which also meets the requirements detailed below, has first claim to the available funds to the extent of the yearly cap. The next project in the ranking which meets the requirements receives the next allocation, and so on, until the fiscal year's funds are exhausted. Two different formulas are used to make these computations, one for existing at-grade crossings nominated for separation or elimination and another for existing separations nominated for alteration or reconstruction.

Other critical requirements to secure an allocation from the Caltrans include:

1. Application for funding must be sent to Caltrans by April 1
2. Authority to construct the project must be obtained from the Commission
3. Environmental review documents must be complete
4. Construction, maintenance, and any other necessary agreements with the railroads must be signed
5. Final plans must be complete

Applicants should be aware of the following funding limits:

- Allocations are made on the basis of estimated cost.
- An allocation to a project may not exceed $5 million from any one fiscal year.
- Caltrans may only allocate up to 80% of the estimated cost.
- Cumulative allocations may not exceed $20 million to any one project.
- Allocations are to be reduced or augmented after the project is completed to reflect the actual cost to construct the grade separation.
- Parties anticipating the need for an allocation greater than $5,000,000 shall be prepared to present evidence at the hearings to justify the additional award. See S&H Code 2454 (g) and (h) for more information.

The probability of projects being funded is dependent on a number of things. The first is the amount of available funding, which is $15 million and which does not increase from year to year. In accordance with S&H Code 2454(g), funding for an individual project is limited to one-third of the total fund or $5 million per year (whichever is less). A project may qualify for up to 80% of the total project cost or a maximum of $20 million funded over a multiyear period, not to exceed five years, if it shows a saving to the state as indicated in S&H Code 2454(h).

The list is dynamic, responding to local demographic changes. Some projects may drop in ranking from one year to the next, as new nominations, where factors such as rising

vehicular traffic levels, increased train activity, or recent accident history indicate a greater public need for grade separation or improvement may rise on the list.

The system is not one where the first on the list is necessarily the first to be funded. For example, in fiscal year 2002-2003, Caltrans notified the Commission that projects ranking 14, 38 and 52 had received $6 million, $5 million, and $5 million, respectively in allocated funds. For fiscal year 2003-2004, no new projects received an allocation, but previously funded projects received supplemental allocations. The same is projected for fiscal year 2004-2005; allocations are to be made to supplemental requests only.

Although the priority list ranking is an important factor in determining whether a project can be funded, securement of an allocation requires a number of other requirements to be met. These requirements include completion of the design, establishment of a maintenance agreement with the affected railroad, completion of environmental review of the project, and procurement of the local funding share or remainder of the project cost. In recent years, these additional requirements have not been met by the vast majority of projects on the priority list, thereby allowing projects with what may appear to be a low ranking to be funded. If there is a possibility that a highway-rail grade separation project may be able to meet the requirements outlined above within two years of its nomination, RCES strongly recommends that the local agency apply for funding through the Grade Separation Program.

4. Formulas

There are two formulas used to rank projects: one for crossings nominated for separation or elimination and the other for existing grade separations in need of alteration or renovation.

Formula For Crossing Nominated For Separation Or Elimination

$$P = \frac{V * (T + 0.1 * LRT) * (AH + 1)}{C} + SCF$$

Formula For Existing Separations Nominated For Alteration Or Reconstruction

$$P = \frac{V * (T + 0.1 * LRT)}{C} + SF$$

Note: V- Average Daily Vehicle Traffic, T –Average Daily Freight/Commuter

Train Traffic, LRT – Average Daily Light Rail Train Traffic, C – Project Cost Share to be Allocated from Grade Separation Fund, AH – Accident History (number of accidents at crossing), SCF- Special Conditions Factor, SF - Separation Factor

Please see the current Order Instituting Investigation for more details on current Commission adopted formulas.

5. Current Priority List

Commission Decision (D.) 05-06-056, dated June 30, 2005 adopted the final order for the Section 190 Grade Separation Priority List for fiscal year 2005-2006, as required by S&H Code Section 2452. The Priority List for fiscal year 2004-2005, established by D.04-06-020, dated June 9, 2004 required no revision. D.05-06-056 also closes Investigation (I.) 03-07-009 (which established the list for 2004-2005 and revised it for 2005-2006). Decisions are published on the Commission's website: http://www.cpuc.ca.gov

6. Next Call for Projects

The Public Utilities Commission is responsible for ranking the nominated projects. The call for projects occurs every two years, therefore the nominated projects stand for two years, with those projects receiving an allocation during the first year being removed from the second year's list. The Commission is required to adopt a list by July 1 of each year. The list is then sent to the CTC and Caltrans. Caltrans allocates the funds.

The current call for projects opened July 21, 2005. The proceeding is online at the following site: http://www.cpuc.ca.gov/proceedings/I0507016.htm .

Click **COMMISSION INVESTIGATION** to download the Order Instituting Investigation and the Appendices which include the application forms and instructions. Applications are due October 21, 2005 to the Los Angeles office.

7. Commission and Caltrans Contacts

California Public Utilities Commission

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Rail Crossings Engineering Section
320 West 4th Street, Suite 500
Los Angeles, CA 90013-1105
(213) 576-7078
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Caltrans

Lauren Clausen
Rail Crossing Safety & Track Branch
Caltrans - Division of Rail
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Sacramento, CA 94274-0001
(916) 653-0243
lauren_clauson@dot.ca.gov

8. Past Allocations

FY	Project	Proceeding	Rank	RR	Lead Agency	State Share
2001-02	Monte Vista Avenue	I.99-07-001	4	BNSF	City of Montclair	$ 5,000,000.00
	Bailey Avenue & Others	I.99-07-001	16		City of San Jose	$ 5,000,000.00
	Clovis Ave OH (1994-95)	I.93-07-032	8	UP	Fresno County	$ 1,370,400.00
Remainder will be used up by supplemental & balance allocations						$ 3,629,600.00
					Total Allocation	$ 15,000,000.00
2002-03	Jurupa Road UP	I.01-07-008	14	UP	City of Riverside	$ 6,000,000.00
	P & Q Streets UP	I.95-07-003	16	BNSF	City of Bakersfield	$ 342,894.65
	7th Standard Road OH	I.01-07-008	38	BNSF	City of Shafter	$ 5,000,000.00
	Mohawk Street UP	I.01-07-008	52	BNSF	Kern County/City of Bakersfield	$ 5,000,000.00
					Total Allocation	$ 16,342,894.65
2003-04	50th Ave OH	I.93-07-032	4	UP	City of Coachella	$ 6,014,010.00
	Chestnut Avenue OH	I.97-07-014	18	UP	County of Fresno	$ 778,748.00
	Kansas-Needham OH	I.95-07-003	1	UP	City of Modesto	$ 3,418,631.00
	Calloway Drive UP	I.95-07-003	18	BNSF	Kern County	$ 872,000.00
	Shaw-Marks UP	I.97-07-014	1	BNSF	City of Fresno	$ 3,340,204.00
					Total Allocation	$ 14,423,593.00
2004-05 (preliminary)	West Capitol Ave UP-Emergency Repair	I.99-07-001	26	UP	City of West Sacramento	$ 19,045.42
	Remainder will be used up by supplemental & balance allocations					
					Total Allocation	$ 19,045.42

9. Decision Tools for Grade Separations

The topic of when to construct a grade separation is complex. The Commission does not have strict criteria that would require an existing at-grade highway-rail crossing to be grade-separated. However, resources are available which clearly specify when a grade separation should be considered, and when it may be well justified.

The Federal Highway Administration's (FHWA) Technical Working Group (TWG) published a document in November 2002 entitled 'Guidance on Traffic Control Devices at Highway-Rail Grade Crossings'. This document is available online. Page 27 and 33 of the published document discuss particular criteria that should be considered when assessing the need for grade separation.

When considering the need for grade separation of highway-rail crossings, it may be appropriate to use the Federal Railroad Administration's web-based tool "GradeDec.net". The software application, accessible at http://GradeDec.net , can be used to evaluate the benefits and costs of rail investment projects, specifically those involving highway-rail grade crossing improvements (including grade separation, closure, or warning device upgrades), within a risk analysis framework. GradeDec.net is particularly well-suited for analysis of rail corridors.

10. Caltrans Guidelines for Grade Separation Allocations

Please see Chapter 19 of the Local Assistance Program Guidelines published by Caltrans for further details regarding allocations from the Grade Separation Program. http://www.dot.ca.gov/hq/LocalPrograms/lam/lapg.htm

11. Relevant Streets & Highways Code

Funding for projects included on each annual priority list is provided by S&H Code Section 190, and the basis for allocation and state requirements are contained in S&H Code Sections 2450-2461.

CALIFORNIA CODES - STREETS AND HIGHWAYS CODE SECTION 190-191

190. Each annual proposed budget prepared pursuant to Section 165 shall include the sum of fifteen million dollars ($15,000,000), which sum may include federal funds available for grade separation projects, for allocations to grade separation projects, in accordance with Chapter 10 (commencing with Section 2450) of Division 3. The funds included for such purposes pursuant to this section each fiscal year, or by any other provision of law, shall be available for allocation and expenditure without regard to fiscal years.

191. Prior to each July 15, the department shall prepare and forward to the Controller a report identifying the amounts to be deducted from the allocations under Sections 2104 and 2107 as provided in Sections 2104.1 and 2107.6. The amounts shall be a proration of five million dollars ($5,000,000), less the federal subventions for grade separation projects included in allocations made pursuant to Chapter 10 commencing with Section 2450) of Division 3 in the preceding fiscal year in excess of three million dollars ($3,000,000). The proration shall be based on the ratio that grade separation allocations to cities, and grade separation allocations to counties, bears to the total allocations in the preceding fiscal year.

CALIFORNIA CODES - STREETS AND HIGHWAYS CODE SECTION 2450-2461

2450. For purposes of this chapter:

(a) "Grade separation" means the structure which actually separates the vehicular roadway from the railroad tracks.

(b) "Project" means the grade separation and all approaches, ramps, connections, drainage, and other construction required to make the grade separation operable and to effect the separation of grades. Such grade separation project may include provision for separation of nonmotorized traffic from the vehicular roadway and the railroad tracks. If a separation of nonmotorized traffic is not to be included in a project, there shall be an affirmative finding that the separation of nonmotorized traffic is not in the public interest.

On any project where there is only one railroad track in existence, the project shall be built so as to provide for expansion to two tracks when the Director of Transportation determines that the project is on an existing or potential major railroad passenger corridor. Such project may consist of:

(1) The alteration or reconstruction of existing grade separations.

(2) The construction of new grade separations to eliminate existing or proposed grade crossings.

(3) The removal or relocation of highways or railroad tracks to eliminate existing grade crossings.

(c) "Highway" means city street, a county highway, or a state highway which is not a freeway as defined in Section 257.

(d) "Railroad" means a railroad corporation.

2451. (a) For the purposes of this chapter, "local agency" includes a city, a county, a separation-of-grade district, and any public entity that provides rail passenger transportation services.

(b) Before a separation-of-grade district may apply to the commission pursuant to this chapter for an allocation for a project, the district shall consult with and obtain the written consent of the city in which the project is located, or the county if the project is located in unincorporated territory.

2452. Prior to July 1 of each year, commencing with 1974, the Public Utilities Commission shall establish a list, in order of priority, of projects which the commission determines to be most urgently in need of separation or alteration. Such priority list shall be determined on the basis of criteria established by the Public Utilities Commission. Where a project involves the relocation of railroad tracks or highways and the closure of grade crossings, the Public Utilities Commission shall indicate on the priority list which of the grade crossings eliminated would have been considered urgently in need of a grade separation.

2453. From the funds set aside pursuant to Section 190, as well as from any other funds that may be set aside for purposes of this chapter, the California Transportation Commission shall make allocations for projects contained in the latest priority list established pursuant to Section 2452. Such allocations shall be made for preconstruction costs and construction costs. Where allocations are made to a local agency, the requirements of Sections 2456 and 2457 shall first be met.

2453.5. The department may submit its comments and recommendations to the commission on any project for which an allocation is to be made.

2454. Allocations made pursuant to Section 2453 shall be made on the basis of the following:

(a) An allocation of 80 percent of the estimated cost of the project shall be made; except that whenever contributions from other sources exceed 20 percent of the estimated cost, the allocation shall be reduced by the amount in excess of 20 percent of the estimated cost.

(b) An allocation of 50 percent of the estimated cost of the project shall be made for a proposed crossing.

(c) No allocation shall be made in excess of 50 percent of the estimated cost of the project unless the grade crossing to be eliminated has been in existence for at least 10 years prior to the date of allocation.

(d) On projects which eliminate an existing crossing, or alter or reconstruct an existing grade separation, no allocation shall be made unless the railroad agrees to contribute 10 percent of the cost of the project.

(e) Where a project does not include a grade separation, but eliminates existing grade crossing or crossings, the allocation shall not exceed the estimated allocation that would have been made for the grade separation which is no longer needed because of the elimination of the grade crossing by the project and which is indicated on the priority list to be urgently in need of grade separation.

(f) Where the project includes the separation of a highway and a railroad passenger service operated by a city or county, the operating agency shall contribute 20 percent of the cost of the project. The priority listing for such projects shall be in accordance with criteria established for such railroad passenger service by the Public Utilities Commission.

(g) Notwithstanding subdivisions (a) to (f), inclusive, the total of such allocations for a single project shall not exceed five million dollars ($5,000,000) without specific legislative authorization, except that the amount for a single project may be increased to either (1) an amount that includes the federal construction cost index increase each year since 1976, or (2) an amount which does not exceed one-third of the total funds appropriated for grade separation projects for the year of allocation, whichever amount is less, as determined each year by the Public Utilities Commission.

(h) Notwithstanding subdivisions (a) to (g), inclusive, a single project in excess of five million dollars ($5,000,000), but not exceeding twenty million dollars ($20,000,000), shall be considered without specific legislative authority, if the project (1) is included in the Public Utilities Commission's priority list of projects scheduled to be funded, (2) eliminates the need for future related grade separation projects, (3) provides projected cost savings of at least 50 percent to the state or local jurisdiction, or both of them, by eliminating the need for future projects, and (4) alleviates traffic and safety problems or provides improved rail service not otherwise possible. Projects approved pursuant to this subdivision shall be funded over a multiyear period, not to exceed five years, and the allocation for any one of those years shall not exceed the amount prescribed by subdivision (g) for a single project.

An agency which has received an allocation for a project approved pursuant to this subdivision shall not be eligible for an allocation for another project under this subdivision for a period of 10 years from the date of approval of that project. Not more than one-half of the total allocation available in any one fiscal year for grade separation projects may be used for the purposes of this subdivision.

(i) Notwithstanding any of the above provisions of this section or any other provision of law, when the state or local agency uses funds derived from federal sources in financing its share of project costs, the railroad contribution, where required by federal law or regulation, shall be computed pursuant to federal law. However, the allocation made pursuant to this chapter shall be computed as though such matching contribution was derived from nonfederal sources and shall be computed as though the railroad had made its contribution pursuant to state law rather than pursuant to federal law. Where the contribution of the railroad is computed according to federal law or regulation because of the use of federal funds in the allocation for a project, the allocation shall be increased by the amount the share of the railroad is reduced below 10 percent of the estimated cost of the project.

2454.2. The planned removal of trackage of the Sacramento Northern Railway, the construction of substitute tracks and track connections, the elimination of 10 existing grade crossings, the acquisition of necessary rights-of-way, and all necessary associated work and appurtenances, to enable Sacramento Northern Railway trains to operate via existing trackage of the Atchison, Topeka & Santa Fe Railway, in and adjacent to the

City of Pittsburg, shall be eligible for an allocation under Section 2453. The Public Utilities Commission shall determine to what extent, if any, the railroad shall contribute to the project. Such eligibility shall not be contingent on whether the railroad agrees to contribute, and the California Highway Commission shall not deny an allocation on such grounds.

The Legislature hereby finds and declares that it is necessary to enact this special law regarding the Pittsburg track removal and grade crossing elimination project because of the existence of the following special facts and circumstances:

The predominant traffic carried by the Sacramento Northern Railway consists of high explosives, bombs, shells, and ammunition destined for the United States Navy ammunition depot at Port Chicago. Such trains traverse residential areas, cross 10 streets at grade, and constitute a grave hazard to the life and safety of the residents of Pittsburg. Sacramento Northern Railway is willing to remove its tracks and operate its trains via the tracks of the Atchision, Topeka & Santa Fe Railway, which is already partially grade separated and which offers a safer route. However, Sacramento Northern Railway will sacrifice certain of its own facilities, will receive no benefits, and therefore is unwilling to contribute any portion of the cost incidental to the removal of its trackage or for the construction of substitute track connections and appurtenances or for the acquisition of rights-of-way.

Based on the foregoing, the Legislature therefore finds and declares that it is necessary that the Sacramento Northern track removal and relocation project in and adjacent to the City of Pittsburg shall be eligible for a grade separation allocation, and that subdivision (d) of Section 2454, relating to a contribution by the railroad, shall not apply for purposes of qualifying for an allocation under Section 2453.

2454.5. (a) Whenever the National Railroad Passenger Corporation (AMTRAK) contributes an amount equal to one-third of the total cost to the state and local agencies of a grade separation project, or any lesser percentage as the National Railroad Passenger Corporation (AMTRAK) and the California Transportation Commission may agree upon, the cost to the participating parties under existing law shall be reduced proportionately.

(b) Any such grade separation project may be assigned a priority by the Public Utilities Commission that is higher than the priorities assigned to all other such projects for which the National Railroad Passenger Corporation (AMTRAK) has not made a contribution.

2455. After an allocation is made to a local agency by the commission, the local agency and the department shall enter into an agreement concerning the handling and accounting of funds, including procedures to permit prompt payment for the work accomplished, and relative to any other phase of the work. The procedures providing for prompt payment of work accomplished shall be drawn in such a manner as to avoid the necessity for the local agency to utilize funds in an amount greater than the local agency's share of the project costs. Such agreement may establish procedures for the programming of the work of the project in order to assure optimum cash flow utilization of funds made available by the Legislature for purposes of this chapter.

2456. An allocation for construction costs, including preconstruction costs if not already allocated, shall be made to a local agency only if it furnishes evidence satisfactory to the department that all necessary orders of the Public Utilities
Commission have been executed, that sufficient local funds will be made available as the work of the project progresses, that all necessary agreements with affected railroad or railroads have been executed that, if required, all environmental impact reports have been prepared and approvals obtained, and that all other matters prerequisite to the award of the construction contract can be accomplished within one year after the allocation. Local funds shall be deemed available to the amount of any general obligation bonds authorized but unsold if it is determined that such bonds may be issued and sold by the local agency at any time.

2457. Preconstruction costs (engineering, right-of-way, preparation of environmental impact reports, and utility relocation) expended by a local agency prior to any allocation shall be included in the total cost of the project even though expended prior to an allocation. Allocations shall be made for preconstruction costs to a local agency that submits evidence satisfactory to the department that the local agency will be able to meet the requirements for an allocation for construction costs, and that preconstruction costs will exceed the local share of the cost of the project. A local agency may also proceed with the advertising for bids and the construction of a project without prejudice to its right to receive an allocation if an allocation is, in fact, made for such project within the same fiscal year that the construction contract was awarded.

2458. Except as provided in this section, allocations shall remain available until expended. If a construction contract has not been awarded within one year after an allocation for construction costs, the commission may order the allocation canceled and such funds shall revert to the fund set aside for purposes of this chapter. All or any part of an allocation for preconstruction costs may be canceled and such funds shall revert to the fund set aside for purposes of this chapter upon a finding that insufficient progress is being made to complete the project. Where an allocation is canceled pursuant to this section, the local agency shall reimburse the fund set aside for purposes of this chapter the portion of the allocation which is not reverted as set forth in this section. The department shall determine, with the local agency, as to the time of repayment.

2459. If the actual cost of the project is less than estimated, the allocations made for such project shall be reduced accordingly and the excess shall revert to the fund set aside for the purposes of this chapter. If the actual and necessary cost of the project exceeds the estimate, the allocations made for such project shall be augmented proportionately by a supplemental allocation. An allocation, however, need not be made for a supplemental allocation, unless the commission is satisfied that funds would have been allocated for the project had the actual costs been used in determining its ranking on the priority list.

2460. If more projects comply with the requirements of this chapter than can be financed from funds set aside for purposes of this chapter, allocations shall be made to those projects highest on the priority list established pursuant to Section 2452. The commission may make allocations for any project when it determines, at the time of

allocation, that sufficient funds are available for all projects which are higher on the priority list and which are, or are reasonably expected to become, eligible during the fiscal year.

2460.5. From funds remaining after allocations for projects higher on the priority list, the commission shall offer to allocate the remaining funds for the next eligible project on the priority list, even though the amount of the remaining funds is less than the amount the local agency is entitled to for that project.

The commission, in the next fiscal year, shall allocate to the local agency an additional amount equal to the difference between the amount the local agency was eligible to receive and the amount of the reduced allocation.

The total of the amount of allocations for a single project, including, but not limited to, any allocation pursuant to this section, shall not exceed the amount prescribed by subdivision (g) of Section 2454 without specific legislative authorization.

2460.7. A project that is on the priority list may be constructed by a local agency prior to the time that it reaches a high enough priority for funding under this chapter. The project shall retain its eligibility for listing on subsequent priority lists established by the Public Utilities Commission pursuant to Section 2452 by applying the traffic, accident, and other conditions existing at the project location at the time immediately preceding the start of construction.

If the project subsequently reaches a high enough priority for funding under this chapter, funds shall be allocated and paid to the local agency in the same manner, and under the same terms and conditions, as any other project funded under this chapter on the basis of the cost of construction of the project. To be eligible for subsequent funding under this section, both of the following requirements shall be met:

(a) The work on the project shall be performed under terms and conditions established by the department.

(b) The project has received the prior approval of the California Transportation Commission.

2461. Allocations for specific projects on the state highway system only shall be deemed expenditures within the county in which the project is situated for the purpose of compliance by the department and the commission with Sections 188 and 188.8.

APPROVED AS TO FORM AND LEGALITY

DEPUTY CITY ATTORNEY

FILED
OFFICE OF THE CITY CLERK
OAKLAND

2009 JAN -8 PM 4: 19

OAKLAND CITY COUNCIL

RESOLUTION NO. 81769 C. M. S.

RESOLUTION RESCINDING CERTIFICATION OF THE OAK TO NINTH PROJECT ENVIRONMENTAL IMPACT REPORT (EIR) PER RESOLUTION No. 79981 C.M.S., APPROVING REVISIONS TO THE ANALYSIS IN THE OAK TO NINTH PROJECT EIR, RECERTIFYING THE OAK TO NINTH PROJECT EIR AS REVISED, AND READOPTING THE CEQA FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS AND MITIGATION MONITORING AND REPORTING PROGRAM AS REVISED

WHEREAS, on June 20, 2006 and July 18, 2006, the City Council and the Oakland Redevelopment Agency held public meetings hearings on the Oak to Ninth Avenue Mixed Use Development Project (the Project) and considered certification of the Environmental Impact Report, SCH No. 2004062013, consisting of the Draft EIR, the Final EIR, and the Addendum to the EIR (the EIR) for the Project, various approvals for the Project, and an appeal of the Planning Commission's certification of the EIR and recommendations and approval actions with respect to the Project; and

WHEREAS, on June 20, 2006 and July 18, 2006, the City Council and the Oakland Redevelopment Agency took the following actions with respect to the approval of the Project: (1) approved Resolution 79981 C.M.S. denying an administrative appeal of the Planning Commission actions and certifying the EIR; (2) approved Resolution 79982 C.M.S. amending the General Plan Estuary Policy Plan; (3) approved Resolution 2006-0045 C.M.S. regarding amending the Central City East Redevelopment Plan; (4) adopted Ordinance 12756 amending the Central City East Redevelopment Plan; (5) approved Resolution 2006-0046 C.M.S. regarding amending the Central District Urban Renewal Plan; (6) adopted Ordinance 12757 C.M.S. amending the Central District Urban Renewal Plan; (7) adopted Ordinance 12758 C.M.S. the Planned Waterfront Zoning District-4 (PWD-4); (8) adopted Ordinance 12759 C.M.S. rezoning property in the Project site; (9) approved Resolution 79984 C.M.S. for the vesting tentative map; (10) approved Resolution 79984 C.M.S. for the preliminary development plan and design guidelines; (11) approved Resolution 2006-0047 C.M.S. authorizing the development agreement; (12) adopted Ordinance 12760 C.M.S. approving a development agreement; (13) approved Resolution 2006-0060 C.M.S. authorizing a cooperation agreement; (14) adopted Exhibits A through D to the approval documents, consisting of the CEQA Findings and Statement of Overriding Considerations, the Mitigation Monitoring and Reporting Program, Conditions of Approval, and General Findings; and

WHEREAS, following the City's certification of the EIR and approval of the Project two lawsuits were filed in Alameda County Superior Court (the Court) challenging, among other claims, the City's certification of the EIR, Case No. RG06-280345, Oakland Heritage Alliance v.

City of Oakland et al., and Case No. RG06-280471, Coalition of Advocates for Lake Merritt v. City of Oakland et al.; and

WHEREAS, on November 16, 2007, the Court filed an Order, thereafter modified by an Order dated January 28, 2008, in Case Nos. RG06-280345 and RG06-280471 granting in part and denying in part the petitions writs of mandate and directing that a judgment and peremptory writ of mandate shall issue (the Court Order); and

WHEREAS, the Court Order found the EIR deficient with respect to portions of the environmental analysis and did not declare invalid any other aspects of the City or Agency actions with respect to their consideration of the Project or the administrative appeal from the Planning Commission actions and recommendations with respect thereto; and

WHEREAS, on February 27, 2008, the Court entered a Judgment and issued a Peremptory Writ of Mandate in Case No. RG06-280345 (Oakland Heritage Alliance v. City of Oakland) commanding the City of Oakland, the Oakland City Council and the Oakland Redevelopment Agency (a) to vacate and set aside its Resolution Certifying the Final EIR for the Oak to Ninth Mixed Use Redevelopment Project and adopting CEQA Findings and Statement of Overriding Considerations and the Mitigation Monitoring and Reporting Program (No. 79981 C.M.S) and (b) to suspend all of the other Project approvals listed above pending further order of the Court, and directing that the matter be remanded to the City for further action as set forth in the Court Order; and

WHEREAS, the Court has neither entered a judgment nor issued a writ in Case No. RG06-280471 (Coalition of Advocates for Lake Merritt v. City of Oakland); and

WHEREAS, in response to the Court Order and the Judgment and Peremptory Writ of Mandate, on September 30, 2008 the City published a Notice of Availability of a document entitled "REVISIONS TO THE ANALYSIS IN THE OAK TO NINTH PROJECT EIR (SCH NO. 2004062013) PREPARED TO COMPLY WITH THE ALAMEDA COUNTY SUPERIOR COURT ORDER IN CASE NO. RG06-280345 AND CASE NO. RG06-280471" (Revisions to the EIR); and

WHEREAS, the City circulated the Revisions to the EIR for public review and comment from September 30, 2008 through November 17, 2008; and

WHEREAS, the City received written comments on the Revisions to the EIR and prepared written responses to the comments received during the public review period; and

WHEREAS, on January 20, 2009, the City Council held a public hearing to consider rescinding its certification of the EIR and adoption of the CEQA Findings and Statement of Overriding Considerations and the Mitigation Monitoring and Reporting Program per Resolution No. 79981 C.M.S. as commanded by the Court, approving the Revisions to the EIR, recertifying the EIR as revised, and readopting the CEQA Findings and Statement of Overriding Considerations and the Mitigation Monitoring and Reporting Program, which was noticed in accordance with legal requirements; and

WHEREAS, on January 20, 2009, the City Council fully reviewed, considered, and independently evaluated the Revisions to the EIR, the Response to Comments, the staff report and attachments thereto, the public testimony, and all other documents and evidence in the public record on the Project, the EIR, and the Revisions to the EIR; now, therefore, be it

RESOLVED: That in compliance with the Judgment and Peremptory Writ of Mandate the City Council rescinds Resolution No. 79981 C.M.S. to the extent that it certified the EIR and approved the CEQA Findings and Statement of Overriding Considerations and the Mitigation Monitoring and Reporting Program which relied thereon; and be it

FURTHER RESOLVED: That the City Council finds the Revisions to the EIR is adequate, accurate, and complete in accordance with CEQA and the CEQA Guidelines and complies with the Court Order and that the Response to Comments contains no significant modifications to the Revisions to the EIR; and be it

FURTHER RESOLVED: That the City Council finds that the Revisions to the EIR and Response to Comments identify no new significant impacts beyond those significant impacts identified in the EIR, no increase in the severity of a significant impact identified in the EIR, and no new mitigation measures considerably different from the mitigation measures contained in the EIR that the project sponsor declines to adopt and that would lessen the significant effects of the Project; and be it

FURTHER RESOLVED: That the City Council finds that the Revisions to the EIR and the Response to Comments represent the independent analysis and conclusions of the City and the City confirms, adopts, and approves the analysis and conclusions in the Revisions to the EIR and Response to Comments; and be it

FURTHER RESOLVED: That the City Council recertifies the EIR as revised by the Revisions to the EIR and Response to Comments, as in compliance with CEQA and the CEQA Guidelines and the Court Order; and be it

FURTHER RESOLVED: That the City Council readopts Exhibit A, the CEQA Findings and Statement of Overriding Considerations for the Project with the following revisions, attached hereto, to reflect the Revisions to the EIR and to correct clerical errors; and be it

FURTHER RESOLVED: That the City Council readopts Exhibit B, the Mitigation and Monitoring Reporting Program for the Project as revised by the Revisions to the EIR, attached hereto. The Revisions to the EIR contains clarifying revisions to Mitigation Measures F.1 and F.2 and the City Council incorporates those revisions into the Mitigation Monitoring and Reporting Program; and be it

FURTHER RESOLVED: That the City Council finds that the EIR, the Revisions to the EIR, the Response to Comments, the CEQA Findings and Statement of Overriding Considerations and the Mitigation and Monitoring Reporting Program may contain clerical errors and bases its decision on the substance of the information in these documents; and be it

FURTHER RESOLVED: That, based on the findings herein and the previous Project approvals, no further action is necessary on the administrative appeal of the Planning Commission's actions with respect to the Project.

IN COUNCIL, OAKLAND, CALIFORNIA, JAN 20 2009, 20_____

PASSED BY THE FOLLOWING VOTE:

AYES - [redacted], DE LA FUENTE, KAPLAN, KERNIGHAN, NADEL, QUAN, [redacted], and PRESIDENT BRUNNER – 6

NOES - 0

ABSENT - 0

ABSTENTION – 0

Excused - Brooks, Reid - 2

ATTEST: LaTonda Simmons

LaTonda Simmons
City Clerk and Clerk of the Council
of the City of Oakland, California

EXHIBIT A

CEQA Findings and Statement of Overriding Considerations

EXHIBIT A TO ALL APPROVAL DOCUMENTS

REVISED CEQA FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE OAK TO NINTH AVENUE MIXED USE DEVELOPMENT PROJECT

City Council Hearing

January 20, 2009

I. INTRODUCTION

1. These California Environmental Quality Act (Pub. Res. Code § § 21000 et seq., "CEQA") findings are adopted by the City of Oakland as lead agency, and the Oakland Redevelopment Agency as a responsible agency for the Oak to Ninth Avenue Mixed Use Development Project ("the Project"). These findings pertain to Environmental Impact Report SCH #2004062013 prepared for the Project.

2. These CEQA findings are Exhibit A and are incorporated by reference into each and every ordinance and resolution approving the Project. Exhibit B is the Mitigation Monitoring and Reporting Program (MMRP). Exhibit C contains conditions of approval. Exhibit D contains general findings regarding the Project approvals, including compliance with the Municipal Code and consistency with the General Plan. All Exhibits are incorporated by reference into each other and into the ordinance or resolution to which the Exhibit is attached.

3. The statements, findings, determinations, and other actions set forth in this Exhibit are based on the substantial evidence contained the entire record before the City. References to specific reports and specific pages of documents are not intended to identify those sources as the exclusive basis for the findings.

II. THE PROJECT

4. The Oak to Ninth Avenue Project is a mixed use development on approximately 64.2 acres located along the Oakland Estuary. The Project referred to in these findings is the Project as approved by the Oakland City Council and the Oakland Redevelopment Agency on June 20, 2006 and July 18, 2006. The Project includes up to 3,100 residential units, approximately 200,000 square feet of commercial space, a minimum of 3,950 parking spaces, 32 acres of parks and public open space, two renovated marinas, shoreline improvements, new roads, improvements to the Embarcadero along the Project site, and other necessary infrastructure and improvements. The existing buildings on the Project site will be demolished with the exception of a portion of the Ninth Avenue Terminal building and the Jack London Aquatic Center. The trees located on the Project site will be removed. The Project also includes General Plan amendments, Redevelopment Plan amendments, a new zoning district to accommodate the Project and amendments to the zoning map.

III. ENVIRONMENTAL REVIEW OF THE PROJECT

5. Pursuant to CEQA, the CEQA Guidelines (Cal. Code Regs title 14, § § 15000 et seq.), and the Oakland Environmental Review Guidelines in Oakland Municipal Code Chapter 17.158, the City determined that an EIR would be prepared. The City issued a Notice of Preparation, which was circulated to responsible agencies and interested groups and individuals for review and comment. A copy of the Notice of Preparation and comments received thereon are included in Appendices A and B of the Draft EIR.

6. A Draft EIR was prepared for the Project to analyze its environmental effects. The Draft EIR was circulated for public review and comment from September 1, 2005 to October 24, 2005. The Planning Commission, the Parks and Recreation Advisory Commission, and the Landmarks Preservation Advisory Board held public hearings on the Draft EIR on September 28, 2005, October 12, 2005 and October 17, 2005, respectively.

7. The City received written and oral comments on the Draft EIR. The City prepared responses that evaluated the comments on environmental issues and made any necessary additions and revisions to the Draft EIR. The comments, responses to the comments, changes to the Draft EIR, and additional information were published in a Final EIR on January 31, 2006. Certain comments were received after the close of the comment period and publication of the Final EIR and these comments were responded to in a document entitled "Additional Responses to Comments," which are incorporated into the Final EIR. The Planning Commission certified the EIR on March 15, 2006. Following the Planning Commission certification of the EIR, the City prepared an Addendum to the EIR to examine certain Project modifications and to address correspondence received since the publication of the Final EIR. The DEIR, the Final EIR, the Addendum and the appendices comprise the "EIR" referenced in these findings. An appeal of the Planning Commission's March 15, 2006 certification of the EIR, among other actions, was filed by Arthur Levy on behalf of certain individuals and groups. On June 20, 2006, the City Council denied the appeal and affirmed the certification of the EIR.

8. [Intentionally Left Blank]

9. Following the City Council's certification of the EIR and approval of the Project, two lawsuits were filed in Alameda County Superior Court (the Court) challenging, among other claims, the City's certification of the EIR in Case No. RG06-280345, Oakland Heritage Alliance v. City of Oakland et al., and Case No RG06-280471, Coalition of Advocates for Lake Merritt v. City of Oakland et al. On November 16, 2007, the Court filed an Order, thereafter modified by an Order dated January 28, 2008, in these cases granting in part and denying in part the petitions for writs of mandate and directing that a judgment and peremptory writ of mandate shall issue (the Court Order). On February 27, 2008, the Court entered a Judgment and issued a Peremptory Writ of Mandate in Case No. RG06-280345 commanding the City, the City Council and the Redevelopment Agency to (a) vacate and set aside the Resolution Certifying the Final EIR for the Project and adopting CEQA Findings and Statement of Overriding Considerations and the Mitigation Monitoring and Reporting Program (Resolution No. 79981 C.M.S.) and (b) suspend all of the other Project approvals pending further order of the Court, and directing that the matter be remanded to the City for further action as set forth in the Court Order.

10. In response to the Court Order and the Judgment and Peremptory Writ, on September 30, 2008 the City published a Notice of Availability of a document entitled "Revisions to the Analysis in the Oak to Ninth Project EIR (SCH No. 2004062013) Prepared to Comply with the Alameda County Superior Court Order in Case No. RG06-280345 and Case No. RG06-280471" (Revisions).

11. The City circulated the Revisions for public review and comment from October 1, 2008 through November 17, 2008. The City received written comments on the Revisions, prepared written responses to the comments received, and on December 19, 2008 published and made available for public review the Response to Comments.

12. On January 20, 2009, the City Council held a public hearing and (a) rescinded Resolution No. 79881 C.M.S. to the extent that it certified the EIR, approved the CEQA Findings and Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Program; (b) recertified the EIR as revised and readopted the CEQA Findings and Statement of Overriding Considerations and Mitigation Monitoring and Reporting Program, as revised. All references to the EIR and Mitigation Monitoring and Reporting Program herein refer to those documents as revised.

13. The EIR provides a project-level analysis of the environmental impacts of the Project and supports all levels of approval necessary to implement the Project.

IV. THE RECORD

14. The record upon which all findings and determination related to the Project are based includes the following:

a. The EIR and all documents referenced in or relied upon by the EIR.

b. All information (including written evidence and testimony) provided by City or Redevelopment Agency staff to the Planning Commission, the Landmarks Preservation Advisory Board, and the Parks and Recreation Advisory Commission relating to the EIR, the proposed approvals for the Project, the Project, and alternatives to the Project.

c. All information (including written evidence and testimony) presented at any and all public hearings related to the EIR and the Project, and all information incorporated into reports presented to any of the public bodies that conducted hearings on the EIR or the Project.

d. All applications, letters, testimony and hearing presentations provided by the project sponsor and their consultants to the City or the Redevelopment Agency in connection with the EIR or the Project.

e. For documentary and information purposes, all locally adopted land use plans and ordinances, including, without limitation, general plans, specific plans, redevelopment plans and related ordinances, together with any related environmental review documents, findings, mitigation monitoring programs and other documentation relevant to planned growth in the Project area.

f. The Mitigation Monitoring and Reporting Program for the Project.

g. All other documents comprising the record pursuant to Public Resources Code section 21167.6(e).

15. The Custodian of the documents and other materials that constitute the record of proceedings on which the City's decision is based is Development Director, Community and Economic Development Agency, or designee. Such documents and other materials are located at 250 Frank Ogawa Plaza, Suite 3315, Oakland, California 94612.

V. CERTIFICATION OF THE EIR

16. In accordance with CEQA and the CEQA Guidelines, the City certifies that the EIR has been completed in compliance with CEQA and was presented to the Planning Commission, the Oakland Redevelopment Agency, and the City Council. The City has reviewed and considered the information contained in the record and the EIR prior to certifying the EIR and approving or recommending approval of any aspect of the Project. Preparation of the EIR was overseen by the City and the conclusions and recommendations in the EIR represent the independent conclusions and recommendations of the City. By these findings, the City confirms and adopts the findings of the EIR as supplemented by these findings.

17. The City recognizes that the EIR, these Findings, and the Mitigation Monitoring and Reporting Program may contain clerical errors and bases its determination on the substance of the information in the EIR.

18. The City certifies that the EIR is adequate to support the approval of the Project, each alternative in the EIR, and variations on the range of alternatives evaluated in the EIR, each component of these alternatives, and any minor modifications to the Project or the alternatives. The EIR is adequate for each entitlement or approval, and any future discretionary approvals, required for construction and operation of the Project. The EIR is adequate to support the Project as approved and the additional mitigation measures and conditions of approval imposed by the City Council and the Redevelopment Agency at the June 20, 2006 and July 18, 2006 hearings on the Project. In particular, the removal of development from Parcel N and reallocation of the units planned for the parcel throughout the remaining development parcels was analyzed in the EIR Addendum. Other conditions and mitigation measures imposed by the City Council will enhance the social, economic, and environmental benefits of the Project and will not have any adverse physical impacts.

VI. ABSENCE OF SIGNIFICANT NEW INFORMATION

19. The City recognizes that the EIR incorporates information obtained and produced after the Draft EIR was completed, and that the EIR contains additions, clarifications, and modifications. The City has reviewed and considered the Final EIR, the EIR Addendum, the Revisions, and all of this information. The Final EIR, the Addendum, and the Revisions do not add significant new information to the Draft EIR that would require recirculation of the EIR under CEQA. The new information added to the EIR does not involve a new significant environmental impact, a substantial increase in the severity of an environmental impact, or a feasible mitigation measure considerably different from others previously analyzed that the

project sponsor declines to adopt and that would clearly lessen the significant environmental impacts of the Project. No information indicates that the Draft EIR was inadequate or conclusory or that the public was deprived of a meaningful opportunity to review and comment on the Draft EIR.

20. Based on the above finding, the City finds that the changes and modifications made to the EIR after circulation for public review and comment do not individually or collectively constitute significant new information within the meaning of Public Resources Code section 21092.1 or CEQA Guidelines section 15088.5.

VII. MITIGATION MONITORING AND REPORTING PROGRAM

21. Public Resources Code section 21081.6, CEQA Guidelines section 15097, and Oakland Administrative Code Chapter 17.158 require the City to adopt a monitoring or reporting program to ensure that the mitigation measures for Project identified in the EIR are implemented. The Mitigation Monitoring and Reporting Program ("MMRP") is included in Exhibit B and is adopted by the City. The MMRP satisfies the requirements of CEQA and the Oakland Municipal Code.

22. The mitigation measures set forth in the MMRP are specific and enforceable. As appropriate, some mitigation measures define performance standards to ensure no significant environmental impacts will result. The MMRP adequately describes implementation procedures, monitoring responsibility, reporting actions, compliance schedule, non-compliance sanctions, and verification of compliance in order to ensure that the Project complies with the adopted mitigation measures. The MMRP ensures that the mitigation measures are in place, as appropriate, throughout the life of the Project.

23. The mitigation measures contained in the MMRP will be imposed as enforceable conditions of approval on the individual development proposals to be approved by the City as the Project is implemented. The City has adopted measures to substantially lessen or eliminate all significant effects where feasible.

24. The mitigation measures contained in the MMRP will not have new significant environmental impacts that were not analyzed in the EIR. In the event a mitigation measure recommended in the EIR has been inadvertently omitted from the MMRP, that mitigation measure is adopted and incorporated from the EIR into the MMRP by reference and adopted as part of the MMRP.

VIII. FINDINGS REGARDING ENVIRONMENTAL IMPACTS

25. In accordance with Public Resources Code section 21081, including, but not limited to, the specific requirements of 21081(a)(1), 21081(a)(2), and 21081(a)(3), and CEQA Guidelines sections 15091 and 15092, the City adopts the findings and conclusions regarding impacts and mitigation measures that are set forth in the EIR. To avoid duplication and redundancy, these findings do not repeat the full discussions of environmental impacts, findings, mitigation measures, explanations of and conclusions with respect to the effectiveness of the mitigation measures in avoiding or reducing the impacts contained in the EIR. Instead, the City ratifies, adopts, and incorporates by reference the analysis, explanation, findings, responses to

comments, and conclusions of the EIR and relies upon them, and other evidence in the record, as substantial evidence supporting these findings. The City adopts the reasoning of the EIR, staff reports, and presentations provided by the staff and the project sponsor as may be modified by this Resolution and relies upon them, and other evidence in the record, as substantial evidence supporting these finding.

26. The City recognizes that the environmental analysis of the Project raises controversial environmental issues, and that a range of technical and scientific opinion exists with respect to those issues. The City has, through review of the evidence and analysis presented in the record, considered the full scope of the environmental issues presented. These findings are based on a full appraisal of all viewpoints expressed and evidence presented in the EIR and in the record, as well as other relevant information in the record of the proceedings for the Project.

27. Under Public Resources Code section 21081(a)(1) and CEQA Guidelines sections 15091 (a)(1) and 15092(b), and to the extent reflected in the EIR, the City finds that changes or alterations have been required in, or incorporated into, the Project that mitigate to a less than significant level or avoid the following potentially significant effects on the environment. The City does not repeat this finding for each impact and mitigation measure identified below because this initial overarching finding for all the impacts and mitigation measures covered by this paragraph no. 27 obviates the need for such repetition. As noted above in paragraph no. 25, in making these findings the City adopts, ratifies, and incorporates by reference all of the information, explanation, reasoning, and analysis contained in the EIR and other evidence in the record. The full text of the mitigation measures referred to in this paragraph are contained in the Mitigation Monitoring and Reporting Program and the City relies on the full text of the Mitigation Measures and requirements of the Mitigation Monitoring and Reporting Program in making these findings.

a. Land Use, Plans, Policies

(1) Impact A.1: The Project, located near the Fifth Avenue Point, may result in the physical division of an existing community. This impact will be mitigated through the imposition of Mitigation Measure A.1, which calls for design measures, access from the Point to the public areas of the Project, appropriate buffering, and design standards in the PWD regulations.

(2) Impact A.2: The Project will conflict with the existing land use classification and zoning. This impact will be mitigated through the imposition of Mitigation Measures A.2 (a) – (b), which call for amending the General Plan and adoption of the PWD zoning district.

(3) Impact A.3: The Project will result in a substantial change in the existing environment and existing land uses. This impact will be mitigated through the imposition of Mitigation Measures A.3 (a) – (b), which call for implementation of all EIR mitigation measures and the regulations of the new PWD zoning.

b. Transportation, Circulation, and Parking

(1) Impacts B.1, B.1a, and B.1d: Phase I of the Project will affect levels of service at the Embarcadero and Oak Street and Embarcadero and 5th Avenue intersections in 2010. These impacts will be mitigated through imposition of Mitigation Measures B.1 (a) and (d), which call for installation of traffic signals at these unsignalized intersections. After implementation of these mitigation measures, the intersections will operate at acceptable levels of service in the AM and PM peak hours.

(2) Impacts B.2, B.2b, B.2f, B.2g, B.2i, B.2j, B.2k, B.2m, B.2n, B.2o, B.2p, B.2q: At build out, the Project will affect levels of service at the following intersections in 2025:

Broadway and Embarcadero (Impact B.2b), which will be mitigated through the imposition of Mitigation Measure B.2b, which calls for installation of a traffic signal at this unsignalized intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in both the AM and PM peak hours.

West Grand Avenue and Harrison Street (Impact B.2f), which will be mitigated through the imposition of Mitigation Measure B.2f, which calls for optimizing the signal timing for the AM period at this intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in both the AM and PM peak hours.

Lakeshore Avenue and Foothill Boulevard (Impact B.2g), which will be mitigated through the imposition of Mitigation Measure B.2g, which calls for optimizing the signal timing for the AM period at this intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM peak hour.

Lakeshore Avenue and Lake Park Avenue (Impact B.2i), which will be mitigated through the imposition of Mitigation Measure B.2i, which calls for optimizing the signal timing for the PM period at this intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

Embarcadero and 5th Avenue (Impact B.2j), which will be mitigated through the imposition of Mitigation Measure B.2j, which calls for widening the Embarcadero roadway along the project site frontage. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

Embarcadero and I-880 Northbound Off-Ramp (Impact B.2k), which will be mitigated through the imposition of Mitigation Measure B.2k, which calls for widening the Embarcadero roadway along the project site frontage. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

5th Avenue and 7th/8th Streets (Impact B.2m), which will be mitigated through the imposition of Mitigation Measure B.2m, which calls for optimizing the

signal timing for the PM period at this intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

14th Avenue and 7th/12th Streets (southbound) (Impact B.2n), which will be mitigated through the imposition of Mitigation Measure B.2n, which calls for optimizing the signal timing for the PM period at this intersection. After implementation of this mitigation, the average delay at the intersection will be less than under the No Project condition, thus mitigating the project impact.

Foothill Boulevard and 14th Avenue (westbound) (Impact B.2o), which will be mitigated through the imposition of Mitigation Measure B.2o, which calls for optimizing the signal timing for the AM period at this intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

Foothill Boulevard and 14th Avenue (eastbound) (Impact B.2p), which will be mitigated through the imposition of Mitigation Measure B.2p, which calls for optimizing the signal timing for the AM period at this intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

16th Street and 23rd Avenue (Impact B.2q),which will be mitigated through the imposition of Mitigation Measure B.2q, which calls for optimizing the signal timing for the PM period at this intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

(3) Impacts B.3, B.3b, B.3f, B.3g, B.3i, B.3j, B.3k, B.3m, B.3n, B.3o, B.3p, B.3q: Project traffic will contribute to significant cumulative impacts at the following intersections in 2025:

Embarcadero and Broadway (Impact B.3b), which will be mitigated through the imposition of Mitigation Measure B.3b, which calls for installation of a traffic signal at this unsignalized intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in both the AM and PM peak hours.

West Grand Avenue and Harrison Street (Impact B.3f), which will be mitigated through the imposition of Mitigation Measure B.3f, which calls for optimizing the signal timing for the AM peak period at this intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

Lakeshore and Foothill Boulevard (Impact B.3g), which will be mitigated through the imposition of Mitigation Measure B.3g, which calls for optimizing the signal timing for the AM peak period at this intersection. After implementation of this mitigation, the average delay at the intersection will be less than under the 2025 Without Project condition, thus mitigating the project's contribution to this impact to less than cumulatively considerable.

Lakeshore Avenue and Lake Park Avenue (Impact B.3i), which will be mitigated through the imposition of Mitigation Measure B.3i, which calls for optimizing the signal timing for the PM period at this intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

Embarcadero and 5th Avenue (Impact B.3j), which will be mitigated through the imposition of Mitigation Measure B.3j, which calls for widening the Embarcadero roadway along the project site frontage. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

Embarcadero and I-880 Northbound Off-Ramp (Impact B.3k), which will be mitigated through the imposition of Mitigation Measure B.3k, which calls for widening the Embarcadero roadway along the project site frontage. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

5th Avenue and 7th/8th Streets (Impact B.3m), which will be mitigated through the imposition of Mitigation Measure B.3m, which calls for optimizing the signal timing for the PM period at this intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

14th Avenue and 7th/East 12th Streets (southbound) (Impact B.3n, which will be mitigated through the imposition of Mitigation Measure B.3n, which calls for optimizing the signal timing for the PM peak period at this intersection. After implementation of this mitigation, the average delay at the intersection will be less than under the 2025 Without Project condition, thus mitigating the project's contribution to this impact to less than cumulatively considerable.

Foothill Boulevard and 14th Avenue (Westbound) (Impact B.3o), which will be mitigated through the imposition of Mitigation Measure B.3o, which calls for optimizing the signal timing for the AM period at this intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

Foothill Boulevard and 14th Avenue (Eastbound) (Impact B.3p), which will be mitigated through the imposition of Mitigation Measure B.3p, which calls for optimizing the signal timing for the AM period at this intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

16th Street and 23rd Avenue (Impact B.3q), which will be mitigated through the imposition of Mitigation Measure B.3q, which calls for optimizing the signal timing for the PM period at this intersection. After implementation of this mitigation, the intersection will operate at an acceptable level of service in the AM and PM peak hours.

(4) Impact B.4: The Project will generate demand for alternative transportation service for the Project area. This impact will be mitigated through implementation

of Mitigation Measures B.4a and b, which call for the Project site plan to be revised to include transit facilities and operation of a shuttle service.

(5) Impact B.7: The Project will increase the potential for conflicts among different traffic streams. This impact will be mitigated through implementation of Mitigation Measure B.7, which calls for changes in the Project site plan to reconfigure certain intersections, install certain traffic signals, design pedestrian facilities to comply with ADA standards, maintain or reconstruct the fence along the Embarcadero adjacent to the Project site to limit access to the railroad tracks, and install additional warning signage at the at grade crossing along 5th Avenue.

(6) Impact B.10: The Project construction will temporarily affect traffic, parking, and pedestrian conditions. This impact will be mitigated through implementation of Mitigation Measure B.10, which calls for implementation of a construction traffic management plan, including comprehensive traffic control measures, notification procedures, location of staging areas, identification of haul routes, construction fencing, trash removal, complaint procedures, monitoring of surface street damage, and coordination with BART.

c. Air Quality and Meteorological Conditions

(1) Impact C.1: Project construction activities will generate short-term emissions of criteria pollutants. This impact will be mitigated through implementation of Mitigation Measures C.1a and b, which call for implementation of the BAAQMD's basic and enhanced control measures, control measures for a site located near sensitive receptors, and compliance with regulations covering the demolition and removal of asbestos.

d. Hydrology and Water Quality

(1) Impact D.1: The Project construction activities could generate loose and erodable soils that, if not properly managed, could have adverse impacts on water quality. This impact will be mitigated through implementation of Mitigation Measure D.1, which calls for compliance with all NPDES requirements, RWQCB General Construction Permit requirements and all City regulations, including the Creek Protection Permit.

(2) Impact D.2: The Project construction dredging activities could adversely affect aquatic organisms and water quality. This impact will be mitigated through implementation of Mitigation Measure D.2, which calls for compliance with all water quality certification requirements, a Section 404 permit, and approval, by the Dredged Material Management Office.

(3) Impact D.5: Establishment and maintenance of new landscaping and lawns may result in adverse water quality impacts. This impact will be mitigated through implementation of Mitigation Measure D.5, which calls for preparation of a landscape management plan that will control the use, storage, and disposal of pesticides and fertilizers.

(4) Impact D.6: The Project could deplete groundwater supplies or interfere with groundwater recharge and cause contamination of surface water. This impact will

be mitigated through implementation of Mitigation Measure D.6, which calls for compliance with NPDES requirements for dewatering activities.

e. Cultural Resources

(1) Impact E.1: Construction of the Project could adversely affect unknown cultural resources at the site. This impact will be mitigated through implementation of Mitigation Measures E.1a through E.1d, which call for an archival resource evaluation and additional measures based on the results of this evaluation, training of construction personnel, provisions for historical or unique archaeological resources accidentally discovered during construction, and provisions for the discovery of human skeletal remains.

(2) Impact E.2: Project construction could adversely affect unidentified paleontological resources at the site. This impact will be mitigated through implementation of Mitigation Measure E.2, which calls for a paleontologist to document and assess the discovery and prepare an excavation plan for approval by the City.

f. Geology, Soils and Seismicity

(1) Impact F.1: The Project could be subject to the effects of a major earthquake causing structure collapse or damage. This impact will be mitigated through implementation of Mitigation Measure F.1 (as revised in the *Revisions*), which calls for site specific, design level geotechnical investigations by a registered geotechnical engineer including an analysis of expected ground motion from known active faults, a determination of structural design requirements to ensure that structures can withstand ground accelerations expected from known active faults, and a determination of the final design parameters for walls, foundations, slabs, utilities, roadways, parking lots, sidewalks, and other improvements, review and approval by a registered geotechnical engineer, incorporation of all mitigations from the site specific investigations into the final design, compliance with all Code requirements, review by a third-party registered engineer, and approval by the City of Oakland Building Services Division.

(2) Impact F.2: The Project could be exposed to liquefaction and settlement in the event of a major earthquake. This impact will be mitigated through implementation of Mitigation Measure F.2 (as revised in the *Revisions*), which calls for site specific, design level geotechnical investigations for each building site by a registered geotechnical engineer to include engineering requirements for mitigating liquefiable soils using proven methods generally accepted by registered engineers; compliance with CGS Geology Guidelines related to liquefaction; all project plans for foundation design, earthwork, and site preparation must incorporate the mitigations from the site specific studies; incorporation of mitigation from the site specific studies into the structural plans and compliance of the structural plans with all Code requirements; review and approval of each site specific study by the City's geotechnical engineer and the review of all project plans for compliance with the applicable geotechnical investigation and applicable Code requirements by the City Building Services Division.

(3) Impact F.3: Development at the Project site could be subject to settlement. This impact will be mitigated through implementation of Mitigation Measure F.3,

which calls for the preparation of site specific geotechnical investigation and reports that will include accepted and appropriate engineering techniques (such as lightweight fill, geofoam, surcharging, wick drains, deep foundations, structural slabs, hinged slabs, flexible utility connections, and utility hangers) for mitigating the effects of settlement and for construction activities and design criteria to comply with all applicable codes and regulations.

(4) Impact F.4: Development of the Project may include the use of dredged material as fill which would be subject to settlement and subsidence. This impact will be mitigated through implementation of Mitigation Measure F.4, which calls for consolidation and stabilization of dredged material use for fill, geotechnical investigations and reports to include accepted and appropriate measures to reduce any settlement and its effects, appropriate permits, and limiting the use of dredged material as fill to open space areas.

(5) Impact F.5: The Project construction activities could result in loosening and exposure and potentially the loss of topsoil and could expose shoreline area to erosion and the loss of topsoil. This impact will be mitigated through implementation of Mitigation Measure F.5, which calls for compliance with NPDES requirements, RWQCB General Construction Permit requirements and all City regulations, including Creek Protection Permits.

g. Noise

(1) Impact G.2: Noise generated by the Project operations could exceed City standards and disturb Project occupants and nearby residents. This impact will be mitigated through implementation of Mitigation Measure G.2, which calls for incorporating certain design features related to shielding building equipment and the location of truck delivery areas.

(2) Impact G.3: The Project will locate new residential uses in a noise environment that is above the General Plan Noise Element "normally acceptable" level. This impact will be mitigated through implementation of Mitigation Measures G.3a and b, which call for compliance with the requirements of Title 24 to achieve an interior noise level of less than 45 dBA and notice to future residents regarding railroad crossing noise.

h. Hazardous Materials

(1) Impact H.1: During remediation, demolition and construction activities, workers, the public, and the environment may be exposed to adverse conditions related to hazardous materials handling. This impact will be mitigated through implementation of Mitigation Measures H.1a through e, which call for preparation of a soil and groundwater clean up plan, compliance with all applicable OSHA regulations, compliance with all local and state protocols for the handling, storage and transport of any hazardous or potentially hazardous waste, proper classification of soils for offsite disposal, sampling of soil for reuse or disposal, containment and proper treatment or disposal of groundwater generated during construction activities, and preparation and approval of a Sampling and Analysis Plan for dredging.

(2) Impact H.2: During demolition and construction, hazardous building components could expose workers, the public and the environment to adverse

conditions related to hazardous materials handling. This impact will be mitigated through imposition of Mitigation Measures H.2a through d, which call for a pre-demolition ACM survey, preparation and implementation of an asbestos abatement plan, preparation and implementation of a lead-based paint abatement plan, a pre-demolition PCB survey and abatement of known or suspected PCBs prior to demolition and construction activities, and proper removal any UST and remediation of any leaks from the UST.

(3) Impact H.3: Hazardous materials used during construction could be released into the environment. This impact will be mitigated through implementation of Mitigation Measure H.3, which calls for the use of construction best management practices to minimize the potential negative effects to groundwater and soils, including the specific measures outlined in this mitigation.

i. Biological Resources/Wetlands

(1) Impact I.2: The Project could result in substantial adverse effect on jurisdictional wetlands or waters of the U.S. This impact will be mitigated through implementation of Mitigation Measures I.2a through e, which call for and include detailed requirements for preparation of a Corps-verified wetland delineation, avoidance of wetlands, implementation of BMPs, protection of the existing wetlands restoration project, obtaining any necessary regulatory permits and Agency approvals including Section 404/Section 10 permits, Section 401 Water Quality Certification, and a BCDC permit, and compensatory mitigation as may be required by the Corps, RWQCB or BCDC. This mitigation contains detailed requirements and performance standards and requires compliance with stringent regulatory requirements of other agencies.

(2) Impact I.3: The Project construction activities could have a substantial adverse effect on fisheries resources in the Oakland inner harbor. This impact will be mitigated through implementation of Mitigation Measure 1.3, which calls for implementation of certain mitigation called for in the Long Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region.

(3) Impact I.4: The Project construction activities could have an adverse effect on nesting habitat for breeding raptors and passerine birds. This impact will be mitigated through the implementation of Mitigation Measure I.4a and b, which call for and provide detailed requirements for construction timing considerations and preconstruction surveys and avoidance of nesting raptors and birds.

(4) Impact I.5: The Project could have a substantial adverse effect on special-status nesting roosting bats. This impact will be mitigated through implementation of Mitigation Measure I.5 that calls for and provides detailed requirements for pre-demolition building surveys, postponement of demolition if nursery sites are discovered, relocation of roosting bats, and creation of bat roosting structures.

28. Under Public Resources Code section 21081(a)(2) and (3) and CEQA Guidelines section 156091 and 15092, and Chapter 17.158 of the Municipal Code, the City determines that the following significant effects on the environment, as reflected in the EIR, are unavoidable and

are acceptable due to the overriding considerations described below either because (a) the changes and alterations that could mitigate or avoid the significant impact are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency and the City cannot ensure that the mitigation measure will be implemented or (b) specific economic, legal, social, technological or other considerations, including the provision of employment opportunities for highly trained workers, make infeasible mitigation measures or alternatives identified by the EIR. As noted above in paragraph no. 25, in making these findings the City adopts, ratifies, and incorporates by reference all of the information, explanation, reasoning, and analysis contained in the EIR (which includes the Revisions) and other evidence in the record. The full text of the mitigation measures referred to in this paragraph are contained in the Mitigation Monitoring and Reporting Program and the City relies on the full text of the Mitigation Measures and requirements of the Mitigation Monitoring and Reporting Program in making these findings. Additionally, the findings below rely on the findings regarding the infeasibility of alternatives set forth herein.

a. Traffic, Circulation, and Parking

(1) Impact B.1b: Phase I of the Project will affect the intersections of 5th Street and Broadway. No feasible mitigations measures are available to reduce this impact to a less than significant level because of the constrained capacity of the Webster Tube, which cannot be widened. Pursuant to Section 21081(a)(3), specific considerations make mitigation measures and alternatives infeasible.

(2) Impact B.1c: Phase I of the Project will affect the intersection 6th and Jackson Streets at the I-880 Northbound On-Ramp. This impact could be reduced to a less than significant level through implementation of Mitigation Measure B.1c, which calls for optimization of the traffic signal at this intersection. Although the City has adopted this mitigation measure for the Project, its implementation is uncertain because it requires the approval of Caltrans. Consequently, the City finds this impact is significant and unavoidable. The City further finds if Caltrans approves this measure, the impact will be reduced to a less than significant level. Thus, pursuant to Section 21081(a)(2), the implementation of this mitigation and should be adopted by Caltrans. Further, pursuant to Section 21081(a)(3), specific considerations (e.g., approval and implementation required by Caltrans) make the mitigation measure infeasible and make alternatives infeasible.

(3) Impact B.1e: Phase I of the Project will affect the intersection Embarcadero and I-880 Northbound Off-Ramp – 6th Avenue. This impact could be reduced to a less than significant level through implementation of Mitigation Measure B.1e, which calls for installation of a traffic signal at this intersection. Although the City has adopted this mitigation measure for the Project, the implementation of this mitigation measure is uncertain because it requires the approval of Caltrans. Consequently, the City finds this impact is significant and unavoidable. The City further finds if Caltrans approves this measure, the impact will be reduced to a less than significant level. Thus, pursuant to Section 21081(a)(2), the implementation of this mitigation measure should be adopted by Caltrans. Further, pursuant to Section 21081(a)(3), specific considerations (e.g., approval and implementation required by Caltrans) make the mitigation measure infeasible and make alternatives infeasible.

(4) Impact B.2a: Buildout of the Project will affect the intersection of Atlantic Avenue and Webster Street. This impact could be reduced to a less than significant level through implementation of Mitigation Measure B.2a, which calls for payment of a fair share fee for certain improvements at this intersection. Although the City has adopted this mitigation measure for the Project, its implementation is uncertain because it requires the approval of, and implementation by, the City of Alameda. Consequently, the City finds that this impact is significant and unavoidable. The City further finds that if Alameda approves this measure, the impact will be reduced to a less than significant level. Thus, pursuant to Section 21081(a)(2), the implementation of this mitigation is the responsibility of another public agency and should be adopted by that agency. Further, pursuant to Section 21081(a)(3), specific considerations (e.g., approval and implementation required by the City of Alameda) make the mitigation measure infeasible and make alternatives infeasible.

(5) Impact B.2c: Buildout of the Project will affect the intersection of 5th Street and Broadway. No feasible mitigations measures are available to reduce this impact to a less than significant level because of the constrained capacity of the Webster Tube, which cannot be widened. Pursuant to Section 21081(a)(3), specific considerations make mitigation measures and alternatives infeasible.

(6) Impact B.2d: Buildout of the Project will affect the intersection of 5th and Oak Streets at the I-880 Southbound On-Ramp. This impact could be reduced to a less than significant level through implementation of Mitigation Measure B.2d, which calls for optimization of the traffic signal at this intersection. Although the City has adopted this mitigation measure for the Project, its implementation is uncertain because it requires the approval of, and implementation by, Caltrans. Consequently, the City finds that this impact is significant and unavoidable. The City further finds that if Caltrans approves this measure, the impact will be reduced to a less than significant level. Thus, pursuant to Section 21081(a)(2), the implementation of this mitigation is the responsibility of another public agency and should be adopted by that agency. Further, pursuant to Section 21081(a)(3), specific considerations (e.g., approval and implementation required by Caltrans) make the mitigation measure infeasible and make alternatives infeasible.

(7) Impact B 2e: Buildout of the Project will affect the intersection of 6th and Jackson Street at I-880 Northbound On-Ramp. No feasible mitigation measures are available to reduce this impact to a less than significant level because of the constrained right-of-way, which prevents the addition of turn lanes or other similar physical improvements at this intersection. Thus, pursuant to Section 21081(a)(3), specific considerations (e.g., legal and technological constraints) make mitigation measures and alternatives infeasible.

(8) Impact B.2h: Buildout of the Project will affect the intersection of Lakeshore Avenue and MacArthur Boulevard. No feasible mitigation measures are available to reduce this impact to a less than significant level because of the constrained right-of-way, which prevents the addition of turn lanes or other similar physical improvements at this intersection. Pursuant to Section 21081(a)(3), specific considerations (e.g., legal and technological constraints) make mitigation measures and alternatives infeasible.

(9) Impact B.2l: Buildout of the Project will affect the intersection of Embarcadero and I-880 Southbound On-Ramp – 10th Avenue. This impact could be reduced to a less than significant level through implementation of Mitigation Measure B.2l, which calls for installation of a traffic signal at this intersection. Although the City has adopted this mitigation measure for the Project, its implementation is uncertain because it requires the approval of, and implementation by, Caltrans. Consequently, the City finds that this impact is significant and unavoidable. The City further finds that if Caltrans approves this measure, the impact will be reduced to a less than significant level. Thus, pursuant to Section 21081(a)(2), the implementation of this mitigation is the responsibility of another public agency and should be adopted by that agency. Further, pursuant to Section 21081(a)(3), specific considerations (e.g., approval and implementation required by Caltrans) make the mitigation measure infeasible.

(10) Impact B.3a: Buildout of the Project will contribute to the cumulative conditions at the intersection of Atlantic Avenue and Webster Street. This impact could be reduced, although not to a less than significant level, with implementation of Mitigation Measure B.3a, which calls for the Project to pay its fair share of the cost of the intersection reconfiguration improvements proposed for this intersection by the City of Alameda. Although the City has adopted this mitigation measure for the Project, its implementation is uncertain because it requires the approval of, and implementation by, the City of Alameda. Consequently, the City finds that this impact is significant and unavoidable. The City further finds that if Alameda approves this measure, the impact or the project's contribution to the impact will be reduced to a less than significant level. Thus, pursuant to Section 21081(a)(2), the implementation of this mitigation is the responsibility of another public agency and should be adopted by that agency. Further, pursuant to Section 21081(a)(3), specific considerations (e.g., approval and implementation required by the City of Alameda) make the mitigation measure infeasible and make alternatives infeasible.

(11) Impact B.3c: Buildout of the Project will contribute to the cumulative conditions at the intersection of 5th Street and Broadway. No feasible mitigation measures are available to reduce this impact to a less than significant level, because of the constrained capacity of the Webster Tube, which cannot be widened. Pursuant to Section 21081(a)(3), specific considerations (e.g., legal and technological constraints) make mitigation measures and alternatives infeasible.

(12) Impact B.3d: Buildout of the Project will contribute to the cumulative conditions at the intersection of 5th and Oak Streets at the I-880 southbound On-Ramp. This impact could be reduced to a less than significant level through implementation of Mitigation Measure B.2d, which calls for optimization of the traffic signal at this intersection. . Although the City has adopted this mitigation measure for the Project, its implementation is uncertain because it requires the approval of, and implementation by, Caltrans. Consequently, the City finds that this impact is significant and unavoidable. The City further finds that if Caltrans approves this measure, the impact will be reduced to a less than significant level. Thus, pursuant to Section 21081(a)(2), the implementation of this mitigation is the responsibility of another public agency and should be adopted by that agency. Further pursuant to Section 21081(a)(3), specific considerations (e.g., approval and implementation required by Caltrans) make the mitigation measure infeasible and make alternatives infeasible.

(13) Impact B.3e: Buildout of the Project will contribute to the cumulative conditions at the intersection of 6th and Jackson Street at the I-880 Northbound On-Ramp. No feasible mitigation measures are available to reduce this impact to a less than significant level, because of the constrained right-of-way at this location. Pursuant to Section 21081(a)(3), specific considerations (e.g., legal and technological constraints) make mitigation measures and alternatives infeasible.

(14) Impact B.3h: Buildout of the Project will contribute to the cumulative conditions at the intersection of Lakeshore Avenue and MacArthur Boulevard. No feasible mitigation measures are available to reduce this impact to a less than significant level, because of the constrained right-of-way at this location. Pursuant to Section 21081(a)(3), specific considerations (e.g., legal and technological constraints) make mitigation measures and alternatives infeasible.

(15) Impact B.3l: Buildout of the Project will contribute to the cumulative conditions at the intersection of Embarcadero and I-880 Southbound On-Ramp -10th Avenue. This impact could be reduced to a less than significant level through implementation of Mitigation Measure B.3l, which calls for installation of a traffic signal at this intersection. Although the City has adopted this mitigation measure for the Project, its implementation is uncertain because it requires the approval of, and implementation by, Caltrans. Consequently, the City finds that this impact is significant and unavoidable. The City further finds that if Caltrans approves this measure, the impact will be reduced to a less than significant level. Thus, pursuant to Section 21081(a)(2), the implementation of this mitigation is the responsibility of another public agency and should be adopted by that agency. Further, pursuant to Section 21081(a)(3), specific considerations (e.g., approval and implementation required by Caltrans) make the mitigation measure infeasible and make alternatives infeasible.

(16) Impact B.9: The Project will contribute to 2025 traffic conditions on regional and local roadways. No feasible mitigation measures are available to reduce this impact to a less than significant level, because of constrained right-of-ways, the inherent difficulties in widening freeways, and the lack of a regional mitigation fee program. Pursuant to Section 21081(a)(3), specific considerations (e.g., legal and technical constraints) make mitigation measures and alternatives infeasible.

b. Air Quality and Meteorological Conditions

(1) Impact C.7: The Project will contribute to cumulative regional air pollution. This impact could be reduced, although not to a less than significant level, with the implementation of Mitigation Measures C.7a through k, which call for implementation of certain rideshare, transit, shuttle, and bicycle and pedestrian measures. No feasible mitigation measures are available to reduce this impact to a less than significant level. Thus, pursuant to Section 21081(a)(3), specific considerations make mitigation measures and alternatives infeasible.

c. Cultural Resources

(1) Impact E.3: The Project will result in the substantial demolition of the Ninth Avenue Terminal. This impact could be reduced, but not to a less than significant level, through the implementation of Mitigation Measures E.3a and b, which call for documentation of the historic resource and reuse and rehabilitation of the bulkhead building. No feasible alternatives are available to reduce this impact to a less than significant level for the reasons set forth below. Thus, pursuant to Section 21081(a)(3), specific considerations make mitigation measures and alternatives infeasible.

Additionally, the City is considering responses to the Request for Proposals for the preservation of between 40,000 and 90,000 square feet of the Terminal Building pursuant to Condition of Approval 25.c. Even if a proposal is accepted by the City pursuant to Condition of Approval 25.c. the impact would remain significant and unavoidable.

(2) Impact E.4: The Project will substantially alter the wharf structure supporting the Ninth Avenue Terminal and surrounding areas. This impact could be reduced, but not to a less than significant level, through the implementation of Mitigation Measures E.3a and b, which call for documentation of the historic resource and reuse and rehabilitation of the bulkhead building. No feasible alternatives are available to reduce this impact to a less than significant level for the reasons set forth below. Thus, pursuant to Section 21081(a)(3), specific considerations make mitigation measures and alternatives infeasible.

(3) Impact E.5: Although the Project buildings have not been designed, the Project may not be architecturally compatible with the remaining bulkhead building and Project buildings will be located within 100 feet of the bulkhead building. No feasible alternatives are available to reduce this impact to a less than significant level for the reasons set forth below. Thus, pursuant to Section 21081(a)(3), specific considerations make mitigation measures and alternatives infeasible.

(4) Impact E.8: The Project will contribute to the cumulative loss of historic resources. This impact could be reduced, but not to a less than significant level, through implementation of Mitigation Measures E.8, which call for a historical exhibit in the bulkhead building and park design elements that reference the Terminal building's footprint and height. No feasible alternatives are available to reduce this impact to a less than significant level for the reasons set forth below. Thus, pursuant to Section 21081(a)(3), specific considerations make mitigation measures and alternatives infeasible.

b. Noise

(1) Impact G.1: The Project construction activities will generate noise levels above City standards and disturb noise-sensitive areas. This impact could be reduced, but not to a less than significant level, through implementation of Mitigation Measures G.1a through d, which call for limiting the hours of construction, use of best available noise control techniques, special provisions for the use of impact tools, noise control measures for stationary

sources, limitations on the number of consecutive days that activities such as pile driving may occur, special attenuation provisions for pile driving or other extreme noise generating construction impacts, and procedures for tracking and responding to noise complaints from construction. No feasible mitigation measures are available to reduce this impact to a less than significant level. Thus, pursuant to Section 21081(a)(3), specific considerations make mitigation measures and alternatives infeasible.

(2) Impact G.4: The Project will locate noise sensitive uses in a noise environment where outdoor noise levels are above the General Plan's "normally acceptable" level. No feasible mitigation measures are available to reduce this impact to a less than significant level as set forth in the Draft EIR. No feasible alternatives are available to reduce this impact to a less than significant level for the reasons set forth below and in Exhibit D, General Findings. Thus, pursuant to Section 21081(a)(3), specific considerations make mitigation measures and alternatives infeasible.

29. Under Public Resources Code section 21081, CEQA Guidelines section 15091 and 15092 and Chapter 17.158 of the Municipal Code, the City recognizes that some mitigation measures require action by, or cooperation from, other agencies. For each mitigation measure that requires the cooperation or action of another agency, the City finds that adoption and/or implementation of each of those mitigation measures can and should be adopted and/or implemented by that other agency.

IV. FINDINGS REGARDING PROJECT ALTERNATIVES AND OPTIONS FOR REUSE OF THE NINTH AVENUE TERMINAL

30. The City finds that specific economic, social, environmental, technological, legal or other considerations make infeasible the alternatives to the Project and justify approval of the Project despite remaining impacts, as more fully discussed in the Statement of Overriding Considerations below.

31. The City adopts the EIR's analysis and conclusions regarding the alternatives previously considered but rejected. The City adopts the EIR's analysis and conclusions with respect to all of the alternatives discussed as supplemented by the findings below.

32. The four potentially feasible alternatives analyzed in the EIR, represent a reasonable range of potentially feasible alternatives that reduce one or more significant impacts of the Project. These alternatives include the (1) No Project Alternative; (2) No Project Estuary Policy Plan Alternative; (3) Enhanced Open Space / Partial Ninth Avenue Terminal Preservation and Adaptive Ruse Alternative; and (4) Reduced Development / Ninth Avenue Terminal Preservation Alternative. As presented in the EIR, the alternatives were described and compared with each other and with the Project. The Reduced Development / Ninth Avenue Terminal Preservation Alternative was identified as the environmentally superior alternative. Additionally, the City examined a "Sub-alternative: Full Ninth Avenue Terminal Preservation and Adaptive Reuse." This is a stand-alone alternative for the Ninth Avenue Terminal that could be included in the Project or any of the development alternatives.

33. The City certifies that it has independently reviewed and considered the information on alternatives provided in the EIR and in the record. The EIR reflects the City's independent judgment as to alternatives. The City finds that the Project provides the best balance between the project sponsor's objectives, the City's goals and objectives, the Project's benefits as described below in the Statement of Overriding Considerations, and mitigation of environmental impacts to the extent feasible. The alternatives proposed and evaluated in the EIR are rejected for the reasons stated in the EIR and for the following reasons. Each individual reason presented below constitutes a separate and independent basis to reject the alternative as being infeasible, and, when the reasons are viewed collectively, provide an overall basis for rejecting the alternative as being infeasible.

34. The City has reviewed the three reports prepared by EPS and submitted by the project sponsor, including: (a) the "Oak to 9th Mixed Use Project Fiscal Impact Analysis" dated July 29, 2005 and updated May, 2006 ("EPS Fiscal Analysis"); (b) the "Oak to 9th Mixed-Use Project Alternatives 1B, 2, and 3 Feasibility Analysis" dated January 31, 2006 ("EPS Alternatives Analysis"); and (c) the "Oak to 9th Mixed-Use Project Ninth Avenue Terminal Reuse Feasibility Analysis" dated February 21, 2006 ("EPS Terminal Reuse Feasibility Analysis"). After reviewing these EPS reports, the City has determined that the reports constitute credible, expert data, analysis, and evidence regarding the fiscal impacts and economic feasibility of the Project and the alternatives. The City has relied on the information, analysis, and conclusions in these EPS reports in its findings regarding the Project alternatives as more specifically set forth below.

35. <u>No Project/No Development Alternative (Alternative 1):</u> Under this alternative, none of the development proposed under the Project would occur. Without the Project, the site is likely to remain in its current state for the foreseeable future. Thus, none of the environmental impacts associated with the Project would occur. This alternative is rejected as infeasible for the following reasons: (a) This alternative would not attain any of the objectives of the Project; (b) It would not increase open space, parks, public access, and views to and along the Estuary as called for in the Estuary Policy Plan; (c) It would not improve existing open space and parks in the Estuary area as called for in the Estuary Policy Plan; (d) No improvement of the existing shoreline and marinas would occur and Clinton Basin Marina would remain functionally obsolete; (e) Uses that generate contamination and the potential for runoff into the Estuary would continue to operate on the site and pose a potential threat to the adjacent Estuary; (f) Comprehensive remediation of the site by the developer would not occur; (g) The alternative would not be consistent with the goals of the Redevelopment Plans and the Estuary Policy Plan to revitalize and redevelop these underused, blighted, industrial parcels and create an active, economically vibrant, publicly accessible waterfront area; (h) The local economy would lose the benefits of this Project, because additional retail spending by Project residents in the surrounding areas and the City would not occur; (i) The alternative would not provide the City with any of the fiscal benefits of the Project as documented in the EPS Fiscal Analysis, including revenues from property taxes, property transfer, sales taxes, utility user fees, motor vehicle fees, business license taxes, new household expenditures, redevelopment revenues including housing set-asides, and other various local taxes and fees; (j) Over 3,100 new housing opportunities would be lost; (k) No new construction or permanent jobs would be created, which would further disadvantage the local job market and economy; and (l) The Ninth Avenue Terminal building and wharf would remain in its current state and would not meet current building, seismic, and

other safety codes. No economically viable use of the Terminal building is likely in its current state. Given these considerations, the City has determined that an economically feasible rehabilitation and reuse of some portion of the Terminal building and seismic upgrade of the wharf would best promote the health, safety, and welfare of the community by creating a code-compliant, active reuse of some portion of the Terminal building, without creating a burdensome economic liability for the City, thereby encouraging Oakland residents and visitors to visit the waterfront. This goal would not be achieved under this alternative.

36. No Project/Estuary Policy Plan (Alternative 1B): Under this alternative, development would occur in accordance with the existing Estuary Policy Plan. This alternative would reduce certain of the Project's significant traffic and air quality impacts and would have the same significant unavoidable impacts on historic resources, because it includes the demolition of the Ninth Avenue Terminal and portions of the associated wharf to create a new large scale open space area. This alternative is rejected for the following reasons: (a) This alternative would not provide any new housing and would result in the loss of 3,100 new housing opportunities, thereby substantially reducing the City's ability to meet its housing goals; (b) Based on the EPS Alternatives Analysis, which examined the alternative's residual land value (i.e. a comparison of the cost of developing and operating the building prototype against the revenues and value that can be achieved for the uses at this site), this alternative is not financially feasible because the type and amount of development results in the costs of development exceeding revenues, thereby producing a negative IRR (internal rate of return); (c) The EPS Alternatives Analysis found that this alternative produced an estimated net shortfall of $257,267,076; (d) The EPS Alternatives Analysis found that conventional financing from lenders and investors would be very difficult to obtain given the substantial financial shortfall; (e) The EPS Alternatives Analysis determined that undertaking this alternative would require significant public subsidies or significant improvements in future market conditions; and (f) The EPS Alternatives Analysis determined that this alternative could not support the open space maintenance, security, management, and insurance costs associated with development of the site.

37. Enhanced Open Space / Partial Ninth Avenue Terminal Preservation and Adaptive Reuse Alternative (Alternative 2): Under the alternative, development would include 1,800 residential units, 95,000 square fee of commercial space, 40.6 acres of parks and open space, realignment of the Embarcadero to curve through the eastern portion of the site, and preservation and reuse of approximately 88,000 square feet of the Ninth Avenue Terminal building, consistent with the Tidelands Trust land use restrictions. This alternative would reduce certain of the Project's significant traffic impacts, would reduce, but not avoid, the significant unavoidable impacts to historic resources, would increase existing hazardous wind conditions in the open space areas, and otherwise would have impacts similar to the Project. This alternative is rejected for the following reasons: (a) This alternative would substantially reduce the number of new housing opportunities on the site, thereby impeding the City's ability to meet its housing goals; (b) The realignment of the Embarcadero would inappropriately place a major thoroughfare along a major new open space area and surrounding a new residential area causing land use conflicts and separating the new open space from the other uses on the site; (c) Based the EPS Alternatives Analysis, which examined the alternative's residual land value (i.e. a comparison of the cost of developing and operating the building prototype against the revenues and value that can be achieved for the uses at this site), this alternative is not financially feasible because the type and amount of development results in the costs of development exceeding

revenues, thereby producing a negative IRR (internal rate of return); (d) The EPS Alternatives Analysis found that this alternative produced a net estimated net shortfall of $172,126,631; (d) The EPS Alternatives Analysis found that conventional financing from lenders and investors would be very difficult to obtain given the substantial financial shortfall; (f) The EPS Alternatives Analysis determined that undertaking this alternative would require significant public subsidies or significant improvements in future market conditions; and (g) The alternative would reduce the ability to provide a new public open space and access to the waterfront in the location of the Ninth Avenue Terminal as called for in the Estuary Policy Plan. Additionally, the conclusions regarding the infeasibility of reusing this portion of the Ninth Avenue Terminal as a stand-alone development are presented below.

38. Reduced Development / Ninth Avenue Terminal Preservation (Alternative 3): Under this alternative, development would include 540 residential units, 10,000 square feet of retail/restaurant use, 39.9 acres of parks and open space and it would preserve and reuse the Ninth Avenue Terminal. This is the environmentally superior alternative and would reduce most of the Project's significant unavoidable impacts, except for one traffic impact, the impact on the historic wharf structure, and the construction noise impact. This alternative would result in exposing the waterfront open space area to the existing hazardous wind conditions. This alternative is rejected for the following reasons: (a) The alternative would substantially reduce the number of new housing opportunities on the site, thereby impeding the City's ability to meet its housing goals; (b) Based the EPS Alternatives Analysis, which examined the alternative's residual land value (i.e. a comparison of the cost of developing and operating the building prototype against the revenues and value that can be achieved for this uses at this site), this alternative is not financially feasible because the type and amount of development results in the costs of development exceeding revenues, thereby producing a negative IRR (internal rate of return); (c) The EPS Alternatives Analysis found that this alternative produced an estimated net shortfall of $308,132,863; (d) The EPS Alternatives Analysis found that conventional financing from lenders and investors would be very difficult to obtain given the substantial financial shortfall; (e) The EPS Alternatives Analysis determined that undertaking this alternative would require significant public subsidies or significant improvements in future market conditions; and (f) The alternative would reduce the ability to provide a new public open space and access to the waterfront in the location of the Ninth Avenue Terminal as called for in the Estuary Policy Plan. The infeasibility of reusing the Ninth Avenue Terminal as a stand-alone development is presented in the findings below.

39. Sub Alternative: Full Ninth Avenue Terminal Preservation and Adaptive Reuse: This sub-alternative would retain and reuse the Ninth Avenue Terminal and related wharf structure. This sub-alternative would avoid the significant impact to the Terminal. This sub-alternative is a stand-alone alternative for the Terminal and could be combined with the Project or any of the development alternatives. This alternative is rejected for the following reasons: (a) The alternative would preclude using the Terminal area for open space and park uses and would preclude new views of the waterfront from this location as called for in the Estuary Policy Plan; and (b) Reuse of the Terminal is financially infeasible as a stand-alone project for the reasons set forth below

40. In response to questions raised during the Planning Commission consideration of the Project and at the March 28, 2006 City Council hearing on the Project, three additional

documents were prepared in connection with the feasibility of preserving the Terminal. First, the PFM Group reviewed the EPS reports and financial data from the project sponsors. (See the PFM Group memorandum to Dan Vanderpriem and Oakland Harbor Partners, dated June 1, 2006 and attached to the staff report). PFM found the following: (a) even adjusting cost and revenues to remove costs such as retrofitting the pier and landscaping the open area, none of the alternatives for preserving the Terminal, including the project, show a positive cash flow; (b) the amount of the annual losses of the alternatives increases with the increase in size and complexity of the alternatives; (c) the risk associated with the larger preservation alternatives are greater than those associated with the Project; (d) additional capital investment to eliminate loan debt service would reduce the Project to an infeasible rate of return; (e) the project sponsor's financial assumptions are reasonable given the long term nature of the Project and current financial conditions; and (f) the return on equity for the Project is in the lower quartile of the range of returns on equity for similar projects and the Project is a relatively high risk development.

Additionally, EPS prepared a report entitled "Subsidization of the Chelsea Piers and the Torpedo Factory Adaptive Reuse Projects" dated May 2006 (attached to the staff report). This report shows that both the Chelsea Piers and Torpedo Factory projects have required substantial public subsidies. Moreover, these projects are substantially different from the Ninth Avenue Terminal in terms of market dynamics, construction costs, economics and allowable uses. Consequently, the projects cannot feasibly serve as a model for preservation of the Terminal.

Finally, Novogradac & Company, certified public accountants, reviewed the potential impact of federal rehabilitation tax credits and federal new market tax credits on the economic feasibility of the Project in connection with preservation of the Terminal. Novogradac found that, even assuming best case conditions, the funding shortfall for the preservation alternatives ranges from $19.6 million to $28.9 million. Consequently, Novogradac concluded that "maintaining the Shed as is or reducing it down to the 1927 size of the building is not economically feasible with the use of federal Rehabilitation Tax Credits or New Market Tax Credits."

41. Options For Reusing the Ninth Avenue Terminal Building: The EPS Terminal Reuse Feasibility Analysis examined various proposed reuse scenarios for the Ninth Avenue Terminal as a stand-alone project, because the Terminal would be owned and operated by a governmental or other entity, not the project sponsor. The scenarios examined included the Project proposal to reuse the bulkhead building, the EIR alternative (Alternative 2) to reuse the 1920's portion of the Terminal, and five options proposed by a study prepared by students and submitted as a comment on the DEIR, entitled "The Ninth Avenue Terminal, A Feasibility Study For Adaptive Reuse." For the reuse scenarios, EPS compared the projected revenues to projected costs to determine if financial shortfalls would occur. Reuse costs were based on estimates provided by Rutherford and Chekene for the structural upgrades that would be needed and construction costs provided by Devcon Construction, Inc. The EPS findings are summarized as follows:

a. Project Proposal: The Project proposal for reuse of the bulkhead building has the greatest likelihood of the various alternatives and options evaluated to be fully occupied. Although this proposal results in a financial shortfall, it is the lowest shortfall of all the options

and alternatives examined. This proposal is the most financially feasible of all the proposals studied.

b. EIR Alternative 2: Based on public comments, the EPS Terminal Reuse Feasibility Analysis examined the financial feasibility of a proposed set of uses that could be developed under EIR Alternative 2, including a visitor's/cultural/community center, the Philbrick Boat Works, other marine-related space, food concessions, boat and bike rentals and other commercials uses. EPS found that, although the market would support these uses, not all uses could be supported at the square footage proposed, thereby reducing the revenue potential of this proposal. Additionally, the EPS Terminal Reuse Feasibility Analysis determined that additional parking must be provided to adequately support the feasibility of this proposal. EPS concluded that this proposal would not be financially feasible, because it results in a shortfall of $22,049,302 to $23,433,349.

c. Student Study Option 1: This option proposes to reuse the Terminal as a conference/special events center. EPS examined the site's ability to compete in the market for conference center services. Based on the EPS analysis, this alternative is economically infeasible for the following reasons: (1) Although the site is suitable for a stand-alone convention center, the lack of full-service hotel facilities within walking distance would make it difficult for the proposed convention center to compete with similar facilities in the area; (2) Convention facilities already exist nearby – the Oakland Convention Center and at two Jack London square hotels, the Jack London Inn and the Waterfront Plaza hotel; (3) Current utilization at the Oakland Convention Center indicates that there is not excess demand to justify new facilities and any new facilities may adversely affect the Convention Center; (4) The financial difficulties of the recently-closed Henry J. Kaiser center illustrate the difficulties of running a stand-alone convention center; (5) Given the inadequate parking provided, the proposed uses would need to be reduced in order to accommodate the needed parking, thereby reducing leasable square footage and revenue; and (6) This option has an estimated financial shortfall of $33,639,407.

d. Student Study Option 2: This option proposes a regional recreation center including a grocery store, sporting goods store, and cafes/restaurants. EPS examined the desirability of the site for grocery tenants and the location's ability to support a large recreation center. Based on the EPS analysis, this alternative is economically infeasible for the following reasons: (1) The waterfront does not offer a grocery tenant a competitive advantage; (2) This alternative does not provide ancillary retail uses and services that help attract supermarket customers; (3) It is uncertain whether the site can support a large recreation space because of the number of similar facilities in the region, including 30 recreation centers operated by the City of Oakland and the Bladium in the City of Alameda.

e. Student Study Option 3: This option includes a conference center, a theater/club, meeting rooms, retail and restaurant space. EPS examined the site's ability to compete in the market for conference center services, and the need for another conference center in the area. Based on the EPS analysis, this alternative is economically infeasible for the following reasons: (1) although the site is suitable for a stand-alone convention center, the lack of full-service hotel facilities within walking distance would make it difficult for the proposed convention center to compete with similar facilities in the area; (2) The suggested added uses, such as retail, community and performing arts spaces, would likely conflict with the convention

space; (3) Convention facilities already exist nearby – the Oakland Convention Center and at two Jack London square hotels, the Jack London Inn and the Waterfront Plaza hotel; (4) Current utilization at the Oakland Convention Center indicates that there is not excess demand to justify new facilities and any new facilities may adversely affect the Convention Center; (5) This option would have an estimated financial shortfall of $35,552,683.

f. Student Study Option 4: This option proposes a large public market, a maritime history center, a restaurant and a café. EPS examined the site's ability to support almost 31,000 square feet of public market use. Based on the EPS analysis, this alternative is economically infeasible for the following reasons: (1) The square footage dedicated to market stalls is unusually large for this type of facility; and, (2) Direct competition with Jack London Square's Harvest Hall would likely make it difficult to attract tenants.

g. Student Study Option 5: This option proposes artists' related uses and a café/restaurant. Based on the EPS analysis, this option is economically infeasible for the following reasons: (1) The spaces are quite large and there are likely a limited number of artists who could afford this type of space; (2) Discussions with operators suggest that affordable live-work artists' studios are highly desirable, but residential use is not permitted at the Terminal site, because the land is held in public trust; (3) Therefore, it is unlikely that the studio spaces would generate enough revenue to make this a viable project.

42. Condition of Approval No. 25.c.: Although the City finds, based on the administrative record, that it is not economically feasible to preserve the Terminal, it is providing the opportunity for an entity to provide an alternative funding source by responding to a Request for Proposals to preserve and reuse 40,000 to 90,000 square feet of the Terminal in accordance with Condition 25.c. A proposal has been submitted by an entity entitled the Ninth Avenue Terminal Partners (NATP). The City has considered the feasibility of this proposal by reviewing the proposal as well as an analysis of the proposal by Architectural Dimensions, consultants to developers of the Oak to Ninth Project. To date, the NATP proposal has not been demonstrated to be feasible (due, e.g., to insufficient, unsubstantiated data and estimates, as explained in the Architectural Dimensions critique) and the City's previous infeasibility determinations remain valid. Notwithstanding the foregoing, after the completion of the City's review and evaluation of the NATP proposal, the City will make a determination regarding any options proposed. In the event that the City does not approve an alternate reuse option pursuant to the terms of Condition No. 25.c, the project sponsor will be required to preserve 20,000 square feet of the Terminal building, instead of the 15,000 square feet proposed under the Project. If the City approves an alternative reuse option, the Project will continue to result in a significant, unavoidable impact to an historic resource and the findings related to that impact are contained herein.

V. STATEMENT OF OVERRIDING CONSIDERATIONS

43. The City finds that each of the specific economic, legal, social, technological, environmental, and other considerations described below and the benefits of the Project summarized below independently outweigh the remaining significant adverse impacts of the projects and is an overriding consideration independently warranting approval of the Project. The remaining significant adverse impacts are acceptable in light of each of these overriding considerations.

44. In furtherance of City goals and policies, the Project will revitalize the waterfront in this area of the Oakland Estuary and convert vacant and underused parcels into a productive, vibrant, cohesive, planned mixed-use community.

45. The Project will provide over 32 acres of public open space, parks, and pedestrian and bicycle trails in the waterfront area along the Oakland Estuary that will enhance and expand public access to this area in accordance with the goals and policies of the Estuary Policy Plan. The Bay Trail will be extended through the site. With these improvements, the Project will allow Oakland residents and other visitors to enjoy an area of the waterfront that has been inaccessible.

46. As documented in the EPS Fiscal Analysis, the Project will provide significant revenue benefits to the City from property taxes, property transfer taxes, sales taxes from residents, employees, and business to business transactions, use taxes, business license taxes, motor vehicle in lieu fees and other permit fees. At buildout, the Project will generate annual net fiscal revenues substantially in excess of costs. As such, the Project will assist the City in meeting and sustaining its future fiscal responsibilities.

47. The Project will provide substantial tax increment revenue to the City and the Redevelopment Agency, generating significant funds for affordable housing in Oakland and other non-housing plans and programs in the Central City East Redevelopment Plan area.

48. The Project will generate approximately 1,000 new employment opportunities and approximately 7,000 construction jobs over the course of the buildout of the Project. Pursuant to the terms of the Development Agreement, the Project will provide for local hiring and funding of local job training programs.

49. By increasing residential and employee populations in this area of the City, the Projects will stimulate the local economy by creating opportunities to support nearby existing local businesses and providing opportunities for new businesses.

50. The Project will provide much needed housing in a smart growth, infill development with a mix of uses convenient to downtown and transit facilities.

51. The Project will promote a jobs/housing balance by providing a mix of commercial and residential uses. The Project will include approximately 465 affordable housing units in accordance with the Development Agreement.

52. The Project will provide a variety of housing types to accommodate a diverse range of households.

53. The Project will remediate and reuse contaminated property thereby enabling redevelopment of this site and enhancing public and environmental safety.

54. The uses in the Project will create a 24-hour population in this waterfront area adding to its attractiveness and vitality.

55. The Project will assist in the alleviation of blighting conditions in the area, thereby serving the goals and objectives of the Redevelopment Plans.

56. The Project will build two marinas providing opportunities for 170 boat slips.

57. The Project will renovate the Terminal bulkhead building to house a maritime museum and community center. Additionally, as a condition of project approval, the Project sponsor will contribute $500,000 to the City for use in connection with historic preservation efforts.

EXHIBIT B

Mitigation Monitoring and Reporting Program

REVISED EXHIBIT B
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
A. Land Use, Plans, and Policies					
A.1: The project would develop new and different uses and buildings immediately adjacent to and surrounding Fifth Avenue Point and may result in the physical division of an existing community. (PS)	**A.1:** The project applicant shall incorporate into the project site plan design elements that 1) address the relationship (setback, height and upper-story stepbacks, etc.) of new buildings located adjacent to Fifth Avenue Point to minimize the physical division of the outparcels from the existing Oak-to-Ninth District; 2) provide safe, direct, and well-designed pedestrian and bicycle access between the outparcels and the new public open spaces, trails, and marina uses on the project site; 3) provide appropriate landscaping and/or other feature(s) to provide appropriate buffering between the outparcels and the project site, where necessary and feasible. The proposed Planned Waterfront Zoning District (PWD-1) regulations discussed in Impact A.2 shall incorporate, as appropriate, specific design standards to address the aforementioned elements in areas abutting Fifth Avenue Point.	Less than Significant	44	City of Oakland Planning and Zoning Department	Prior to approval of Final Development Plans and specifications for the respective Development Parcel
A.2: The project would not be consistent with the current existing Estuary Plan land use classification and zoning districts for the project site. (PS)	**A.2a:** The project sponsor shall apply for and obtain City approval for a General Plan Amendment to the Planned Waterfront Development-1 land use classification in the Estuary Policy Plan to 1) include residential as a permitted land use, 2) incorporate the density, FAR, and the other land use and development standards (as appropriate to include in the	Less than Significant	44	Project Sponsor; City Planning and Zoning Department	Concurrent with Rezoning

1 This column describes the Level of Significance resulting from the Project, together with imposition of all reasonably feasible mitigation measures. For purposes of this Mitigation Monitoring and Reporting Program, "**Less Than Significant**" means that, under Public Resources Code section 21081(a)(1) and CEQA Guidelines sections 15091(a)(1) and 15092(b)(2)(A), changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. "**Significant and Unavoidable**" means that, under Public Resources Code section 21081(a)(3) and (b), and CEQA Guidelines sections 15091(a)(3), 15092(b)(2)(B) and 15093, no mitigation measures are available, or specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the EIR or elsewhere; these impacts are acceptable due to the overriding considerations being considered for adoption by the City. Under Public Resources Code section 21081(a)(2) and CEQA Guidelines section 15091(a)(2) and 15092(b)(2)(A), where all or part of the mitigation measures are within the responsibility and jurisdiction of another public agency (including situations which require the cooperation of another public agency), and such changes either have been adopted by the other agency or can and should be adopted by such other agency, these impacts are also identified as "**Significant and Unavoidable**."

2 Compliance date, and inspection or field survey dates to be noted in this column by the responsible agency.

* The MMRP is revised to include text changes identified in the *Revisions to the Analysis in the Oak to Ninth Project EIR (SCH. No.2004062013) Prepared to Comply with the Alameda County Superior Court Order in Case No. RG06-280345 and Case No. RG06-280471*. The Revised MMRP incorporates all mitigation measures identified in the EIR and in the *Revisions* document.

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
A. Land Use, Plans, and Policies (cont.)					
A.2 (cont.)	General Plan) outlined in the proposed Planned Water Development-1 Zone-1, and 3) explicitly state the intended treatment of the Ninth Avenue Terminal. If approved, the General Plan Amendment would eliminate the project's inconsistency with the Estuary Policy Plan.				
	A.2b: The project sponsor shall apply for and obtain City approval for an amendment to the Oakland Planning Code to add the "Planned Waterfront Zoning District" (PWD-1) and associated regulations, and to amend the Oakland General Plan and Zoning Map to apply the PWD-1 District to the geographic area of the project site. The project would be required to adhere to the PWD-1 District regulations, development standards, design guidelines, and other requirements, including allowable uses, requirements for open space, streets, building heights, maximum densities, maximum commercial space, and parking. If approved, the change in zoning from the existing industrial (M-40 Zone) and special (S-2/S-4 Zone) districts to the PWD-1 District would eliminate the project's inconsistencies with the existing zoning as well as any zoning inconsistency with the General Plan.		44	Project Sponsor; City Planning and Zoning Department	Concurrent with General Plan Amendment
A.3: The project would introduce new land uses, and residential densities, and large building masses, forms, and significant height to the project site. The project may likely increase noise, light and glare, and traffic and that may reduce or eliminate existing views from public vantage points. As a result, the project would result in a substantial change in existing environment and existing land uses. (PS)	**A.3a:** The project sponsor shall implement all mitigation measures identified throughout this EIR to address the significant physical impacts associated with the environmental changes that would occur as a result of the project, reducing each impact to less than significant, where feasible.	Less than Significant	44	City Planning and Zoning Department	Throughout implementation of the project

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
A. Land Use, Plans, and Policies (cont.)					
A.3 (cont.)	**A.3b:** The project sponsor shall implement the specific regulations and standards of the proposed Planned Waterfront Zoning District (consistent with Mitigation Measures A.1 and A.2b), if approved. To specifically address the physical impacts resulting from the change in land use and environment in proximity to Fifth Avenue Point and adjacent residential development, the project shall adhere to the regulations and standards for allowable uses, open space, streets, setbacks, building heights and upper-story stepbacks, maximum densities, maximum commercial space, pedestrian and bicycle access, and landscaping and buffering.	Less than Significant	44	City Planning and Zoning Department	Throughout implementation of the project by administration of the adopted Design Guidelines and the design review process in the Development Agreement
B. Transportation, Circulation, and Parking					
B.1: Traffic generated by Phase 1 of the project would affect traffic levels of service at local intersections in the project vicinity in 2010.					
B.1a: Traffic generated by Phase 1 of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and Oak Street*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant. (PS)	**B.1a:** Install traffic signals at the unsignalized intersection of *Embarcadero and Oak Street*. The signals shall have fixed-time controls with permitted left-turn phasing, which would not require a separate left-turn arrow. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.	Less than Significant	18,19	Public Works Agency, City Traffic Engineering Department; Planning and Zoning Department	Completion according to the phasing schedule set forth in COA 19 pursuant to the adopted schematic Mastic Traffic Improvement Plan required by COA 18

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.1b: The LOS F conditions at the signalized intersection of *5th Street and Broadway*, which would prevail during the PM peak hour under 2010 baseline conditions, would worsen with the addition of traffic generated by Phase 1 of the project. The project-generated increases in vehicle delay on a critical movement would exceed the four-second threshold of significance. (SU)	No feasible mitigation measures are available that would fully improve operations at *5th Street and Broadway* to acceptable levels. While improvements such as reconfiguring lanes on Broadway and adding directional signage, as discussed in the JLS EIR, would improve traffic flow conditions on some movements, downstream bottlenecks in the Webster Tube would continue to cause substantial backups and delay on 5th Street approaching Broadway, and the previously described unacceptable LOS F conditions would continue. The constrained capacity of the tube is an issue of multi-jurisdictional concern (solutions are being explored by the cities of Oakland and Alameda, Caltrans, and the Alameda County Congestion Management Agency), and no feasible measures to increase the tube's capacity have been identified to date (e.g., the tube cannot simply be widened as can a roadway).	**Significant and Unavoidable**			
B.1c: The signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp* would degrade from LOS E to LOS F during the PM peak hour with the addition of traffic generated by Phase 1 of the project. (SU)	**B.1c:** Optimize the traffic signal timing at the signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented (because the City of Oakland, as lead agency, could not implement Measure B.1c without the approval of Caltrans. However, in the event that Mitigation Measure B.1c could be implemented, the impact would be less than significant.	18, 19	Public Works Agency, City Traffic Engineering Department; Caltrans	If encroachment permit is issued by Caltrans then the mitigation measure must be complete prior to the issuance of the Certificate of Occupancy for the 1,000th unit

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.1d: Traffic generated by Phase 1 of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and 5th Avenue*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour. (PS)	**B.1d:** Install traffic signals at the unsignalized intersection of *Embarcadero and 5th Avenue*. The signals shall have fixed-time controls with permitted left-turn phasing, which would not require a separate left-turn arrow. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.	Less than Significant	18, 19	City Public Works Agency	Prior to the issuance of the Certificate of Occupancy for the 1,000th unit
B.1e: Traffic generated by Phase 1 of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and I-880 Northbound Off-Ramp – 6th Avenue*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant, during the PM peak hour. (SU)	**B.1e:** Install traffic signals at the unsignalized intersection of *Embarcadero and I-880 Northbound Off- Ramp – 6th Avenue*. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.1e without the approval of Caltrans. However, in the event that Mitigation Measure B.1e could be implemented, the impact would be less than significant.	18, 19	City Public Works Agency; Caltrans	If encroachment permit is issued by Caltrans then the mitigation measure must be complete prior to the issuance of the Certificate of Occupancy for the 1,000th unit
B.2: Traffic generated by buildout of the project would affect traffic levels of service at local intersections in the project vicinity in 2025.					

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.2a: The signalized intersection of *Atlantic Avenue and Webster Street* would degrade from LOS E to LOS F during the AM peak hour with the addition of traffic generated by buildout of the project. (SU)	**B.2a:** The project applicant shall pay its fair share contribution to the cost of improvements proposed by the City of Alameda at the signalized intersection of Atlantic Avenue and Webster Street. Intersection reconfiguration would consist of adding and restriping lanes to provide the following lanes per approach: • Webster Street (from Oakland) – 1 Left-turn lane, 2 Through lanes, and 1 Right-turn lane (non-channelized right turn) • Webster Street (to Oakland) – 2 Left-turn lanes, 1 Through lane, and 1 Through/Right-turn lane • Atlantic Avenue (towards Alameda Point) – 1 Left-turn lane, 1 Through lane, and 1 Through/Right-turn lane • Atlantic Avenue (away from Alameda Point) – 2 Left-turn lanes, 2 Through lanes, and 1 Right-turn lane This mitigation measure was identified by the City of Alameda as the required improvement to accommodate redevelopment of the former Naval Air Station. The project would contribute to the implementation of this mitigation measure through payment of a fair share cost of the improvement (to be determined). During the AM and PM peak hours, the project's contribution to the estimated growth in traffic between the existing and cumulative traffic volumes (including project traffic) would be 5 and 6 percent, respectively. The project applicant would pay this fair share amount to the City of Alameda, which would then be responsible for the implementation of this improvement.	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2a without the approval of the City of Alameda). However, in the event that Mitigation Measure B.2a could be implemented, the impact would be less than significant.		City of Oakland Planning and Zoning Department; Public Works Agency; and the City of Alameda Planning and Public Works Department	If the City of Alameda proceeds to implement traffic improvements at the intersection of Atlantic and Webster, the project applicant shall pay its fair share contribution towards the improvements prior to the issuance of the Certificate of Occupancy for the 3,100th unit or when the work is authorized and a bid is accepted by the City of Alameda.

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.2b: Traffic generated by buildout of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and Broadway*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour. (PS)	**B.2b:** Install traffic signals at the unsignalized intersection of *Embarcadero and Broadway*. The signals shall have fixed-time controls with permitted left-turn phasing, which would not require a separate left-turn arrow. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards.	Less than Significant	18, 19	City Public Works Agency; Planning and Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit
B.2c: The LOS F conditions at the signalized intersection of *5th Street and Broadway*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen with the addition of traffic generated by buildout of the project. The project-generated increases in vehicle delay would exceed the two-second threshold of significance. (SU)	No feasible mitigation measures are available that would fully improve its operations to acceptable levels. While improvements such as reconfiguring lanes on Broadway and adding directional signage, as discussed in the JLS EIR, would improve traffic flow conditions on some movements, downstream bottlenecks in the Webster Tube would continue to cause substantial backups and delay on 5th Street approaching Broadway, and the previously described unacceptable LOS F conditions would continue. The constrained capacity of the tube is an issue of multi-jurisdictional concern (solutions are being explored by the cities of Oakland and Alameda, Caltrans, and the Alameda County Congestion Management Agency), and no feasible measures to increase the tube's capacity have been identified to date (e.g., the tube cannot simply be widened as can a roadway).	**Significant and Unavoidable**			

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.2d: The signalized intersection of *5th and Oak Streets at the I-880 Southbound On-Ramp* would degrade from LOS E to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project. (SU)	**B.2d:** Optimize the traffic signal timing for the PM peak period at the signalized intersection of *5th and Oak Streets at the I-880 Southbound On-Ramp*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2d without the approval of Caltrans. However, in the event that Mitigation Measure B.2d could be implemented, the impact would be less than significant.	18, 19	City Public Works Agency; Planning & Zoning Division; Caltrans	If encroachment permit is issued by Caltrans, then the mitigation measure must be complete prior to the issuance of the Certificate of Occupancy for the 1,000th unit
B.2e: The signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp* would degrade from LOS E to LOS F during the AM peak hour with the addition of traffic generated by buildout of the project, and the LOS F conditions that, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (total intersection average vehicle delay would exceed the two-second threshold of significance) with the addition of traffic generated by buildout of the project. (SU)	No feasible mitigation measures are available. The 2010 analysis concluded that the impact from Phase 1 development could be mitigated through optimization of signal timing (see Mitigation Measure B.1c). However, with the additional growth in background traffic and the growth in project traffic that would occur from 2010 to 2025, this retiming could not fully mitigate the impact from Project Buildout. Given the constrained right-of-way at this location, the addition of turn lanes or other similar improvements would not be feasible.	**Significant and Unavoidable**		City Public Works Agency; Planning & Zoning Division; Caltrans	If encroachment permit is issued by Caltrans, then the mitigation measure must be complete prior to the issuance of the Certificate of Occupancy for the 1,000th unit
B.2f: The LOS F conditions at the signalized intersection of *West Grand Avenue and Harrison Street*, which would prevail during the AM peak hour under 2025 baseline conditions, would worsen (total intersection average vehicle delay would exceed the two-second threshold of significance) with the addition of traffic generated by buildout of the project. (PS)	**B.2f:** Optimize the traffic signal timing for the AM peak period at the signalized intersection of *West Grand Avenue and Harrison Street*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.2g: The LOS E conditions at the signalized intersection of *Lakeshore Avenue and Foothill Boulevard*, which would prevail during the AM peak hour under 2025 baseline conditions, would worsen (an increase in the total intersection average vehicle delay of more than four seconds) with the addition of traffic generated by buildout of the project. (PS)	**B.2g:** Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Lakeshore Avenue and Foothill Boulevard.* Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit
B.2h: The LOS F conditions at the signalized intersection of *Lakeshore Avenue and MacArthur Boulevard*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (an increase in the average vehicle delay for a critical movement of more than four seconds) with the addition of traffic generated by buildout of the project. (SU)	No feasible mitigation measures are available. Assessment of possible mitigation measures indicates that optimization of signal timing at this intersection would reduce average vehicle delays by about 15 seconds, but would not fully mitigate the project's impact. Other improvements, such as additional turn lanes, do not appear feasible given the constrained right-of-way at the intersection.	**Significant and Unavoidable**			
B.2i: The LOS E conditions at the signalized intersection of *Lakeshore Avenue and Lake Park Avenue*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (an increase in the average vehicle delay for a critical movement of more than six seconds) with the addition of traffic generated by buildout of the project. (PS)	**B.2i:** Optimize the traffic signal timing for the PM peak period at the signalized intersection of *Lakeshore Avenue and Lake Park Avenue.* Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit
B.2j: The LOS F conditions at the intersection of *Embarcadero and 5th Avenue*, which would prevail during the PM peak hour under 2025 baseline unsignalized conditions, would continue under traffic signal control (installed by 2010 [see Mitigation Measure B.1d]) with the addition of traffic generated by buildout of the project. (PS)	**B.2j:** Widen Embarcadero to provide two through travel lanes in each direction along the project site frontage (i.e., from north of 4th Avenue to 9th Avenue), with separate left-turn lanes provided at the intersections, and provide appropriate lane configurations on the streets that intersect Embarcadero within the above-cited limits.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.2k: The intersection of *Embarcadero and I-880 Northbound Off-Ramp* (to be signalized by 2010 [see Mitigation Measure B.1e]) would degrade from LOS B to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project. (PS)	**B.2k:** Implement Mitigation Measure B.2j.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division; Caltrans	If encroachment permit is issued by Caltrans, then the mitigation measure must be complete prior to the issuance of the Certificate of Occupancy for the 2,500th unit
B.2l: Traffic generated by buildout of the project would add more than ten vehicles to the unsignalized intersection of *Embarcadero and I-880 Southbound On-Ramp – 10th Avenue*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour. (SU)	**B.2l:** Install traffic signals at the unsignalized intersection of Embarcadero and I-880 Southbound On- Ramp – 10th Avenue. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Prior to the installation of this traffic signal, a complete traffic signal warrant analysis would be conducted at this location to verify that this location meets MUTCD signal warrants, which include both daily and peak-hour volume, accidents, and pedestrian volumes. Signal installation shall meet City of Oakland and Caltrans design standards.	This project impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.2l without the approval of Caltrans. However, in the event that Mitigation Measure B.2l could be implemented, the impact would be less than significant.	18, 19	City Public Works Agency; Planning & Zoning Division; Caltrans	If encroachment permit is issued by Caltrans, then the mitigation measure must be complete prior to the issuance of the Certificate of Occupancy for the 2,500th unit
B.2m: The signalized intersection of *5th Avenue and 7th/8th Streets* would degrade from LOS D to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project. (PS)	**B.2m:** Optimize the traffic signal timing for the PM peak period at the signalized intersection of 5th Avenue and 7th/8th Streets. Additionally, the westbound and eastbound (5th Avenue) approaches of the intersection would be restriped within the current paved approach, and on-street parking spaces adjacent to the intersection would be removed, to provide separate left-turn,	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.2m (cont.)	through, and through/right-turn lanes. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.				
B.2n: The signalized intersection of *14th Avenue and 7th/12th Streets (Southbound)* would degrade from LOS E to LOS F during the PM peak hour with the addition of traffic generated by buildout of the project. (PS)	**B.2n:** Optimize the traffic signal timing for the PM peak period at the signalized intersection of *14th Avenue and 7th/12th Streets (Southbound).* Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit
B.2o: The signalized intersection of *Foothill Boulevard and 14th Avenue (Westbound)* would degrade from LOS D to LOS E during the AM peak hour with the addition of traffic generated by buildout of the project. (PS)	**B.2o:** Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Foothill Boulevard and 14th Avenue (Westbound).* Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit
B.2p: The LOS F conditions at the signalized intersection of *Foothill Boulevard and 14th Avenue (Eastbound)*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (total intersection average vehicle delay would exceed the two-second threshold of significance) with the addition of traffic generated by buildout of the project. (PS)	**B.2p:** Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Foothill Boulevard and 14th Avenue (Eastbound).* Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.2q: The LOS E conditions at the signalized intersection of *16th Street and 23rd Avenue*, which would prevail during the PM peak hour under 2025 baseline conditions, would worsen (an increase in the average vehicle delay for a critical movement of more than six seconds) with the addition of traffic generated by buildout of the project. (PS)	**B.2q:** Optimize the traffic signal timing for the PM peak period at the signalized intersection of *16th Street and 23rd Avenue*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit
B.3: Traffic generated by buildout of the project would contribute to cumulatively significant impacts at local intersections in the project vicinity in 2025.					
B.3a: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the cumulative traffic increases, causing the signalized intersection of *Atlantic Avenue and Webster Street* in Alameda to degrade from LOS E to LOS F during the AM peak hour. (SU)	**B.3a:** The project applicant shall pay its fair share contribution to the cost of improvements proposed by the City of Alameda at the signalized intersection of *Atlantic Avenue and Webster Street*. Intersection reconfiguration would consist of adding and restriping lanes to provide the following lanes per approach: • Webster Street (from Oakland) – 1 Left-turn lane, 2 Through lanes, and 1 Right-turn lane (non-channelized right turn) • Webster Street (to Oakland) – 2 Left-turn lanes, 1 Through lane, and 1 Through/Right-turn lane • Atlantic Avenue (towards Alameda Point) – 1 Left-turn lane, 1 Through lane, and 1 Through/Right-turn lane • Atlantic Avenue (away from Alameda Point) – 2 Left-turn lanes, 2 Through lanes, and 1 Right-turn lane	This cumulative impact would be **significant and unavoidable**, because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.3a without the approval of the City of Alameda. However, in the event that Mitigation Measure B.3a could be implemented, the project's contribution to the cumulative impact would be less than considerable.	19	City of Oakland Planning and Zoning; Public Works Agency; and the City of Alameda Planning and Public Works Department	If the City of Alameda proceeds to implement traffic improvements at the intersection of Atlantic and Webster, the project applicant shall pay its fair share contribution towards the improvements prior to the issuance of the Certificate of Occupancy for the 2,500th unit or when the work is authorized and a bid is accepted by the City of Alameda.

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.3a (cont.)	This mitigation measure was identified by the City of Alameda as the required improvement to accommodate redevelopment of the former Naval Air Station. The project would contribute to the implementation of this mitigation measure through payment of a fair share cost of the improvement (to be determined). During the AM and PM peak hours, the project's contribution to the estimated growth in traffic between the existing and cumulative traffic volumes (including project traffic) would be 5 and 6 percent, respectively. The project applicant would pay this fair share amount to the City of Alameda, which would then be responsible for the implementation of this improvement. After implementation of this measure, the intersection would operate at LOS E in the AM peak hour, and at LOS D in the PM peak hour. LOS E is an unacceptable condition, but the average delay would be lower than under the 2025 Without Project Condition, and the project's contribution to the cumulative impact would be less than the threshold of significance established by the City of Oakland for determining whether the project's impact is cumulatively considerable.				
B.3b: Traffic generated by buildout of the project under 2025 With Project Conditions would add more than ten vehicles to the unsignalized intersection of *Embarcadero and Broadway* during the PM peak hour, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour. (PS)	**B.3b:** Install traffic signals at the unsignalized intersection of *Embarcadero and Broadway*. The signals shall have fixed-time controls with permitted left-turn phasing, which would not require a separate left-turn arrow. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment	Less than Significant		City Public Works Agency; Police Department	Prior to the issuance of the Certificate of Occupancy for the 1,000th unit.

REVISED EXHIBIT B (Continued)
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FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.3b (cont.)	shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards. Prior to the installation of this traffic signal, a complete traffic signal warrant analysis would be conducted at this location to verify that this location meets MUTCD signal warrants, which include both daily and peak-hour volume, accidents, and pedestrian volumes. The Jack London Square Redevelopment Project EIR identified a number of improvements in the project study area that would be required to mitigate that project's traffic impacts, including installation of traffic signals at this intersection prior to occupancy of buildout of the Jack London Square project. However, the exact timing of implementation of this improvement has not been established. If the Jack London Square project were to install traffic signals at the intersection of Embarcadero and Broadway prior to buildout of the Oak to Ninth project, then the Oak to Ninth project applicant would pay a fair share contribution to the cost of this traffic signal. However, if development of the Jack London Square project were to lag behind, and the intersection of Embarcadero and Broadway was unsignalized prior to buildout of the Oak to Ninth project, then the Oak to Ninth project applicant would pay to install the traffic signals. After implementation of this measure, the intersection would operate at an acceptable LOS B or better in both the AM and PM peak hours.				

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.3c: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the LOS F conditions during the PM peak hour at the signalized intersection of *5th Street and Broadway*. The intersection would operate at LOS F during the PM peak hour under 2025 Without Project Conditions and the proposed project would result in an increase in the total intersection average vehicle delay of more than two seconds. (SU)	No feasible mitigation measures are available that would improve its operations to acceptable levels. While improvements such as reconfiguring lanes on Broadway and adding directional signage, as discussed in the Jack London Square Redevelopment Project EIR, would improve traffic flow conditions on some movements, downstream bottlenecks in the Webster Tube would continue to cause substantial backups and delay on 5th Street approaching Broadway, and the previously described unacceptable LOS F conditions would continue. The constrained capacity of the tube is an issue of multi-jurisdictional concern (solutions are being explored by the cities of Oakland and Alameda, Caltrans, and the Alameda County Congestion Management Agency), and no feasible measures to increase the tube's capacity have been identified to date.	**Significant and Unavoidable**			
B.3d: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the cumulative traffic increases, causing the signalized intersection of *5th and Oak Streets at the I-880 Southbound On-Ramp* to degrade from LOS E to LOS F during the PM peak hour. (SU)	**B.3d:** Optimize the traffic signal timing at the signalized intersection of *5th and Oak Streets at the I-880 Southbound On-Ramp*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at an acceptable LOS E or better in both the AM and PM peak hours.	This cumulative impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.3d without the approval of Caltrans. However, in the event that Mitigation Measure B.3d could be implemented, the impact would be reduced to less than significant.	18, 19	City Public Works Agency; Planning & Zoning Division; Caltrans	If encroachment permit is issued by Caltrans, then the mitigation measure must be complete prior to the issuance of the Certificate of Occupancy for the 1,000th unit.

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.3e: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the cumulative traffic increases, causing the signalized intersection of *6th and Jackson Streets at the I-880 Northbound On-Ramp* to degrade from LOS E to LOS F during the AM peak hour, and would contribute to the LOS F conditions during the PM peak hour. The intersection would operate at LOS F during the PM peak hour under 2025 Without Project Conditions, and the proposed project would result in an increase of more than two seconds in the total intersection average vehicle delay. (SU)	No feasible mitigation measures are available. The 2010 analysis concluded that the impact from Phase 1 development could be mitigated through optimization of signal timing (see Mitigation Measure B.1c). However, with the additional growth in background traffic and the growth in project traffic that would occur from 2010 to 2025, this retiming could not mitigate the impact from Project Buildout to a less than significant level. Given the constrained right-of-way at this location, the addition of turn lanes or other similar improvements would not be feasible.	**Significant and Unavoidable**		City Public Works Agency; Planning & Zoning Division; Caltrans	If encroachment permit is issued by Caltrans, then the mitigation measure must be complete prior to the issuance of the Certificate of Occupancy for the 1,000th unit.
B.3f: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the LOS F conditions during the AM peak hour at the signalized intersection of *West Grand Avenue and Harrison Street*. The intersection would operate at LOS F during the AM peak hour under 2025 Without Project Conditions, and the proposed project would result in an increase of more than two seconds in total intersection average vehicle delay. (PS)	**B.3f:** Optimize the traffic signal timing for the AM peak period at the signalized intersection of *West Grand Avenue and Harrison Street*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at an acceptable LOS D or better in both the AM and PM peak hours.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit
B.3g: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the LOS E conditions during the AM peak hour at the signalized intersection of *Lakeshore Avenue and Foothill Boulevard*. The intersection would operate at LOS E during the AM peak hour under 2025 Without Project Conditions, and the proposed project would result in an increase in the total intersection average vehicle delay of more than four seconds. (PS)	**B.3g:** Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Lakeshore Avenue and Foothill Boulevard*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit.

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FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.3g (cont.)	To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at LOS E in the AM peak hour, which is an unacceptable condition, but the increase in average delay from the 2025 Without Project Condition would be less than the threshold of significance established by the City of Oakland for determining whether the project's impact is cumulatively considerable. Assessment of possible further mitigation measures (to achieve an acceptable LOS D or better condition) such as addition of a right-turn lane on Foothill Boulevard indicates that there is not sufficient right-of-way available for this additional lane at the intersection.				
B.3h: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the LOS F conditions during the PM peak hour at the signalized intersection of *Lakeshore Avenue and MacArthur Boulevard*. The intersection would operate at LOS F during the PM peak hour under 2025 Without Project Conditions and the proposed project would result in an increase in the average vehicle delay for a critical movement of more than four seconds. (SU)	No feasible mitigation measures are available. Assessment of possible mitigation measures indicates that optimization of signal timing at this intersection would reduce delays, but would not mitigate the impact. Other improvements (to achieve an acceptable LOS D or better condition), such as additional turn lanes, are not feasible because there is not sufficient right-of-way available for additional lanes at the intersection.	**Significant and Unavoidable**			
B.3i: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the LOS E conditions during the PM peak hour at the signalized intersection of *Lakeshore Avenue and Lake Park Avenue*. The intersection would operate at LOS E during the PM peak hour under 2025 Without Project Conditions, and the proposed project would result in an increase	**B.3i:** Optimize the traffic signal timing for the PM peak period at the signalized intersection of *Lakeshore Avenue and Lake Park Avenue*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
in the average vehicle delay for a critical movement of more than six seconds. (PS)	To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at an acceptable LOS D or better in both the AM and PM peak hours.				
B.3j: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the LOS F conditions during the PM peak hour at the intersection of *Embarcadero and 5th Avenue*. The intersection would operate at LOS F during the PM peak hour under 2025 Without Project Conditions, and those LOS F conditions would continue under traffic signal control (installed by Mitigation Measure B.1d, required for project impacts in 2010) with the addition of traffic generated by buildout of the project. (PS)	**B.3j:** Widen Embarcadero to provide two through travel lanes in each direction along the project site frontage (i.e., from north of 4th Avenue to 9th Avenue), with separate left-turn lanes provided at the intersections, and provide appropriate lane configurations on the streets that intersect Embarcadero within the above-cited limits. The project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at an acceptable LOS D or better in both AM and PM peak hours.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit.
B.3k: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the LOS F conditions during the PM peak hour at the intersection of *Embarcadero and I-880 Northbound Off-Ramp*. The intersection would operate at LOS F during the PM peak hour under 2025 Without Project Conditions, and those LOS F conditions would continue under traffic signal control (installed by Mitigation Measure B.1e, required for project impacts in 2010) with the addition of traffic generated by buildout of the project. (PS)	**B.3k:** Widen Embarcadero to provide two through travel lanes in each direction along the project site frontage (i.e., from north of 4th Avenue to 9th Avenue), with separate left-turn lanes provided at the intersections, and provide appropriate lane configurations on the streets that intersect Embarcadero within the above-cited limits. The project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at an acceptable LOS C or better in both AM and PM peak hours.	Less than Significant		City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.3l: Traffic generated by buildout of the project under 2025 With Project Conditions would add more than ten vehicles to the unsignalized intersection of *Embarcadero and I-880 Southbound On-Ramp – 10th Avenue*, and the peak-hour volumes would meet the Caltrans peak-hour traffic signal warrant during the PM peak hour. (SU)	**B.3l:** Install traffic signals at the unsignalized intersection of *Embarcadero and I-880 Southbound On- Ramp – 10th Avenue*. Installation of traffic signals shall include the traffic signal equipment and optimization of signal phasing and timing (i.e., allocation of green time for each intersection approach) in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. Traffic signal equipment shall include pedestrian signal heads (with adequate time for pedestrians to cross the streets). Signal installation shall meet City of Oakland and Caltrans design standards. To minimize the effects of queuing and "spill-backs" to adjacent intersections, coordination with signal phasing and timing of adjacent intersections shall include signal interconnects. Prior to the installation of this traffic signal, a complete traffic signal warrant analysis would be conducted at this location to verify that this location meets MUTCD signal warrants, which include both daily and peak-hour volume, accidents, and pedestrian volumes. The project applicant shall pay for this measure. After implementation of this measure, the intersection would operate at LOS B in both the AM and PM peak hours.	This cumulative impact would be **significant and unavoidable** because it is not certain that the measure could be implemented because the City of Oakland, as lead agency, could not implement Measure B.3l without the approval of Caltrans. However, in the event that Mitigation Measure B.3l could be implemented, the impact would be less than significant.	18, 19	City Public Works Agency; Planning & Zoning Division; Caltrans	If encroachment permit is issued by Caltrans, then the mitigation measure must be complete prior to the issuance of the Certificate of Occupancy for the 2,500th unit.
B.3m: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the cumulative traffic increases, causing the signalized intersection of *5th Avenue and 7th/8th Streets* to degrade from LOS D to LOS F during the PM peak hour. (PS)	**B.3m:** Optimize the traffic signal timing for the PM peak period at the signalized intersection of *5th Avenue and 7th/8th Streets*. Additionally, the westbound and eastbound (5th Avenue) approaches of the intersection would be restriped within the current paved approach, and on-street parking spaces adjacent to the intersection would be removed, to provide separate left-turn,	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.3m (cont.)	through, and through/right-turn lanes. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. The City of Oakland, which has jurisdiction over this intersection, would be responsible for its implementation. After implementation of this measure, the intersection would operate at an acceptable LOS D or better in both the AM and PM peak hours.				
B.3n: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the cumulative traffic increases, causing the signalized intersection of *14th Avenue and 7th/East 12th Streets (Southbound) to* degrade from LOS E to LOS F during the PM peak hour. (PS)	**B.3n:** Optimize the traffic signal timing for the PM peak period at the signalized intersection of *14th Avenue and 7th/12th Streets (Southbound).* Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. The City of Oakland, which has jurisdiction over this intersection, would be responsible for its implementation. After implementation of this measure, the intersection would operate at LOS E in the PM peak hour, which is an unacceptable condition, but the average delay would be lower than under the 2025 Without Project Condition, and the project's contribution to the cumulative impact would be less than the	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.3n (cont.)	threshold of significance established by the City of Oakland for determining whether the project's impact is cumulatively considerable. Assessment of possible further mitigation measures (to achieve an acceptable LOS D or better condition) such as addition of a right-turn lane, and conversion of the through/right lane to through movements only, on 14th Avenue indicates that there is not sufficient right-of-way available for this additional lane at the intersection.				
B.3o: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the cumulative traffic increases, causing the signalized intersection of *Foothill Boulevard and 14th Avenue (Westbound) to* degrade from LOS D to LOS E during the AM peak hour. (PS)	**B.3o:** Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Foothill Boulevard and 14th Avenue (Westbound)*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. The City of Oakland, which has jurisdiction over this intersection, would be responsible for its implementation. After implementation of this measure, the intersection would operate at an acceptable LOS C in both the AM and PM peak hours.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit.
B.3p: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the LOS F conditions during the PM peak hour at the signalized intersection of *Foothill Boulevard and 14th Avenue (Eastbound)*. The intersection would	**B.3p:** Optimize the traffic signal timing for the AM peak period at the signalized intersection of *Foothill Boulevard and 14th Avenue (Eastbound)*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
operate at LOS F during the PM peak hour under 2025 Without Project Conditions, and the proposed project would result in an increase of more than two seconds in total intersection average vehicle delay. (PS)	traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. The City of Oakland, which has jurisdiction over this intersection, would be responsible for its implementation. After implementation of this measure, the intersection would operate at an acceptable LOS C in both the AM and PM peak hours.				
B.3q: Traffic generated by buildout of the project under 2025 With Project Conditions would contribute to the LOS E conditions during the PM peak hour at the signalized intersection of *16th Street and 23rd Avenue*. The intersection would operate at LOS E during the PM peak hour under 2025 Without Project Conditions; and the proposed project would result in an increase in the average vehicle delay for a critical movement of more than six seconds. (PS)	**B.3q:** Optimize the traffic signal timing for the PM peak period at the signalized intersection of *16th Street and 23rd Avenue*. Optimization of traffic signal timing shall include determination of allocation of green time for each intersection approach in tune with the relative traffic volumes on those approaches, and coordination with signal phasing and timing of adjacent intersections. To ensure that signal timing optimization occurs, the project applicant shall pay for this measure. The City of Oakland, which has jurisdiction over this intersection, would be responsible for its implementation. After implementation of this measure, the intersection would operate at an acceptable LOS C or better in both the AM and PM peak hours.	Less than Significant	18, 19	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 2,500th unit.
B.4: The project would generate demand for alternative transportation service for the area. (PS)	**B.4a:** The project applicant shall redesign the project site plan to include transit facilities, including bus turnouts on the Embarcadero at a minimum, to ensure that bus service could be accommodated if agreement with AC Transit were to be met to extend service to the project site. Additional facilities would include bus stops	Less than Significant	22	City Public Works Agency; Planning & Zoning Division	Prior to the issuance of the Certificate of Occupancy for the 1,000th unit.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.4 (cont.)	within the project, or even a dedicated transit center at which public buses and/or private shuttles could stop.				
	B.4b: The project applicant shall operate a private shuttle service to complement AC Transit service that might be extended to the project site. The shuttle service shall run between the project site and nearby activity centers and transit nodes (e.g., Lake Merritt BART station) with an adequate number of shuttle stops located onsite, and shall operate on a frequency sufficient to attract use of the service by project residents and employees.	Less than Significant	22	City Planning and Zoning Department	Within six months following the issuance of a Certificate of Occupancy of the 1,000th residential dwelling on the project site; every two years thereafter until the Planning Director determines the shuttle service is no longer necessary
B.7: The project would increase the potential for conflicts among different traffic streams. (PS)	**B.7:** The project applicant shall redesign the site plan as follows: • Reconfigure the intersections of Embarcadero/7th Avenue and Embarcadero/9th Avenue intersection for right-in/right-out movements only (to ensure proper spacing between signalized intersections). • Install a traffic signal at the intersection of Embarcadero and 8th Avenue. • Install signal interconnect on Embarcadero between 5th and 10th Avenues to allow for coordination of traffic signals along Embarcadero (to minimize queuing [back-ups] on Embarcadero). • The design of pedestrian facilities including sidewalks, crosswalks, and curb ramps shall comply with ADA standards and other applicable legislation.	Less than Significant	18, 19	City Public Works Agency, Traffic Engineering Department, Planning & Zoning Division	To be incorporated into the schematic Master Traffic Improvement Plan as set forth in COA 18; to be implemented according to the phasing schedule in COA 19

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.7 (cont.)	• Maintain or reconstruct the fence along the Embarcadero that limits access to the railroad tracks adjacent to the project site. • Install additional bicycle and pedestrian warning signage at the existing at-grade crossing along 5th Avenue.				
B.9: The project would contribute to 2025 changes to traffic conditions on the regional and local roadways. (SU)	Direct mitigation of the project's significant impact on the freeway segment is not feasible. Factors that limit the mitigation of impacts include constrained right-of-way, no regional or local traffic impact fee mechanism to collect and disperse funds for roadways improvements, and the inherent difficulties with widening the freeways, such as the need to widen over crossings and structures adjacent to the freeway.	**Significant and Unavoidable**			
B.10: Project construction would temporarily affect traffic flow and circulation, parking, and pedestrian safety. (PS)	**B.10:** Prior to initiation of each phase of development, the project applicant and construction contractor shall meet with the Traffic Engineering and Parking Division of the Oakland Public Works Agency and other appropriate City of Oakland and non-City agencies (e.g., Caltrans) to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction. The project applicant shall develop a construction management plan for review and approval by the City Traffic Engineering Division. The plan shall include at least the following items and requirements: • A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and	Less than Significant	37	City Public Works Agency, Traffic Engineering Department; Planning & Zoning Division	Prior to issuance of the first building permit for the respective development area; to be implemented throughout construction period for each development parcel

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
B. Transportation, Circulation, and Parking (cont.)					
B.10 (cont.)	designated construction access routes. In addition, the information shall include a construction staging plan for any right-of-way used on the Embarcadero, including sidewalk and lane intrusions and/or closures. • Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur. • Location of construction staging areas for materials, equipment, and vehicles (must be located on the project site). • Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation and safety; and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant. • Temporary construction fences to contain debris and material and to secure the site. • Provisions for removal of trash generated by project construction activity. • A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an onsite complaint manager. • Provisions for monitoring surface streets used for truck routes so that any damage and debris attributable to the trucks can be identified and corrected. • Provisions for coordination with BART to reduce, as needed, adverse effect on access to the Lake Merritt BART Station.				

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
C. Air Quality and Meteorological Conditions					
C.1: Activities associated with demolition, site preparation and construction would generate short-term emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions. (PS)	**C.1a:** During construction, the project sponsor shall require the construction contractor to implement the following measures required as part of BAAQMD's basic and enhanced dust control procedures required for sites larger than four acres (aggregate): Basic Control Measures – The following controls should be implemented at all construction sites: • Water all active construction areas at least twice daily. • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. • Sweep daily (with water sweepers) all paved access roads, parking areas and staging area at construction sites. • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. Enhanced Control Measures – The following measures shall be implemented during project construction because the site is greater than four acres in area: • All "Basic" control measures listed above. • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).	Less than Significant	37	City Building Services Department	Prior to issuance of the first demolition, grading or building permit in the respective development parcel; to be included as a standard part of all building and grading permit plans and specifications

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
C. Air Quality and Meteorological Conditions (cont.)					
C.1 (cont.)	• Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.). • Limit traffic speeds on unpaved roads to 15 miles per hour. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways. • Replant vegetation in disturbed areas as quickly as possible. The following control measures shall be implemented during project construction because the site is large in area and located near sensitive receptors: • Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site. • Install wind breaks, or plant trees/ vegetative wind breaks at windward side(s) of construction areas. • Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 miles per hour. • Limit the area subject to excavation, grading and other construction activity at any one time.				
	C.1b: Demolition and disposal of any asbestos containing building material would be in accordance with the procedures specified by Regulation 11, Rule 2 (Asbestos Demolition, Renovation and Manufacturing) of BAAQMD's regulations.	Less than Significant		City Building Services Department	Prior to issuance of the first demolition, grading or building permit in the respective development parcel for any applicable building or grading area meeting thresholds

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
C. Air Quality and Meteorological Conditions (cont.)					
C.7: The project together with anticipated future cumulative development in Oakland and the Bay Area in general would contribute to regional air pollution. (SU)	**C.7:** To reduce the significance of the operational impacts of the project, the project sponsor shall, as feasible and practical, implement a combination of the following mitigation measures:	With implementation of the above mitigation measures, the cumulative air quality impact would be **significant and unavoidable**. Based on the effectiveness of these measures as determined by the BAAQMD, the above mitigation measures would reduce the operational impacts of the project by reducing motor vehicle trips by the project by 15 to 20 percent (BAAQMD, 2004). However, no feasible mitigation is available to reduce the residual impact to a less than significant level.	22	City Public Works Agency, Planning & Zoning Division	A final Transportation Demand Management Plan (TDM) and subsequent addendums outlining the requirements necessary to reduce motor vehicle trips to the project will be submitted with Final Development Plans prepared for the first phase of the project and each subsequent phase; to be coordinated with Mitigation Measure B.4 requirements (shuttle operation).
	Rideshare Measures				
	C.7a: Encourage all tenants (commercial and residential) at the site to implement carpool/ vanpool programs (e.g., carpool, ride matching for employees, assistance with vanpool formation, provision of vanpool vehicles, guaranteed ride home program, etc.). Distribute information about the Alameda County Congestion Management Agency's Guaranteed Ride Home Program to tenants of the building to facilitate alternative transportation modes. As part of the program, a person who uses an alternate mode of travel, including transit or a carpool, is provided with free taxi service in the case of unexpected circumstances. These circumstances might include unscheduled overtime or a family illness or emergency.		22	City Public Works Agency, Planning & Zoning Division	See C.7 above for monitoring timeline

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
C. Air Quality and Meteorological Conditions (cont.)					
C.7 (cont.)	**C.7b:** Encourage commercial tenants to implement employee rideshare incentive programs providing cash payments or pre-paid fare media such as transit passes or coupons.		22	City Public Works Agency, City Planning& Zoning Division	See C.7 above for monitoring timeline
	Transit Measures				
	C.7c: Construct transit facilities, such as bus turnouts/bus bulbs, benches, shelters, etc., as determined appropriate by AC Transit, consistent with Transit Mitigation Measure B.4a.		22	City Public Works Agency, City Planning& Zoning Division	See C.7 above for monitoring timeline
	C.7d: Encourage commercial tenants to meet standard, minimum employee ridesharing requirements or to provide incentives to encourage employees to rideshare.		22	City Public Works Agency, City Planning& Zoning Division	See C.7 above for monitoring timeline
	C.7e: Encourage commercial tenants to implement a parking cash-out program for employees (e.g., non-driving employees receive transportation allowance equivalent to the value of subsidized parking).		22	City Public Works Agency, City Planning& Zoning Division	See C.7 above for monitoring timeline
	Shuttle Measures				
	C.7f: The project applicant shall operate a private shuttle service between the project site and nearby activity centers and transit nodes (e.g., Lake Merritt BART station) with an adequate number of shuttle stops located onsite, and on a frequency sufficient to attract use of the service by project residents and employees		22	City Public Works Agency, City Planning& Zoning Division	Within six months following the issuance of a Certificate of Occupancy for the 1,000th residential dwelling on the project site; every two years thereafter until the Planning Director determines the shuttle service is no longer necessary.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
C. Air Quality and Meteorological Conditions (cont.)					
C.7 (cont.)	***Bicycle and Pedestrian Measures***				
	C.7g: Provide bicycle lanes and/or paths, connected to the community-wide network.		22	City Public Works Agency, City Planning& Zoning Division	See C.7 above for monitoring timeline; to be coordinated with implementation of Mitigation Monitoring B.4.
	C.7h: Provide secure, weather-protected bicycle parking for employees and residents.		22	City Public Works Agency, City Planning& Zoning Division	See C.7 above for monitoring timeline; to be coordinated with implementation of Mitigation Monitoring B.4.
	C.7i: Provide direct, safe, attractive pedestrian and bicycle access to transit stops and adjacent development.		22	City Public Works Agency, City Planning& Zoning Division	See C.7 above for monitoring timeline; to be coordinated with implementation of Mitigation Monitoring B.4.
	C.7j: Provide adequate street lighting within the street right of way immediately adjacent to and within the project site.		22	City Public Works Agency, City Planning& Zoning Division	See C.7 above for monitoring timeline; to be coordinated with implementation of Mitigation Monitoring B.4.
	C.7k: Provide secure short-term bicycle parking for retail customers and other non-commute trips.		22	City Public Works Agency, City Planning& Zoning Division	See C.7 above for monitoring timeline; to be coordinated with implementation of Mitigation Monitoring B.4.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
D. Hydrology and Water Quality					
D.1: Project construction would involve activities (excavation, soil stockpiling, boring and pile driving, grading, and dredging, etc.) that would generate loose, erodable soils that, if not properly managed, could violate any water quality standards or waste discharge requirements; result in substantial erosion or siltation; create or constitute substantial polluted runoff; or otherwise substantially degrade water quality. (PS)	**D.1:** The project sponsor shall comply with all NPDES requirements, RWQCB General Construction Permit requirements, and all City regulations and Creek Protection Permits requirements.	Less than Significant	23	City Building Services Department; City Planning and Zoning Department	Prior to issuance of a grading permit for each phase of the project.
D.2: Project construction activities would include dredging in Clinton Basin, which could require disturbance, removal, and disposal of contaminated sediment that may result in adverse impacts to aquatic organisms and water quality. (PS)	**D.2:** The project sponsor shall obtain and comply with all water quality certification and requirements required for dredging activities, which shall include a Section 404 permit process pursuant to the Army Corps of Engineers (Corps) and pursuant to the oversight, permitting, and approval of the Dredged Material Management Office (DMMO).	Less than Significant	23	City Building Services Department; City Planning and Zoning Department	Prior to commencing marina construction in Clinton Basin as part of the permit review and approval process.
D.5: Site development under the project would involve new landscaping and open lawns. If not properly handled, chemicals used to establish and maintain landscaping and open lawn areas, such as pesticides and fertilizers, could flow into the waterways and result in water quality impacts to the Oakland Estuary, and eventually San Francisco Bay. (PS)	**D.5:** The project sponsor shall prepare a landscape management plan (LMP) for all public open spaces that includes, but is not necessarily limited to, a description of application, storage, and safety measures involving the use of pesticides and fertilizers. The LMP shall include but not be limited to the following: • Transportation and storage: Pesticides and fertilizers shall be transported and stored as per state and federal guidelines. They shall be stored in designated bermed areas onsite. • Pesticide Application: Pesticides and fertilizers shall be handled and applied according to the procedures set by the manufacturer. The LMP shall address methods to optimize and reduce the use of pesticides and fertilizers and present strategies to incorporate environmentally-safe (organic) pest and growth enhancement	Less than Significant	23	City Building Services Department; City Public Works Agency	Prior to approval of Final Development Plans; to be incorporated into the operation plans for both the Homeowner's Association (HOA) agreement and the Community Service/Facility District. (CSD/CFD).

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
D. Hydrology and Water Quality (cont.)					
D.5 (cont.)	materials. These strategies shall address eventually eliminating the use of chemicals such as diazinon that harm water quality. The RWQCB has found that the pesticides have a reasonable potential to cause or contribute to exceedances of water quality standards. Therefore, the NPDES permit requires the City of Oakland (as a permittee) to address pesticides. The project sponsor shall adhere to the Diazinon Pollutant Reduction Plan or the Pesticide Plan submitted by the ACCWP to the RWQCB. The goals of the Pesticide Plan and of its resulting implementing actions are to reduce or substitute pesticide use (especially diazinon use) with less toxic alternatives (ACCWP, 2003). • The Plan shall identify pesticide and fertilizer application schedules. • Container Disposal: The contractor shall dispose of empty containers carefully. The containers shall never be disposed at locations that would contaminate natural waterways. The LMP and its recommendations for use, control, and eventual reduction of nonorganic pesticide and fertilizer use shall be approved by the City prior to installing the landscape and shall be implemented throughout the life of the project.				
D.6: The project sponsor could deplete groundwater supplies or interfere with groundwater recharge and cause contamination of surface. (PS)	**D.6:** The project sponsor shall comply with NPDES permit requirements by the RWQCB for dewatering activities.	Less than Significant	23	City Building Services Department; City Public Works Agency	Prior to approval of Final Development Plans

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
E. Cultural Resources					
E.1: Construction of the project could cause substantial adverse changes to the significance of currently unknown cultural resources at the site, potentially including an archaeological resource pursuant to CEQA Guidelines Section 15064.5 or CEQA Section 21083.2(g), or the disturbance of any human remains, including those interred outside of formal cemeteries. (PS)	**E.1a:** An archival cultural resource evaluation shall be implemented prior to the start of construction or other ground-disturbing activities to identify whether historic or unique archaeological resources exist within the project site. The archival cultural resource evaluation, or "sensitivity study," shall be conducted by a cultural resource professional approved by the City and who meets the Secretary of the Interior's Professional Qualifications Standards for Prehistoric and Historical Archaeology. The purpose of the archival cultural resource evaluation is to: (1) identify documentation and studies to determine the presence and location of potentially significant archaeological deposits; (2) determine if such deposits meet the definition of a historical resource under CEQA Guidelines Section 15064.5 or a unique archaeological resource under CEQA Section 21083.2(g); (3) guide additional archaeological work, potentially including pre-construction subsurface archaeological investigation if warranted, to recover the information potential of such deposits; and (4) define an archaeological monitoring plan, if warranted. A pre-construction meeting shall occur with the cultural resource professional and the City regarding the findings of the evaluation, and shall include consultation with and considerations of the Department of Toxic Substances (DTSC), the Lead Agency for the environmental cleanup activities on the project site. If excavation is the only feasible means of data recovery, such excavation shall be in accord with the provisions of CEQA Guidelines Section 15126.4(b)(3)(C). Any additional archaeological work and or monitoring shall be pursuant to a plan approved by the City. If a pre-constructing testing program is deemed necessary by the qualified professional as a	Less than Significant	25, 37	City Planning & Zoning Division; City Building Services Department	Prior to the issuance of a building or grading permit for all development areas affected.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
E. Cultural Resources E. Cultural Resources					
E.1 (cont.)	result of the archival study, it shall be guided by the archival study and shall use a combination of subsurface investigation methods (including backhoe trenching, augering, and archaeological excavation units, as appropriate). If monitoring of any areas during ground disturbing activates is determined to be required based on the results of the archival evaluation and the pre-construction testing, the monitoring will be conducted by a qualified cultural resources professional and the monitoring plan will include appropriate provisions for evaluating any archaeological deposits, consultation with the City, and any necessary data recovery program.				
	E.1b: Prior to the commencement of ground disturbing activities, all construction personnel shall receive environmental training from a cultural resource professional approved by the City and who meets the Secretary of the Interior's Professional Qualifications Standards for Prehistoric and Historical Archaeology. The purpose of the environmental training is to inform all construction personnel of the possibility of encountering historical resources. All construction personnel specifically involved in onsite activities that may uncover prehistoric resources shall be trained in the identification of prehistoric resources and immediate actions required if potential resources are found.	Less than Significant	25, 37	City Planning & Zoning Division; City Building Services Department	Prior to the issuance of a building or grading permit for all development parcels.
	E.1c: Pursuant to CEQA Guidelines 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore, in the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the	Less than Significant	25, 37	City Planning & Zoning Division; City Building Services Department	To be incorporated in the plans and specification for all building and grading plans involving subsurface work and ground disturbing activities.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
E. Cultural Resources (cont.)					
E.1 (cont.)	project proponent and/or lead agency shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the City. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.				
	E.1d: In the event that human skeletal remains are uncovered at the project site during construction or ground-breaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and follow the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.	Less than Significant	25, 37	City Planning & Zoning Division; City Building Services Department; Alameda County Coroner	To be incorporated in the plans and specification for all building and grading plans involving subsurface work and ground disturbing activities.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
E. Cultural Resources (cont.)					
E.2: The project may adversely affect unidentified paleontological resources at the site. (PS)	**E.2:** The project sponsor shall notify a qualified paleontologist of unanticipated discoveries, who shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in Section 15064.5 of the CEQA Guidelines. In the event of an unanticipated discovery of a breas, true, and/or trace fossil during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards (SVP 2004)). The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The paleontologist shall submit the excavation plan to the City for review and approval.	Less than Significant	25, 37	City Planning & Zoning Division; City Building Services Department	To be incorporated in the plans and specification for all building and grading plans involving subsurface work and ground disturbing activities.
E.3: The project would result in the substantial demolition of the Ninth Avenue Terminal, which is an historic resource as defined in CEQA Guidelines Section 15064.5. (SU)	**E.3a:** Photograph the affected historic resource through large-format, black and white photographs meeting the Photographic Specifications of the Historic American Building Survey (HABS). The documentary photographs would be archived locally at the Oakland History Room (OHR) of the Oakland Public Library along with a copy on archival paper of the Oakland Landmark and S-7 Preservation Combining Zone Application Form for the Ninth Avenue Terminal. Digital copies of the photographs would be forwarded to the Oakland Cultural Heritage Survey. Even with extensive documentation, however, the demolition of a substantial portion of the building would result in the permanent loss of the historic resource that is associated with Oakland's history.	**Significant and Unavoidable**	25, 37	City Planning & Zoning Division; City Building Services Department	Within 12 months of the effective date of the adoption of the conditions of approval for the Development Parcel that includes the Ninth Avenue Terminal, or prior to demolition activities on said Development Parcel

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
E. Cultural Resources (cont.)					
E.3 (cont.)	**E.3b:** Although the historic resource would no longer retain its historic significance, adaptive use and rehabilitation of the Bulkhead Building would comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties. The current concept depicts a design that appears to comply, although their conceptual nature precludes the ability to reach an informed conclusion. The project sponsor would be subject to submitting more detailed designs, including, but not limited to, proposed window treatments, materials palette, awnings, signage, and interior configurations for review. For the latter, particular attention would be paid to the significance of the interior's "Expansive, unimpeded space with exposed trusses," and the statement "A key feature of the transit shed is its expansive interior with exposed trusses." In addition, the first story of the existing office in the Bulkhead Building, mentioned in Attachment 2 of the Oakland Landmark and S-7 Preservation Combining Zone Application Form for the Ninth Avenue Terminal, would be retained and rehabilitated. The review should be conducted by a professional meeting the standards for Historic Architecture or Historic Preservation Planning as set forth in the Secretary of the Interior's Professional Qualification Standards, 1997 Proposed Changes (not adopted). The results of the review should be forwarded to the Secretary of the Landmarks Preservation Advisory Board, City of Oakland, for final approval.	**Significant and Unavoidable**	25	City Planning & Zoning Division; City Building Services Department	Prior to issuance of the demolition permit for the Ninth Avenue Terminal Building.
E.4: The project would substantially alter the wharf structure supporting the Ninth Avenue Terminal and surrounding areas, which is an historic resource, as defined in CEQA Guidelines Section 15064.5. (SU)	(See E.3a and E.3b.)	**Significant and Unavoidable**		City Planning & Zoning Division; City Building Services Department	See E.3a and E.3b, above.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
E. Cultural Resources (cont.)					
E.5: The project would construct a new mixed-use, multi-story development within approximately 100 feet of the remaining Bulkhead Building which may not be architecturally compatible with this structure as a potential future Oakland City Landmark. (SU)		**Significant and Unavoidable**			
E.8: The substantial demolition of the Ninth Avenue Terminal, in combination with the previous loss of the other two Oakland Municipal Terminals, would result in cumulative impacts to historic resources. (SU)	**E.8:** The project sponsor shall set aside a minimum of 200 square feet of floor area within the Bulkhead Building for an historical exhibit depicting the history of the Oakland Municipal Terminals. At a minimum, the exhibit would consist of the following: 1) Historic photographs of the Grove Street Terminal, Outer Harbor Terminal and Ninth Avenue Terminal. 2) Contemporary photographs of the Ninth Avenue Terminal taken as recommended in Mitigation Measure E.3a. 3) Examples of manifests, log books, invoices and other artifacts that may be in the possession of the Port of Oakland or private companies, if available. These may be reproductions. 4) Other displayable objects and narrative information. 5) An educative and documentary audio/visual history on the Oak to Ninth area and accessory areas as appropriate, including: a. Visual explanation of wharf design versus other types of pier design; b. Oral histories of people who worked at the building and/or other maritime industries in the area;	**Significant and Unavoidable**	25	City Planning & Zoning Division; City Building Services Department	No less than 90 days from the date of scheduled demolition, the applicant shall submit a specific proposal to implement this measure, including schematic design of the exhibit and the proposed media. This plan shall be reviewed and approved by the Planning Director prior to the issuance of the demolition permit and shall be implemented no later than the issuance of an occupancy permit for the 9th Avenue Terminal retrofit and reuse plan.

REVISED EXHIBIT B (Continued)
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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
E. Cultural Resources (cont.)					
E.8 (cont.)	c. Historic film clips. d. History of the development of the harbor; e. History of the development of the Port Board; f. PWA and WPA involvement at the Port; g. World War II uses; h. A visual film documentation of the existing warehouse/industrial character of the area, including views from the water to the City. i. Written transcripts on archival quality paper for any audio or visual exhibits prepared for this mitigation 6) The proposed park design, to be located where the Ninth Avenue Terminal demolition is proposed, should incorporate landscaping, sculptural elements, paths, lighting, etc. that conceptually reference the expanse of the building's footprint and height.				
F. Geology, Soils, and Seismicity					
F.1: In the event of a major earthquake in the region, seismic ground shaking could potentially injure people and cause collapse or structural damage to proposed structures. (PS)	**F.1:** Prior to the issuance of a building permit for any portion of the project site, the project sponsor shall: 1. Submit to the City Building Services Division a site-specific, design level geotechnical investigation prepared for each development parcel by a registered geotechnical engineer. The investigation shall comply with all applicable state and local code requirements and:	Less than Significant	24	City of Oakland Building Services Department	Prior to issuance of the first demolition, grading or building permit in the respective Development Parcel

REVISED EXHIBIT B (Continued)
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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
F. Geology, Soils, and Seismicity (cont.)					
F.1 (cont.)	a) Include an analysis of the expected ground motions at the site from known active faults using accepted methodologies; b) Determine structural design requirements as prescribed by the most current version of the California Building Code, including applicable City amendments, to ensure that structures can withstand ground accelerations expected from known active faults; c) Determine the final design parameters for walls, foundations, foundation slabs, utilities, roadways, parking lots, sidewalks, and other surrounding related improvements; 2. Project plans for foundation design, earthwork, and site preparation shall incorporate all of the mitigations in the site specific investigations. 3. The project structural engineer shall review the site specific investigations, provide any additional necessary mitigation to meet Building Code requirements, and incorporate all applicable mitigations from the investigation in the structural design plans and shall ensure that all structural plans for the project meet current Building Code requirements. 4. The City Building Services Division registered geotechnical engineer or third-party registered engineer retained to review the geotechnical reports shall review each site-specific geotechnical investigation, approve the final report, and require compliance with all geotechnical mitigations contained in the investigation in the plans submitted for the grading, foundation, structural, infrastructure and all other relevant construction permits.				

REVISED EXHIBIT B (Continued)
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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
F. Geology, Soils, and Seismicity (cont.)					
F.1 (cont.)	5. The City Building Services Division shall review all project plans for grading, foundations, structural, infrastructure and all other relevant construction permits to ensure compliance with the applicable geotechnical investigation and other applicable Code requirements.				
F.2: In the event of a major earthquake in the region, seismic ground shaking could potentially expose people and property to liquefaction and earthquake-induced settlement. (PS)	**F.2:** Prior to the issuance of a building permit for any portion of the project site, the project sponsor shall: 1. Submit to the City Building Services Division a site-specific, design level geotechnical investigation prepared for each building site by a registered geotechnical engineer. The investigation shall comply with all applicable state and local code requirements and: a) Provide site specific engineering requirements for mitigation of liquefiable soils; b) Specify liquefaction mitigations that shall use proven methods, generally accepted by registered engineers, to reduce the risk of liquefaction to a less than significant level such as: - subsurface soil improvement, - deep foundations extending below the liquefiable layers, - structural slabs designed to span across areas of non-support, - soil cover sufficiently thick over liquefaction soil to bridge liquefaction zones, - dynamic compaction, - compaction grouting,	Less than Significant	24	City of Oakland Building Services Department	Prior to issuance of the first demolition, grading or building permit in the respective Development Parcel; during the site specific geotechnical investigation

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
F. Geology, Soils, and Seismicity (cont.)					
F.2 (cont.)	- jet grouting, - mitigation for liquefaction hazards suggested in the California Geological Survey's Geology (CGS) Guidelines for Evaluating and Mitigating Seismic Hazards (CGS Special Publication 117, 1997) including edge containment structures (berms, dikes, sea walls, retaining structures, compacted soil zones), removal or treatment of liquefiable soils, modification of site geometry, lowering the groundwater table, in-situ ground densification, deep foundations, reinforced shallow foundations, and structural design that can withstand predicted displacements. 2. The geotechnical investigation shall evaluate these mitigations and identify the most effective and practicable mitigation methods for inclusion in the project plans. These identified mitigations shall be reviewed to ensure compliance with the CGS Geology Guidelines related to protection of the public safety from liquefaction. 3. Project plans for foundation design, earthwork, and site preparation shall incorporate all of the mitigations in the site specific investigations. 4. The project structural engineer shall review the site specific investigations, provide any additional necessary mitigation to meet Building Code requirements, and incorporate all applicable mitigations from the investigation in the structural design plans and shall ensure that all structural plans for the project meet current Building Code requirements.				

REVISED EXHIBIT B (Continued)
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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
F. Geology, Soils, and Seismicity (cont.)					
F.2 (cont.)	5. The City Building Services Division registered geotechnical engineer shall review each site-specific geotechnical investigation, approve the final report, and require compliance with all geotechnical mitigations contained in the investigation in the plans submitted for the grading, foundation, structural, infrastructure and all other relevant construction permits. 6. The City Building Services Division shall review all project plans for grading, foundations, structural, infrastructure and all other relevant construction permits to ensure compliance with the applicable geotechnical investigation and other applicable Code requirements.				
F.3: Development at the project site could be subjected to settlement. (PS)	**F.3:** As with standard geotechnical practices, site specific geotechnical investigations and reports would be required in order to obtain permits from the City of Oakland. Such geotechnical investigations and reports prepared for the project site shall include generally accepted and appropriate engineering techniques for determining the susceptibility of the project site to settlement and reducing its effects. Where settlement and/or differential settlement is predicted, mitigation measures such as lightweight fill, geofoam, surcharging, wick drains, deep foundations, structural slabs, hinged slabs, flexible utility connections, and utility hangers could be used. These measures shall be evaluated and the most effective, feasible, and economical measures shall be recommended. Engineering recommendations shall be included in the project engineering and design plans. All construction activities and design criteria shall comply with applicable codes and requirements of the 1997 UBC with California additions (Title 22), and applicable City construction and grading ordinances.	Less than Significant	24	City of Oakland Building Services Department	Prior to issuance of the first demolition, grading or building permit in the respective Development Parcel; during the site specific geotechnical investigation

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
F. Geology, Soils, and Seismicity (cont.)					
F.4: Development at the project area may include use of dredged material as fill which would be subject to settlement and subsidence. (PS)	**F.4:** Any dredged material used for fill will have to undergo an appropriate process of consolidation and stabilization to render it suitable for the support of engineered fill. A geotechnical investigation and report will be required in order to obtain permits from the City of Oakland in addition to the Dredged Material Management Office permitting requirements. The geotechnical investigations and reports prepared for the project site shall include generally accepted and appropriate engineering techniques for determining the susceptibility of the project specific site to settlement and reducing its effects. Engineering recommendations shall be included in the project engineering and design plans. The use of dredged materials as fill shall be limited to open space areas.	Less than Significant	24	City of Oakland Building Services Department	Prior to issuance of the first demolition, grading or building permit in the respective Development Parcel; during the construction activities
F.5: Construction activities at the project area could loosen and expose surface soils. If this were to occur over the long term, exposed soils could erode by wind or rain causing potential loss of topsoil. In addition, shoreline areas exposed to wave action could be subject to erosion and loss of topsoil. (PS)	**F.5:** Consistent with Mitigation Measure D.1 (which addresses construction-related water quality impacts), the project sponsor shall comply with all applicable NPDES requirements, RWQCB General Construction Permit requirements, and all City regulations, including Creek Protection Permits, as detailed in Mitigation D.1.	Less than Significant	24	City Building Services Department; City Planning and Zoning Department	Prior to issuance of the first demolition, grading or building permit in the respective Development Parcel; during the construction activities
G. Noise					
G.1: Project construction activities would intermittently and temporarily generate noise levels above existing levels in the project vicinity. Project construction noise levels could exceed City of Oakland standards and cause disturbances in noise-sensitive areas, such as residential areas. (PS)	**G.1a:** The project applicant shall require construction contractors to limit standard construction activities as required by the City of Oakland Building Services Division. Such activities are generally limited to between 7:00 AM and 7:00 PM Monday through Friday, with pile driving and/or other extreme noise-generating activities (greater than 90 dBA) limited to between 8:00 AM and 4:00 PM Monday through Friday, with no extreme noise generating	**Significant and Unavoidable**	37	City Building Services Department	Prior to issuance of the first building permit for the respective Development Parcel; inspections during construction phase of Project.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
G. Noise (cont.)					
G.1 (cont.)	activity permitted between 12:30 PM and 1:30 PM. No construction activities shall be allowed on weekends, except that interior construction shall be permitted after buildings are enclosed, without prior authorization of the Building Services Division, and no extreme noise-generating activities shall be allowed on weekends and holidays.				
	G.1b: To reduce daytime noise impacts due to construction, the project applicant shall require construction contractors to implement the following measures: • Equipment and trucks used for project construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds, wherever feasible). • Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible; this could achieve a reduction of 5 dBA. Quieter procedures, such as use of drills rather than impact tools, shall be used whenever feasible.	**Significant and Unavoidable**	37	City Building Services Department;	Prior to issuance of the first building permit for the respective Development Parcel; inspections during construction phase of Project.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
G. Noise (cont.)					
G.1 (cont.)	• Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures to the extent feasible. • If feasible, the noisiest phases of construction (such as pile driving) shall be limited to less than 10 days at a time to comply with the local noise ordinance.				
	G.1c: To further mitigate pile driving and/or other extreme noise-generating construction impacts, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted for review and approval by the City of Oakland Building Services Division to ensure that maximum feasible noise attenuation will be achieved.	**Significant and Unavoidable**	37	City Building Services Department	Prior to any pile driving or other extreme noise generating activities on the site.
	G.1d: Prior to the issuance of each building permit, along with the submission of construction documents, the project applicant shall submit to the City Building Services Division a list of measures to respond to and track complaints pertaining to construction noise.	**Significant and Unavoidable**	37	City Building Services Department	Prior to issuance of the first building permit for the respective Development Parcel; inspections during construction phase of Project.
G.2: Noise from project-generated traffic and other operational noise sources, such as mechanical equipment and truck loading/unloading, could exceed City of Oakland Noise Ordinance standards and disturb project occupants and nearby residents. (PS)	**G.2:** The project applicant shall incorporate the following design features into the final site plans: • Building equipment (e.g., HVAC units) shall be located away from nearby residences, on building rooftops, and properly shielded within an enclosure that effectively blocks the line of sight of the source from receivers in order to meet City of Oakland Noise Ordinance standards.	Less than Significant	37	City Building Services Department; City Planning and Zoning Division	Prior to issuance of the first building permit for the respective Development Parcel

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
G. Noise (cont.)					
G.2 (cont.)	• Truck delivery areas shall be located as far from adjacent residences as possible. To the extent feasible, project buildings shall be located so that they block noise related to truck deliveries and waste collection from residential or other sensitive receptors.				
G.3: The project would locate noise-sensitive multifamily residential uses in a noise environment where noise levels are above what is considered "normally acceptable" according to the City of Oakland General Plan Noise Element. (PS)	**G.3a:** To comply with the requirements of Title 24 and achieve an interior noise level of less than 45 dBA, noise reduction in the form of sound-rated assemblies (i.e., windows, exterior doors, and walls) shall be incorporated into project building design. Final recommendations for sound-rated assemblies will depend on the specific building designs and layout of buildings on the site and shall be determined during the design phase. (Oak to 9th Residential Development, Oakland, California, Environmental Noise Assessment by Charles M. Salter Associates, Inc., November 2002. Table 4 of the Salter Associates document lists conceptual window and wall Sound Transmission Class (STC) ratings for different noise environments and gives an estimate of the STC requirements needed to meet interior noise criteria.)	Less than Significant		City Building Services Department	Prior to issuance of the first building permit for the respective Development Parcel
	G.3b: Due to the proximity of the project to a railroad crossing, a written disclosure of railroad crossing noise, particularly usage of train horns and bells on warning devices during the daytime and nighttime hours, shall be provided to potential residents of the project	Less than Significant		City Planning and Zoning Department	Prior to issuance of the first certificate of occupancy for the project.
G.4: The project would locate noise-sensitive multifamily residential uses and public parks in a noise environment where noise levels are above what is considered "normally acceptable" according to the City of Oakland General Plan Noise Element. (PS)		**Significant and Unavoidable**			

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
H. Hazardous Materials					
H.1: Disturbance and release of contaminated soil during remediation, demolition and construction phases of the project, or transportation of excavated material, contaminated groundwater or dredged sediment could expose construction workers, the public, or the environment to adverse conditions related to hazardous materials handling. (PS)	**H.1a:** The applicant shall retain a qualified environmental consulting firm to prepare a cleanup plan for the contaminated soil and groundwater which would be based on a comprehensive remedial investigation report for the project area. This plan shall be approved by the appropriate regulatory agencies which may include but not be limited to the DTSC and the RWQCB. The plan shall also include the preparation of a health and safety plan to protect the workers and the public during all remediation and construction activities proposed. Following agency approval of the plan, remediation and removal work shall be conducted according to all applicable OSHA worker safety regulations. Remediation activities at the site may include, without limitation, closure or removal of subsurface structures, excavation and disposal of contaminated materials, natural and enhanced bioremediation of soil and groundwater, restoration and improvement of shoreline structures, limited dredging of sediments, and institutional and engineering controls to prevent exposure to and migration of contaminated materials. Throughout the course of remediation and construction activities, the handling, transport, and storage of any hazardous waste or potentially hazardous waste shall be conducted appropriate to all local and state agency protocols.	Less than Significant		City Building Services Department; City Public Works Agency; State Dept. of Toxic Substances Control; Regional Water Quality Control Board	Prior to issuance of the first building permit in the respective Development Area and on-going during construction activities
	H.1b: Prior to offsite disposal, the project applicant shall adequately profile excavated soils to establish the proper classification of the soils for hazardous or non-hazardous waste disposal. The soils shall be handled, stored and transported according to all applicable regulations for the appropriate classification.	Less than Significant	37	City Building Services Department; City Public Works Agency	Prior to issuance of the first building permit in the respective Development Area and on-going during construction activities

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
H. Hazardous Materials (cont.)					
H.1 (cont.)	**H.1c:** Soil generated by construction activities shall be stockpiled onsite and sampled prior to reuse or disposal at an appropriate facility. Any reuse of soils shall be conducted by prior approval from the appropriate state oversight agency.	Less than Significant	37	City Building Services Department; City Public Works Agency	Prior to issuance of the first building permit in the respective Development Area and on-going during construction activities
	H.1d: Groundwater generated during construction dewatering shall be contained and transported offsite for disposal at an appropriate facility, or treated, if necessary, prior to discharge into the sanitary sewer to levels acceptable to the East Bay Municipal Utilities District.	Less than Significant	37	City Building Services Department; City Public Works Agency	Prior to issuance of the first building permit in the respective Development Area and on-going during construction activities
	H.1.e: Prior to dredging any materials from the Clinton Basin, the project applicant shall retain a qualified environmental consulting firm to prepare a Sampling and Analysis Plan (SAP) as described by the Corps of Engineers (PN 99-4). The SAP shall be approved by the Dredged Material Management Office (DMMO) and shall include a proposal for a disposal location and a disposal alternatives analysis. Following agency approval of the plan, sediment removal work shall be conducted in accordance with all applicable OSHA worker safety regulations. In addition, the handling, transport, and storage of any hazardous waste or potentially hazardous waste shall be conducted consistent with all local and state agency protocols.	Less than Significant	37	City Building Services Department; City Public Works Agency	Prior to issuance of the first building permit in the respective Development Area and on-going during construction activities
H.2: Disturbance and release of hazardous structural and building components (i.e. asbestos, lead, PCBs, USTs, and ASTs) during demolition and construction phases of the project or transport of these materials could expose construction workers, the public, or the environment to adverse conditions related to hazardous materials handling. (PS)	**H.2a:** A pre-demolition ACM survey shall be performed by a state-certified asbestos consultant prior to demolition of any of the structures located on the project site. The survey shall include sampling and analysis of suspected ACMs. Abatement of known or suspected ACMs shall occur prior to demolition or construction activities that would disturb those materials.	Less than Significant	37	City Building Services Department; City Public Works Agency	Prior to issuance of the first building permit in the respective Development Area and on-going during construction activities

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H. Hazardous Materials (cont.)					
H.2 (cont.)	Pursuant to an asbestos abatement plan developed by a state-certified asbestos consultant and approved by the City, all ACMs shall be removed and appropriately disposed of by a state certified asbestos contractor.				
	H.2b: The project applicant shall implement a lead-based paint abatement plan, prepared by a qualified consultant, which shall include the following components: • A pre-demolition LBP survey for all structures proposed for demolition at the project site. The survey shall include sampling and identification of suspected materials containing LBP. • Development of an abatement specification plan which shall be based on survey work and detail proposed abatement work areas and procedures. • A site Health and Safety Plan. • Containment of all abatement work areas to prohibit offsite migration of paint chip debris. • Removal of all peeling and stratified lead-based paint on building surfaces and on non-building surfaces to the degree necessary to safely and properly complete demolition activities per the recommendations of the survey. The demolition contractor shall be identified as responsible for properly containing and disposing of intact lead-based paint on all equipment to be cut and/or removed during the demolition. • Appropriately remove paint chips by vacuum or other approved method. • Collection, segregation, and profiling waste for disposal determination. • Appropriate disposal of all hazardous and non-hazardous waste.	Less than Significant	37	City Building Services Department	Prior to issuance of the first building permit in the respective Development Area and on-going during construction activities; to be implemented in conjunction with Mitigation Measure C.1.B.

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
H. Hazardous Materials (cont.)					
H.2 (cont.)	**H.2c:** A pre-demolition PCB survey shall be performed prior to demolition of any of the structures located on the project site. The survey shall include sampling and identification of suspected PCBs. Abatement of known or suspected PCBs shall occur prior to demolition or construction activities that would disturb those materials. In the event that electrical equipment or other PCB-containing materials are identified prior to demolition activities they shall be removed, and shall be disposed of by a licensed transportation and disposal contractor at an appropriate hazardous waste facility.	Less than Significant	37	City Building Services Department; City Public Works Agency	Prior to issuance of the first building permit in the respective Development Area and on-going during construction activities
	H.2d: When known or previously unidentified USTs are encountered during construction, construction in the immediate area shall cease until the UST is removed with oversight from the City of Oakland Fire Department Hazardous Materials Unit or other applicable oversight agency. If there is any indication that the tank has leaked, then the lead agency shall direct any appropriate remediation measures. Removal of the UST shall include, to the extent deemed necessary by the lead agency, over-excavation and disposal of any impacted soil that may be associated with such tanks to a degree satisfactory to the oversight agency.	Less than Significant	37	City Building Services Department; City Public Works Agency	Prior to issuance of the first building permit in the respective Development Area and on-going during construction activities
H.3: Hazardous materials used onsite during construction activities (i.e., solvents) could be released to the environment through improper handling or storage. (PS)	**H.3:** The use of construction best management practices shall be implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following: • Follow manufacturer's recommendations on use, storage and disposal of chemical products used in construction;	Less than Significant	37	City Building Services Department; City Public Works Agency	Prior to issuance of the first building permit in the respective Development Area and on-going during construction activities

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
H. Hazardous Materials (cont.)					
H.3 (cont.)	• Avoid overtopping construction equipment fuel gas tanks; • During routine maintenance of construction equipment, properly contain and remove grease and oils. • Properly dispose of discarded containers of fuels and other chemicals.				
I. Biological Resources / Wetlands					
I.2: Construction activities required for the project would result in a substantial adverse effect on potentially jurisdictional wetlands or waters of the U.S. under the jurisdiction of the Corps, waters of the state under the jurisdiction of the Regional Water Quality Control Board (RWQCB), and wetlands under the jurisdiction of BCDC jurisdiction. (PS)	**I.2a:** *Corps-Verified Wetland Delineation*. A preliminary identification of potentially jurisdictional areas was conducted in 2004 (LSA, 2004), and the project sponsor submitted the draft potentially jurisdictional wetland delineation to the Corps in July 2005. The project sponsor shall obtain Corps verification of the preliminary identification of jurisdictional areas prior to submitting permit applications. A verified wetland delineation would be required prior to the submittal of regulatory permit applications.	Less than Significant	37	City Planning and Development Department; City Building Permit Department; City Public Works Agency	Prior to project sponsor submittal of regulatory permit applications to Army Corps
	I.2b: *Wetland Avoidance*. Section 404 first requires that projects avoid or minimize adverse effects on jurisdictional waters to the extent practicable. To the extent feasible, the final project design shall minimize effects on wetlands and other waters in accordance with Section 404 of the Clean Water Act. Areas that are avoided shall be subject to Best Management Practices (BMPs), as described in Mitigation Measure I.2.d below. Such measures shall include installation of silt fencing, straw wattles or other appropriate erosion and sediment control methods or devices. Equipment used for the removal of debris and concrete rip-rap along the estuary edge will be operated from land using backhoes and cranes. Construction operations along	Less than Significant	37	City Planning and Development Department; City Building Permit Department; City Public Works Agency	Prior to approval of Final Development Plans; on-going during construction activities

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
I. Biological Resources / Wetlands (cont.)					
I.2 (cont.)	Clinton Basin and Shoreline Park shall be barge-mounted or shall involve water-based equipment such as scows, derrick barges and tugs. Additionally, the existing restoration project at the southwest end of Clinton Basin, implemented by the Port of Oakland, shall be protected during construction activities. The extent of this area shall be clearly marked by a qualified biologist prior to the start of any grading or construction activities and a buffer zone established. All construction personnel working in the vicinity of the restoration area shall be informed of its location and buffer zone.				
	I.2c: Obtain Regulatory Permits and other Agency Approvals. Prior to the start of construction activities for the project, the project applicant shall obtain all required permit approvals from the Corps, the RWQCB, BCDC, and all other agencies with permitting responsibilities for construction activities within jurisdictional waters of other jurisdiction areas. Permit approvals and certifications shall include, but not be limited to Section 404/Section 10 permits from the Corps, Section 401 Water Quality Certification from the RWQCB, and BCDC permit. *Section 404 / Section 10 Permits.* Permit approval from the Corps shall be obtained for the placement of dredge or fill material in waters of the U.S., if any within the interior of the project site, pursuant to Section 404 of the federal Clean Water Act. Construction along the estuary edge below MHW elevation will be considered dredging by the Corps and will require a Section 10 permit. In addition, dredging of Clinton Basin will also require a Section 10 permit.	Less than Significant	37	City Planning and Development Department; City Building Permit Department; City Public Works Agency	Prior to approval of Final Development Plans; on-going during construction activities for that part of the site adjacent to the shoreline or otherwise potentially affected applicable land and water areas (i.e., stormwater or construction runoff and erosion)

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Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
I. Biological Resources / Wetlands (cont.)					
I.2 (cont.)	*Section 401 Water Quality Certification*. Approval of Water Quality Certification (WQC) and/or Waste Discharge Requirements (WDRs) shall be obtained from the RWQCB for work within jurisdictional waters. Preparation of the Section 401 Water Quality Certification applications will require an application and supporting materials including construction techniques, areas of impact, and project schedule. *BCDC Permit*. Permit approval from BCDC placing solid material, pilings floating structures boat docks, or other fill and/or dredging or other extraction of material from the Bay and the 100-foot shoreline band inland from mean high tide line along the length of the project site. Activities would include dredging for rebuilding the marina in Clinton Basin, and replacing the 5th Avenue marina with a new marina that will contain approximately 170 boat slips. The proposed project will include the removal of approximately 33,780 square feet of solid Bay fill as part of the shoreline design and the placement of 74,110 square feet of solid Bay fill for the creation of a village green at Clinton Basin. The project also includes the removal of approximately 129,920 square feet of pile-supported fill with the removal of a portion of the Ninth Avenue Terminal wharf. Additionally, floating fill will be required to create the two proposed marinas. The project will be required to comply with all BCDC permit conditions that typically include requirements to construct, guarantee and maintain public access to the bay, specified construction methods to assure safety or to protect water quality, and mitigation requirements to offset the adverse environmental impacts the project.				

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
I. Biological Resources / Wetlands (cont.)					
I.2 (cont.)	**I.2d:** *Best Management Practices (BMPs).* The project applicant shall implement standard BMPs to maintain water quality and control erosion and sedimentation during construction, as required by compliance with the General National Pollution Discharge Elimination System (NPDES) Permit for Construction Activities and established by Mitigation Measure D.1 to address impacts on water quality. Mitigation measures would include, but would not be limited to, installing silt fencing along the edges of the project site to protect estuarine waters, locating fueling stations located away from potential jurisdictional features, and isolating construction work areas from the identified jurisdictional features. The project applicant shall also implement, BMPs to avoid impacts onwater quality resulting from dredging activities within the Bay, and that as identified in the *Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region* (LTMS) (Corps, 2001). These BMPs include: silt fencing and gunderbooms or other appropriate methods for keeping dredged materials from leaving the project site.	Less than Significant	37	City Planning and Development Department; City Building Permit Department; City Public Works Agency	On-going during all construction activities on the project site
	I.2e: *Compensatory Mitigation.* The project applicant shall provide compensatory mitigation for temporary impacts to, and permanent loss of, waters of the U.S., including wetlands, as required by regulatory permits issued by the Corps, RWQCB, and BCDC. Measures shall include, but not be limited to 1) onsite mitigation through wetland creation or enhancement, 2) development of a Mitigation and Monitoring Plan, and 3) additional wetland creation or enhancement or offsite mitigation.	Less than Significant		City Public Works Agency; City Planning and Zoning Department	On-going during all construction activities on the project site

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
I. Biological Resources / Wetlands (cont.)					
I.3: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on fisheries resources in the Oakland Inner Harbor. (PS)	**I.3a:** *Protection of Fish and Migrating Salmonids.* The project applicant shall implement measures for protection of salmonids and Pacific herring during dredging projects and for indirect impacts on the San Francisco Bay "Essential Fish Habitat" (EFH) that are identified in the Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region (LTMS) (Corps, 2001).	Less than Significant	37	City Public Works Agency; City Public Works Agency; City Planning and Zoning Department	On-going during all construction activities on the project site
I.4: Construction activities required for the project could have a substantial adverse effect, either directly or through habitat modifications, on nesting habitat for breeding raptors and passerine birds, including Cooper's hawk. (PS)	**I.4a:** *Timing of Construction.* To the extent feasible, construction activities shall be conducted outside the breeding season for birds and raptors (August 1-January 30) Trees and shrubs that could provide potential nesting habitat may be removed during this period to avoid future nesting within the project site.	Less than Significant	37	City Public Works Agency; City Planning and Zoning Department	Pre-construction survey performed and at designated points during all construction activities on the project site
	I.4b: *Preconstruction Surveys. If seasonal avoidance is infeasible, the following measures* shall be required to avoid potential adverse effects on nesting special-status raptors and other nesting birds: • A qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within 500 feet of construction activities. Preconstruction surveys should occur no later than two weeks prior to the start of construction activities. • If active nests of raptors or other bird species are found during preconstruction surveys, a no-disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of these buffer zones and types of construction shall be determined in consultation with the CDFG and shall be based on existing noise and human disturbance levels at the project site.	Less than Significant	37	City Public Works Agency; City Planning and Zoning Department	Pre-construction survey performed and at designated points during all construction activities on the project site

REVISED EXHIBIT B (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE OAK TO NINTH MIXED USE REDEVELOPMENT PROJECT

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation[1]	Condition of Approval	Monitoring Responsibility[2]	Monitoring Timeline
I. Biological Resources / Wetlands (cont.)					
I.4 (cont.)	• If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees, shrubs, and buildings that have been determined to be unoccupied by special-status birds or that are located more than 500 feet from active nests may be removed.				
I.5: The project could have a substantial adverse effect, either directly or through habitat modifications, on special-status nesting and roosting bats. (PS)	**I.5:** Before demolition of abandoned or underused buildings on the project site, such as the Ninth Avenue Terminal building, a qualified biologist who is familiar with bat biology and who is able to recognize signs of bats using abandoned buildings shall conduct pre-demolition building surveys in order to adequately make a determination on the presence of bat nurseries. If abandoned or underused buildings slated for destruction are being used by bats as nursery sites, demolition shall be postponed until young are reared and able to forage on their own. This determination shall be made by a qualified biologist specializing in bat biology. If bats are found to be roosting in abandoned or underused buildings on the project site, the bats shall be actively relocated to a temporary roosting structure (preferably onsite) during demolition activities. In addition, permanent bat roosting structures ("bat boxes") shall be created in order to properly mitigate the effects of a loss of roosting structure. The design of the bat boxes shall conform to the specifications appropriate to the species of bats found on the project site and vicinity, and shall be approved by a qualified bat biologist knowledgeable in the design of bat boxes. The bat boxes shall conform to the architectural design of the project buildings to reduce the visibility and obtrusiveness of the boxes and to avoid vandalism or disturbance to bat colonies.	Less than Significant	37	City Public Works Agency; City Planning and Zoning Department	Pre-construction survey performed and at designated points during all construction activities on the project site

OAK TO NINTH AVENUE PROJECT

Addendum #1 to the Certified Environmental Impact Report

State Clearinghouse No. 2004062013

Prepared for:
City of Oakland CEDA

June 7, 2006

OAK TO NINTH AVENUE PROJECT

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CHAPTER I
Introduction

A. Background

On March 15, 2006, the City of Oakland Planning Commission certified an environmental impact report (EIR) for the Oak to Ninth Avenue Project (ER04-0009). Prior to and since the Planning Commission's action, the project sponsor has been asked to consider a number of matters regarding the project and its potential impacts. Also, comments on the Draft EIR that were not received for inclusion in the certified Final EIR document have been received by the City. This Addendum is a comprehensive compendium of the new analysis and responses to address these matters.

B. Purpose of the EIR Addendum

The City has prepared this Addendum to the 2006 certified EIR[1] for the Oak to Ninth Avenue Project (Addendum) to provide additional analysis for 1) an alternative project site plan (eliminating Parcel N development and redistributing 300 dwelling units), and 2) the project's potential effects on the proposed reconfigured 12th and 14th Streets adjacent to Lake Merritt, and 3) to present responses to additional comments received on the EIR, some of which were previously submitted to the Planning Commission.

The information provided in this Addendum does not change the environmental analysis contained in the certified EIR. The scope and analysis presented in this document were prepared consistent with to the requirements of Section 15162 and 15164 of the California Environmental Quality Act (CEQA) discussed below. The City will use this Addendum, together with the 2006 certified EIR, when considering its action on the project.

CEQA Framework for the Addendum

According to CEQA Guidelines Section 15164, an addendum to a previously certified EIR may be prepared if some changes or additions are necessary to the EIR but none of the conditions described

[1] This document generally refers to the certified "EIR" which, pursuant to CEQA, consists of the Draft EIR (DEIR) and the Final EIR (FEIR) / Response to Comments document for the project.

below for preparation of a subsequent EIR have occurred (CEQA Guidelines Section 15162) *(emphasis added)*:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration *due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects*;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration *due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects*; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

CEQA allows the lead agency or responsible agency to prepare an addendum to a previously certified EIR if only minor technical changes or additions are necessary (but none of the above conditions have occurred). The decision making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.

Based on the analysis conducted and provided herein, this addendum concludes that the alternative project site plan or the potential effects to the proposed reconfigured 12th and 14th Street at Lake Merritt analyzed herein would not constitute a major revision to the certified EIR; that there is no substantial change in circumstances as a result of the potential project change that would cause new or more intense significant impacts; and that there is no new information of substantial importance that identifies new or more intense significant impacts (CEQA Guidelines Section 15162). Thus, preparation of an addendum to the certified EIR is appropriate pursuant to CEQA.

CHAPTER II
"No Parcel N" Development Scenario

A. Description

Parcel N is located on the westernmost edge of the project site directly west of the Jack London Aquatic Center (Aquatic Center) and north of Estuary Park. As described and analyzed in the Draft EIR and in the Final EIR (which analyzed an alternative configuration of Parcel N), the Oak to Ninth Avenue Project would develop 300 dwelling units, approximately 15,000 square feet of ground-floor non-residential use, and approximately 300 onsite parking spaces on Parcel N in its final phase of development (estimated year 2024). This Addendum considers an alternative project scenario in which Parcel N would not be developed and would instead be improved with approximately 2.41 acres of new open space and parking extending north from Estuary Park. The open space portion of Estuary Park (excluding Jack London Aquatic Center facilities) would be increased from 3.5 acres (existing) to approximately 5.9 acres, and would extend north to Embarcadero. Surface parking would line the west of the park. **Figure II-1**, on the following page, illustrates the alternative Oak to Ninth Avenue site configuration with no development on Parcel N. The development previously proposed on Parcel N would be redistributed to other parcels within the site. **Table II-1** below shows the revised development program by parcel.

TABLE II-1
DEVELOPMENT PROGRAM COMPARISON – DEIR AND "NO PARCEL N" SCENARIO

Parcel	Acres		Ground Level Non-Residential Area (s.f.)		Total Units		Units/Net Acre		Parking	
	DEIR	No Parcel N	DEIR	No Parcel N	DEIR	No Parcel N	DEIR	No Parcel N	DEIR	No Parcel N
A	2.74	2.38	10,000	10,000	375	407	137	171	375	444
B	1.53	1.53	6,000	6,000	160	175	105	114	160	185
C	1.48	1.48	6,000	6,000	160	175	108	118	160	185
D	1.46	1.46	6,000	6,000	160	175	110	120	160	185
E	1.20	1.20	8,000	8,000	86	131	72	108	86	147
F	1.49	1.75	5,000	5,000	164	165	110	94	164	172
G	2.72	2.72	42,000	45,000	280	300	103	110	514	372
H	2.08	2.08	35,000	36,000	335	375	161	180	435	472
J	1.84	1.84	12,000	15,000	292	339	159	184	392	375
K	2.23	1.69	17,000	10,000	310	322	139	190	310	355
L	1.45	1.45	15,000	15,000	144	146	99	101	144	176
M	2.65	(M1) 1.45 (M2) 1.15	5,000	(M1) 5,000 (M2) 15,000	334	(M1) 265 (M2) 125	126	(M1) 183 (M2) 109	334	(M1) 275 (M2) 157
N	2.41	0	15,000	0	300	0	124	0	300	0
Terminal	-	-	18,000	18,000	-	-	-	-	-	-
TOTAL	25.28	22.19	200,000	200,000	3,100	3,100	120	140*	3,534	3,500

*Average Net Density
Source: Oakland Harbor Partners, 2006

ILLUSTRATIVE DEVELOPMENT PROGRAM

Parcel	Acres (ac)	Ground Level Non-Residential Area (s.f.)	Residential Program Total DU's	Residential Program DU/ac	Structured Parking Total
A	2.38	10,000	407	171	444
B	1.53	6,000	175	114	185
C	1.48	6,000	175	118	185
D	1.46	6,000	175	120	185
E	1.20	8,000	131	108	147
F	1.75	5,000	165	94	172
G	2.72	45,000	300	110	372
H	2.08	36,000	375	180	472
J	1.84	15,000	339	184	375
K	1.69	10,000	322	190	355
L	1.45	15,000	146	101	176
M1	1.45	5,000	265	183	275
M2	1.15	15,000	125	109	157
9th Ave. Terminal	-	18,000	-	-	-
Total	22.19	200,000	3,100	140*	3,500

*This represents an average net density

BCDC JURISDICTION

0 50' 100' 200' 300'

ILLUSTRATIVE PLAN

Brooklyn Basin ~ Oak to 9th Development Plan

Prepared for Oakland Harbor Partners by ROMA Design Group in association with MVE Architects, Moffatt & Nichol and BKF Engineers

MAY 16, 2006

B. Environmental Effects on "No Parcel N" Scenario

The Draft EIR (DEIR) discusses certain topics for which specific effects could be directly attributed to the development of Parcel N. These include General Plan consistency (Estuary Policy Plan); traffic, circulation and parking; and visual quality (views and shadow). This following discussion focuses on the potential changes that could occur for each of the CEQA topics analyzed in the 2006 certified EIR but focuses on these three most affected topics. The discussion concludes that the "No Parcel N" scenario would result in the same or less severe environmental impacts as those identified for the proposed project analyzed in the Draft EIR.

Land Use, Plans, and Policies

The Draft EIR states that the series of parks that would be created by the DEIR project would be generally consistent with those envisioned in the Estuary Plan, except that the existing Estuary Park would increased by approximately 2.41 acres that would extend north to the Embarcadero, as illustrated in the Estuary Policy Plan (Estuary Plan). The total area of *new* open space would be 23.11 acres compared to 20.7 new acres with the DEIR project. Therefore, the No Parcel N scenario would remain and be further consistent with numerous Estuary Plan objectives and policies that call for the creation of new public open space along the Oak-to-Ninth District waterfront.

Transportation, Circulation, and Parking

Because the dwelling unit and commercial space totals are identical between the No Project scenario and the project analyzed in the Draft EIR, the overall project trip generation would also therefore be identical. Based on the analysis conducted by Fehr & Peers Transportation Consultants for this Addendum (**Appendix A**), the distribution of project-generated traffic would be unaffected by changes to the site plan, therefore the project impacts are expected to be the same at all off-site intersections. Off-site intersections would include all intersections except those directly adjacent to the project site.

The number of driveways proposed along Embarcadero is proposed to remain the same under the No Parcel N scenario. At one of these driveways (Estuary Drive near the former Parcel N), the traffic volume is expected to decrease significantly with the removal of the previous Parcel N dwelling units and commercial space from this driveway.

Throughout the remainder of the project site, the number of trips is expected to increase, however, the increase at any one driveway to the site or individual development parcels is expected to be minimal. The trip increase at each driveway ranges from 5 AM peak hour trips at Embarcadero / 5th Avenue to 40 PM peak hour trips at Embarcadero / 6th Avenue/I-880 off-ramp. The other driveways would also experience minimal increases in traffic volumes. This minimal increase occurs for the following reasons:

1. The change in the site plan results in the redistribution of no more than 10 percent of the uses on site (300 dwelling units and 15,000 square feet of commercial)

2. These dwelling units and the commercial space are distributed across the remaining areas of the project

3. There are six driveways which provide access to the site

4. The project maintains an extensive internal roadway system which allows vehicles from the various parcels to access multiple driveways

Therefore, the redistribution of land uses results in a minimal increase in trips across all driveways.

The impact analysis for the EIR included two of the major intersections adjacent to the project site. These intersections are Embarcadero/5th Avenue and Embarcadero/6th Avenue/I-880 off-ramp. As noted in above, there will be a minor increase in the number of vehicles at these intersections. The traffic study documented in the Draft and Final EIR identified impacts and recommended mitigation measures at these two intersections. With the recommended mitigations, mainly a widening of Embarcadero from 5th Avenue along the project frontage, both of these intersections would operate at an acceptable service levels (LOS D or better).

An analysis of intersection operations indicates that the additional trips cause a minimal increase in delay and no change in LOS. The delay change ranges from less than 1 second at the intersection of Embarcadero/5th Avenue in the AM peak hour to a change in delay of 3 seconds at the intersection of Embarcadero/6th Avenue/I-880 off-ramp in the PM peak hour. During all analysis periods, the change in delay is insufficient to cause a change in LOS. Therefore, these two intersections would continue to operate at acceptable levels even with the change in the project site, assuming implementation of the mitigation measures identified in the Draft and Final EIR.

Air Quality and Meteorological Conditions

Since the No Parcel N scenario would have the same traffic and circulation characteristics as the DEIR project, it would generate the same number of vehicle trips and criteria air pollutant emissions. No change would result to the operational air quality impacts identified in the DEIR. Also, although the duration of construction would likely be reduced, specifically adjacent to existing residential uses, construction-related air quality impacts identified in the DEIR would also remain since demolition of the large existing building on Parcel N would still occur.

Hydrology and Water Quality

Since less paved development and more turf area would occur on Parcel N, there would be a slight reduction in the total area of impervious surface onsite. Under the No Parcel N scenario, for all parts of the project site, the project would continue to remove existing uses and onsite handling and storage of hazardous material, improve the onsite storm drain system, and implement measures to treat runoff. As a result, the same or reduced water quality and hydrology impacts during construction and operations would occur, as identified for the DEIR project.

Cultural Resources

The No Parcel N scenario would not affect historic resources since none are located on or near Parcel N. Therefore, the same cultural resources impacts would occur as those identified for the DEIR project.

Geology, Soils, and Seismicity

As with the DEIR project, residential use buildings would still be constructed on the overall project site although not on Parcel N. Therefore the same impacts relative to geology, soils and seismic hazards that would occur with the DEIR project would occur with the No Parcel N scenario.

Noise

Since the No Parcel N scenario would have similar traffic and circulation characteristics and internal street layout as the DEIR project, the same traffic-related noise impacts identified for the DEIR project would occur. Like the DEIR project, a significant, unavoidable impact would result because residential uses would continue to be in a noise environment that exceeds the City's "normally acceptable" standard, although not on Parcel N. Operational noise impacts associated with utility equipment and commercial activities (e.g., loading, etc.) in particular would be reduced since these activities and facilities would no longer occur adjacent to existing residential uses. As with air quality, construction-related noise impacts also would be reduced but would still occur due to demolition activities required for Parcel N.

Hazardous Materials

The No Parcel N scenario would involve construction activities and would therefore still expose the public to hazardous materials during construction. Remediation would still occur, and any operational hazardous materials impacts would be the same, as with the DEIR project.

Biological Resources

The development of Parcel N would not affect any specific biological resources not otherwise identified as being impacted by the overall development project. Therefore, the No Parcel N scenario would not affect biological resources, and the same impacts identified in the DEIR would occur.

Population, Housing and Employment

The No Parcel N scenario would not change the total number of housing units, population, or number or types of jobs proposed by the project. Similarly, the same amount of total ground-floor non-residential use would occur on the project site overall, so there would be no change in employment. Therefore, the No Parcel N scenario would have the same population, housing and employment impacts identified for the DEIR project.

Visual Quality and Shadows

The DEIR project proposed a building that would vary from approximately 65 to 86 feet tall on 2.4 acres fronting the Embarcadero on Parcel N. No structure would be constructed on Parcel N under the No Parcel N scenario, therefore, although no significant impacts to visual quality or shadow were identified in the Draft EIR, the removal of the Parcel N structure would eliminate any new project shadow near adjacent residential uses and would not affect a change in short, medium or long range views across the area of the Oak to Ninth Avenue project site west of Lake Merritt Channel. The visual character of this area would be open space expanding south from the Embarcadero to the Bay Trail along the waterfront.

The height, massing and location of the buildings proposed on the remaining development parcels, east of the Channel, would not be changed from what was analyzed in the Draft EIR. Under the No Parcel N scenario, these buildings would absorb the development originally proposed for Parcel N. Therefore, impacts to visual character, views and shadow would remain less than significant as identified in the Draft EIR (as well as identified for the Reconfigured Parcel N scenario analyzed in the Final EIR). Effects specifically associated with the up to 86-foot tall building originally proposed on Parcel N adjacent to residential uses would be avoided.

Public Services and Recreation

The No Parcel N scenario would result in approximately 2.41 more acres of total open space than analyzed in the DEIR. Since the overall population would remain the same as with the DEIR project, the ratio of park acres per 1,000 residents to would be increased from 4.1 to 4.6 (compared to the City standard of "4.0 acres per 1,000 residents"). Also, the No Parcel N scenario would include the same number of dwelling units and types of other land uses as analyzed in the DEIR, therefore it would not change the demand for public services or recreational facilities identified for the DEIR project.

Utilities and Service Systems

Similar to public services impacts above, since the No Project N scenario would not change the total number of dwelling units, estimated population, or land uses on the overall project site, the impacts identified for public utilities and service systems would be the same as those identified in the DEIR for the proposed project.

Summary

The potential environmental effects that would occur under the No Parcel N development scenario would be essentially the same or less severe than those identified for the proposed project analyzed in the Draft EIR. This is primarily due to the overall development program remaining unchanged with the development assumed for Parcel N being distributed throughout the project site. An increase in unpaved area and public open space similar to that envisioned by the General Plan, and the removal of the 65 to 86-foot tall structure proposed near existing residential uses would also result in reduced effects compared to those identified in the Draft EIR.

CHAPTER III

Potential Impacts to Reconfigured 12th and 14th Streets at Lake Merritt

A. Background

Within the foreseeable future, the City of Oakland will be reconfiguring 12th and 14th Streets south of Lake Merritt to create a six-lane boulevard. In response to direction from City staff, additional analysis was conducted to estimate project traffic impacts on the proposed reconfigured 12th and 14th Streets. Based on the analysis prepared by Fehr & Peers Transportation Consultants, dated May 18, 2006, (provided in **Appendix B**), the Oak to Ninth Avenue Project would not impact the operations of the proposed reconfiguration of this roadway system.

B. Potential Traffic Impacts

Level of Service (LOS) Analysis

The transportation impact analysis for Oak to Ninth Avenue Project focused on project impacts at the intersection level. Impacts to the freeways and other major regional roadways throughout Alameda County were also evaluated, based on the requirements of the Alameda County Congestion Management Agency (ACCMA). As documented in the Draft EIR, the analysis concluded that the intersections along both the west side and east side of the 12th/14th Street roadway segment would operate at acceptable service levels.

An additional level of analysis is presented in this addendum and estimates the 2025 level of service (LOS) for this roadway segment using the following information:

- Traffic volumes from adjacent intersections at 1st Avenue/International Boulevard, 1st Avenue/Foothill, and 5th Avenue/East 12th Street; based on the roadway configuration, it is likely that traffic on this roadway segment would pass through these three intersections. Volumes on the segment of 12th/14th Street adjacent to Lake Merritt were estimated by combining the traffic volumes at these intersections.

- The roadway capacity was estimated by applying a per lane capacity of 800 vehicles per hour. This capacity was used for the impact analysis on regional roadways, except

for freeway facilities. Therefore, the directional capacity on the 12th Street/14th Street roadway segment would be 2,400 vehicles per hour, in each direction.

The results of the LOS analysis are provided in **Table III-1**. As indicated in this table, the westbound direction is expected to be deficient during the AM period while the eastbound segment will be deficient during the PM period. In both cases, the addition of project traffic would increase the volumes on the deficient segments by less than 3 percent.

TABLE III-1

LOS RESULTS FOR 12TH/14TH STREET ROADWAY SEGMENT

		2025 No Project			2025 With Project		
Period	**Direction**	**Volume**	**V/C**	**LOS**	**Volumes**	**V/C**	**LOS**
AM	Eastbound	894	0.37	A	912	0.38	A
AM	Westbound	2775	1.16	F	2850	1.19	F
PM	Eastbound	3290	1.37	F	3381	1.40	F
PM	Westbound	1262	0.53	A	1326	0.55	A

Source: Fehr & Peers, April 2006

Impact Analysis

The following criterion was applied to determine if the project impacts on these roadway segments are significant:

- The project would cause a roadway segment on the Metropolitan Transportation System to operate at LOS F or would increase the V/C ratio by more than three (3) percent for a roadway segment that would operate at LOS F without the project

While the 12/14th Street roadway segments are not located on the Metropolitan Transportation System, the above criterion does relate to a roadway segment and was applied for this analysis. As indicated in the above table, the V/C ratio increases by 3 percent or less on all segments. The impact is therefore less than significant.

CHAPTER IV

Further Responses to Comments on the Draft EIR

This chapter addresses further comments received on the 2006 certified EIR. Addressed is correspondence received from the California Department of Transportation, the Metropolitan Greater Oakland Democratic Club, Ms. Cynthia Shartzer, and Dr. Rajiv Bhatia. Some of this correspondence was previously submitted to the Planning Commission. Those letters are noted throughout this chapter.

A. Caltrans Letter and Response

The California Department of Transportation (Caltrans) submitted a comment letter dated October 21, 2005, on the Draft EIR. Caltrans' correspondence is presented as Letter D in Chapter VI (Other Responses to Written Comments on the Draft EIR) in the Final EIR, and the City's responses to the comments follow the letter on Final EIR pages VI-11 through VI-16.

Caltrans subsequently submitted a letter dated March 20, 2006 in response to the Final EIR, and that letter is provided on the following pages. The City's responses to the questions and concerns raised follow the letter.

DEPARTMENT OF TRANSPORTATION
111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5505
FAX (510) 286-5513
TTY (800) 735-2929

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March 20, 2006

ALA880618
ALA-880-30.37
SCH#2004062013

Ms. Margaret Stanzione
City of Oakland
Community Development Agency
250 Frank Ogawa Plaza, Suite 3315
Oakland, CA 94612

Dear Ms. Stanzione:

Oak to 9TH Mixed-Use Project – Final Environmental Impact Report

Thank you for continuing to include the California Department of Transportation (Department) in the review process for the proposed Oak to 9th Mixed-Use project. The following comments are based on the Final Environmental Impact Report referencing the Response to Comments notation. As lead agency, the City of Oakland is responsible for all project mitigation, including any needed improvements to state highways. Any required roadway improvements should be completed prior to issuance of project occupancy permits. An encroachment permit is required for work in the State right-of-way (ROW), and the Department will not issue an encroachment permit until our concerns are adequately addressed. Therefore, we strongly recommend that the lead agency work with the applicant and the Department to resolve project issues prior to submittal of the encroachment permit application. Further comments will be provided during the encroachment permit process.

D-6
Although we agree that off-ramp intersections would impact ramp operations, we disagree that intersection analysis alone is adequate. According to the Caltrans' *"Guide for the Preparation of Traffic Impact Studies"*, the impact to state facilities needs to be addressed. Furthermore, although City staff and EIR consultants recognized "that further operational analysis may be needed to design improvements at intersections containing freeway ramps" in the response to our comment, it is unclear whether the freeway ramps would be included in the analysis. As such, the document should expand discussion to include ramp impacts and mitigation measures.

D-7
Quantifying the change in delay values at intersections with Level of Service F conditions would

provide a clear, analytic basis for comparing with and without project traffic conditions and should be included in the Environmental Impact Report.

D-25
Response to comment states that "Parking was inadvertently shown under the freeway structure on several DEIR figures. These 'typos' have been eliminated from the affected figures." However, the Preliminary Development Plan and Vesting Tentative Tract Map No. 7621 for the Oak to 9th Mixed-Use Project submitted with the Project Referral dated December 20, 2005 shows proposed parking under the Interstate 880 (I-880) freeway structure south of the northbound Embarcadero off-ramp. As stated in the Department's January 31, 2006 correspondence, the proposed parking facility conflicts with drainage facilities to be constructed as part of the Department's 5th Avenue Overhead Structure Replacement Project. While it is our understanding that parking under the freeway structure will not be pursued as part of this project, please be sure to correct all documents associated with this project.

D-26
As an affected agency, the Department requests the opportunity to review all engineering studies which address the proposed drainage improvements for the project. As stated in the Department's previous comments, the project's drainage design should accommodate drainage runoff from tributary areas east of the development site, which includes the freeway. Those new facilities should be coordinated and compatible with the Department's highway drainage facilities. The drainage proposal shown in the Preliminary Development Plan does not address the existing connection between the Department's drainage system and the City's drainage system opposite 8th Street. As the general drainage pattern is from east to west, there is an obligation on the development to maintain the natural drainage patterns, and to accept and convey storm flows in a manner that does not adversely affect upstream properties.

State's Requirements
The Department's policy is to upgrade existing non-standard highway facilities to meet current standards if warranted. If modifications to the state facilities do not provide full standards, a design factsheet not to upgrade the existing non-standard mandatory features shall be provided through the exception process.

All work within the State's ROW affecting the State's facilities requires approval and/or coordination with the State.

Should you require further information or have any questions regarding this letter, please call Lisa Carboni of my staff at (510) 622-5491.

Sincerely,

TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Ms. Terry Roberts, State Clearinghouse

Responses to Caltrans Comments (3/20/06)

D-6 **Table IV-1** below indicates the results of a Level of Service (LOS) Analysis for the various ramp facilities proximate to the project site. As indicated in the Table below, there is one ramp facility which operates at a deficient LOS. This analysis was conducted using Highway Capacity Manual (HCM) methodology for ramp junctions. This methodology uses freeway traffic volumes, lanes, ramp volume, ramp length and other considerations to determine ramp LOS.

This ramp is the I-880 Northbound ramp at 6th Avenue, where traffic would exit from I-880 onto the Embarcadero. These deficient LOS results result mainly from deficient operations on I-880, which was identified as operating at a deficient level in the Draft EIR. This deficient operations was noted as a significant impact in the DEIR, along with other segments of the freeway which were determined to operate at a deficient level. Our experience with using the ramp analysis methodology is that poor freeway operations often influence the results of the ramp analysis.

In a practical sense, these results indicate that the traffic may not be able to reach the ramp due to freeway congestion. All indications are that the ramp will operate at an acceptable level with any delays or congestion occurring on the freeway itself.

This conclusion is bolstered by development of a micro-simulation model in VISSIM which was presented to Caltrans staff in a meeting on March 23, 2006. As this model demonstrated, the queuing on the ramp would not extend back to the freeway, even with the passage of a freight train along the project frontage.

TABLE IV-1

RAMP JUNCTION LOS RESULTS

	AM		PM	
Ramp Junction	**Density**	**LOS**	**Density**	**LOS**
I-880 Northbound/6th Avenue Off-Ramp	32	D	44	F
I-880 Southbound/10th Avenue On-Ramp	26	C	24	C
I-880 Southbound/16th Avenue Off-Ramp	38	E	35	D

Source: Fehr & Peers, 2006

D-7: Fehr & Peers Transportation Consultant's have updated the Draft EIR tables to provide the delay values for the LOS F intersections. In several cases, the LOS F value was assigned based on field observations instead of the technical analysis. In those cases, no delay is reported. There are also several unsignalized intersections where it is not possible

to report delay because the delay can not be calculated, due to the high volumes. In those cases, the "overflow" conditions are reported.

The following should be noted regarding the information provided:

1. While the software employed in this analysis (Synchro) is capable to calculating delay for even the most oversaturated conditions, Fehr & Peers has found these delay calculations to be unreliable at very high levels of delay.

2. In particular, Fehr & Peers found that the addition of a small number of vehicles at an intersection with very high levels of delay will lead to a disproportionate increase in delay. This phenomenon is particularly true at unsignalized intersections, since the analysis includes side street delay only.

3. Fehr & Peers' assessment of intersection impacts considered both changes in delay and the project's contribution to growth at study intersections. The addition of this information does not change the identified project impacts and mitigation measures.

TABLE IV.B-2 REV

EXISTING INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

No.	Intersection	Traffic Control	Existing AM		Existing PM	
			LOS	Delay	LOS	Delay
#1	Atlantic & Webster (Alameda)	Signal	C	28.2	C	30.2
#2	Atlantic & Constitution (Alameda)	Signal	C	27.9	C	27.0
#3	Embarcadero & Broadway	All-Way Stop	A	8.0	A	9.5
#4	Embarcadero & Oak Street	Side Street Stop	B	13.3	C	16.0
#5	5th Street & Broadway	Signal	C	30.2	F	* [a]
#6	5th Street & Webster Street	Side Street Stop	A	9.4	A	9.3
#7	5th Street & Jackson Street	Signal	B	11.1	B	10.3
#8	5th Street & Madison Street	Signal	A	8.2	B	10.7
#9	5th Street & Oak Street	Signal	B	12.4	B	12.5
#10	6th Street & Broadway	Signal	C	22.2	B	19.8
#11	6th Street & Webster Street	Side Street Stop	A	9.5	A	9.2
#12	6th Street & Jackson Street	Signal	C	* [b]	C	* [b]
#13	7th Street & Market Street	Signal	B	12.0	B	12.3
#14	7th Street & Broadway	Signal	B	12.8	B	16.6
#15	7th Street & Webster Street	Signal	A	8.7	B	11.4
#16	7th Street & Jackson Street	Signal	B	11.0	B	11.9
#17	7th Street & Madison Street	Signal	B	12.9	B	14.3
#18	7th Street & Oak Street	Signal	B	12.5	B	14.0
#19	8th Street & Market Street	Signal	A	9.1	B	10.9
#20	8th Street & Broadway	Signal	B	11.4	B	11.8
#21	8th Street & Webster Street	Signal	C	28.1	E	* [b]
#22	8th Street & Jackson Street	Signal	B	16.5	B	14.2
#23	8th Street & Madison Street	Signal	A	8.9	A	9.4
#24	8th Street & Oak Street	Signal	B	16.6	B	16.0
#25	West Grand Avenue & Market Street	Signal	B	12.9	B	14.7
#26	West Grand Avenue & Broadway	Signal	B	15.5	B	17.4
#27	West Grand Avenue & Harrison Street	Signal	C	31.2	C	29.2
#28	10th Street & Oak Street	Signal	A	9.4	A	9.6
#29	1st Avenue & International Boulevard	Signal	B	16.9	B	13.4
#30	Lakeshore Avenue & Foothill Blvd	Signal	C	25.5	B	12.9
#31	Lakeshore Avenue & East 18th Street	Signal	B	13.5	C	27.5
#32	Lakeshore Avenue & Hanover Ave.	Signal	A	7.0	A	6.1
#33	Lakeshore Avenue & Brooklyn Ave.	Signal	A	7.0	A	5.8

TABLE IV.B-2 REV (continued)

EXISTING INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (SECONDS/VEHICLE)

#34	Lakeshore Avenue & MacArthur Blvd	Signal	C	23.6	E	66.9
#35	Lakeshore Avenue & Lake Park Ave.	Signal	D	35.2	D	35.5
#36	Embarcadero & 5th Avenue	Side Street Stop	F	54.0	F	401
#37	Embarcadero & I-880 NB Off-Ramp	Side Street Stop	B	12.3	B	14.2
#38	Embarcadero & I-880 SB On-Ramp	All-Way Stop	B	10.3	B	13.5
#39	Embarcadero & I-880 SB Off-Ramp	Side Street Stop	B	12.9	B	11.7
#40	5th Avenue & 7th/8th Streets	Signal	B	13.0	B	13.1
#41	14th Avenue & 7th St./12th St. (SB)	Signal	C	22.4	C	24.6
#42	14th Avenue & East 12th St. (NB)	Signal	B	12.3	B	10.1
#43	East 12th Street & 23rd Avenue	Signal	B	12.9	B	12.3
#44	East 12th Street & 5th Avenue	Signal	B	12.9	B	13.9
#45	International Boulevard & 14th Ave.	Signal	B	11.3	B	12.9
#46	International Boulevard & 23rd Ave.	Signal	B	12.4	B	11.7
#47	International Boulevard & 5th Ave.	Signal	B	13.4	B	12.8
#48	Foothill Boulevard & 5th Avenue	Signal	B	11.2	B	16.1
#49	Foothill Boulevard & 14th Ave. (WB)	Signal	B	19.7	B	17.0
#50	Foothill Boulevard & 14th Ave. (EB)	Signal	C	23.9	C	22.0
#51	Foothill Boulevard & 23rd Avenue	Signal	B	16.8	B	13.2
#52	16th Street & 23rd Avenue	Signal	B	15.8	C	33.7

[a] See text on page IV.B-8 about how field observations show substantially worse LOS than calculated LOS under existing conditions.
[b] See text below about how field observations show worse LOS than calculated LOS under existing conditions.

Note: The LOS/Delay for Side-Street Stop-Control (SSSC) intersections represent the worst movement or approach; for Signalized and All-Way Stop-Control (AWSC) the LOS/Delay represent overall intersection.

SOURCE: Fehr & Peers Transportation Consultants

TABLE IV.B-5 REV

2010 AM AND PM PEAK HOUR INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

			AM Peak Hour				PM Peak Hour			
		Traffic	Baseline		With Project		Baseline		With Project	
No.	Intersection	Control	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
#1	Atlantic & Webster (Alameda)	Signal	D	52.7	D	54.3	D	49.0	D	50.0
#2	Atlantic & Constitution (Alameda)	Signal	C	34.6	C	34.8	C	31.3	C	32.0
#3	Embarcadero & Broadway	AWSC	A	8.3	A	8.9	B	10.5	B	12.5
#4	Embarcadero & Oak Street	SSSC	C	22.9	**E**	**42.1**	D	25.3	**F**	**109.2**
#5	5th Street & Broadway	Signal	D	44.1	D	43.8	F	* [a]	**F**	* [a]
#6	5th Street & Webster Street	SSSC	A	9.8	A	9.8	A	8.6	A	9.8
#7	5th Street & Jackson Street	Signal	B	11.0	B	11.0	B	10.4	B	10.3
#8	5th Street & Madison Street	Signal	A	8.4	A	8.4	B	11.0	B	10.8
#9	5th Street & Oak Street	Signal	B	13.7	B	14.2	C	20.5	C	22.8
#10	6th Street & Broadway	Signal	C	24.2	C	24.8	C	20.7	C	20.4
#11	6th Street & Webster Street	SSSC	A	9.9	A	9.9	A	9.3	A	9.3
#12	6th Street & Jackson Street	Signal	C	* [b]	C	* [b]	E	61.0	**F**	**80.5**
#13	7th Street & Market Street	Signal	B	12.9	B	12.9	B	14.7	B	14.7
#14	7th Street & Broadway	Signal	B	14.2	B	14.2	B	17.3	B	18.8
#15	7th Street & Webster Street	Signal	B	11.0	B	11.1	B	13.0	B	13.2
#16	7th Street & Jackson Street	Signal	B	12.4	B	11.9	B	14.4	B	15.7
#17	7th Street & Madison Street	Signal	B	12.8	B	12.9	B	15.6	B	15.8
#18	7th Street & Oak Street	Signal	B	12.6	B	12.4	B	16.7	B	16.5
#19	8th Street & Market Street	Signal	A	9.4	A	9.4	B	12.2	B	12.2
#20	8th Street & Broadway	Signal	B	11.7	B	11.8	B	12.2	B	12.5
#21	8th Street & Webster Street	Signal	C	29.0	C	29.3	E	* [b]	E	* [b]
#22	8th Street & Jackson Street	Signal	B	17.8	B	18.9	B	14.8	B	15.2
#23	8th Street & Madison Street	Signal	A	9.0	A	9.0	A	9.4	A	9.3
#24	8th Street & Oak Street	Signal	B	16.4	B	16.3	B	15.7	B	15.6
#25	West Grand Ave. & Market Street	Signal	B	13.7	B	13.7	B	18.3	B	18.4
#26	West Grand Ave. & Broadway	Signal	B	19.9	B	19.9	C	19.9	C	27.0
#27	West Grand Ave. & Harrison Street	Signal	D	44.6	D	45.1	D	36.0	D	36.2
#28	10th Street & Oak Street	Signal	A	9.5	A	9.5	A	9.8	A	9.8
#29	1st Ave. & International Blvd	Signal	B	16.7	B	16.9	B	16.1	B	16.2
#30	Lakeshore Ave. & Foothill Blvd	Signal	C	31.7	C	32.9	B	14.7	B	15.1
#31	Lakeshore Ave. & East 18th Street	Signal	B	14.6	B	14.6	C	29.8	C	30.2
#32	Lakeshore Ave. & Hanover Avenue	Signal	A	6.2	A	6.3	A	7.2	A	7.2
#33	Lakeshore Ave. & Brooklyn Ave.	Signal	A	7.1	A	7.1	A	6.1	A	6.1
#34	Lakeshore Ave. & MacArthur Blvd	Signal	C	23.8	C	24.1	F	90.0	F	90.3

TABLE IV.B-5 REV (continued)

2010 AM AND PM PEAK HOUR INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

No.	Intersection	Traffic Control	AM Peak Hour				PM Peak Hour			
			Baseline		With Project		Baseline		With Project	
			LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
#35	Lakeshore Ave. & Lake Park Ave.	Signal	D	39.7	D	39.8	D	48.4	D	48.5
#36	Embarcadero & 5th Avenue	SSSC	F	108.8	**F**	**Overflow**	F	**Overflow**	**F**	**Overflow**
#37	Embarcadero & I-880 Northbound Off-Ramp – 6th Avenue	SSSC	B	12.3	**F**	**95.4**	B	14.5	**F**	**1358**
#38	Embarcadero & I-880 Southbound On-Ramp – 10th Avenue	AWSC	B	10.3	B	12.1	B	13.7	B	17.3
#39	Embarcadero & I-880 Southbound Off-Ramp – 16th Avenue	SSSC	B	13.5	B	13.7	B	11.9	B	12.8
#40	5th Avenue & 7th/8th Streets	Signal	B	13.5	B	13.8	B	15.0	B	16.1
#41	14th Avenue & 7th/12th St. (SB)	Signal	C	24.0	C	24.3	D	41.0	D	45.3
#42	14th Avenue & East 12th St. (NB)	Signal	B	13.2	B	13.1	B	11.8	B	11.6
#43	East 12th Street & 23rd Avenue	Signal	B	14.3	B	14.8	B	13.7	B	14.4
#44	East 12th Street & 5th Avenue	Signal	B	13.4	B	13.9	B	15.8	B	17.9
#45	International Blvd & 14th Avenue	Signal	B	11.9	B	11.9	B	14.2	B	14.3
#46	International Blvd & 23rd Avenue	Signal	B	13.2	B	13.3	B	13.1	B	13.5
#47	International Blvd & 5th Avenue	Signal	B	13.9	B	14.2	B	14.2	B	14.5
#48	Foothill Blvd & 5th Avenue	Signal	B	11.2	B	11.4	B	18.3	B	19.8
#49	Foothill Blvd & 14th Ave. (WB)	Signal	C	24.2	C	24.3	B	17.6	B	17.8
#50	Foothill Blvd & 14th Ave. (EB)	Signal	C	24.8	C	24.7	C	22.7	C	22.8
#51	Foothill Blvd & 23rd Avenue	Signal	B	18.0	B	17.8	B	13.4	B	13.5
#52	16th Street & 23rd Avenue	Signal	B	16.0	B	15.7	D	50.1	D	52.2

[a] See text on page IV.B-8 about how field observations show substantially worse LOS than calculated LOS under existing conditions.
[b] See text on page IV.B-10 about how field observations show worse LOS than calculated LOS under existing conditions.

Note: The LOS/Delay for Side-Street Stop-Control (SSSC) intersections represent the worst movement or approach; for Signalized and All-Way Stop-Control (AWSC) the LOS/Delay represent overall intersection. Significant impacts are denoted in **Bold** typeface.

SB = Southbound; NB = Northbound; WB = Westbound; EB = Eastbound

Significant impacts are denoted in **Bold** typeface.

SOURCE: Fehr & Peers Transportation Consultants

TABLE IV.B-6 REV

2010 AM AND PM PEAK HOUR MITIGATED INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

No.	Intersection	Mitigation	Project Condition				Mitigated Condition			
			AM Peak		PM Peak		AM Peak		PM Peak	
			LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
#4	Embarcadero & Oak Street	Signal	E	42.1	**F**	**109.2**	B	13.5	B	15.8
#5	5th Street & Broadway	None feasible	D	43.8	**F**	* a	D	43.8	**F**	* a
#12	6th Street & Jackson Street	Optimize Timing	C	* b	**F**	**80.5**	C	* b	D	50.0
#36	Embarcadero & 5th Avenue	Signal	**F**	**108.8**	**F**	**Overflow**	A	9.5	C	21.2
#37	Embarcadero & I-880 Northbound Off-Ramp – 6th Avenue	Signal	**F**	**95.4**	**F**	**1358**	A	6.9	C	22.3

[a] See text on page IV.B-8 about how field observations show substantially worse LOS than calculated LOS under existing conditions.

[b] See text on page IV.B-10 about how field observations show worse LOS than calculated LOS under existing conditions.

Significant impacts are denoted in **Bold** typeface.

SOURCE: Fehr & Peers Transportation Consultants

TABLE IV.B-7 REV

2025 AM AND PM PEAK HOUR INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

			AM Peak Hour				PM Peak Hour			
		Traffic	Baseline		With Project [a]		Baseline		With Project [a]	
No.	Intersection	Control	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
#1	Atlantic & Webster (Alameda)	Signal	E	74.6	**F**	**82.0**	E	57.9	E	61.7
#2	Atlantic & Constitution (Alameda)	Signal	D	44.0	D	45.4	D	38.5	D	40.8
#3	Embarcadero & Broadway	AWSC	A	9.4	B	14.5	C	21.3	**F**	**93.7**
#4	Embarcadero & Oak Street	SSSC/ Signal	F	63.6	C	20.2	F	57.4	D	39.0
#5	5th Street & Broadway	Signal	E	77.6	E	75.2	F	* b	**F**	* b
#6	5th Street & Webster Street	SSSC	A	10.0	B	10.1	A	9.5	A	9.7
#7	5th Street & Jackson Street	Signal	B	10.9	B	11.2	B	10.6	B	12.7
#8	5th Street & Madison Street	Signal	A	8.2	A	8.3	B	14.6	B	17.8
#9	5th Street & Oak Street	Signal	C	21.9	D	52.9	E	60.7	**F**	**111.7**
#10	6th Street & Broadway	Signal	C	25.3	C	28.8	C	23.1	C	25.6
#11	6th Street & Webster Street	SSSC	B	10.3	B	10.3	A	9.5	A	9.6
#12	6th Street & Jackson Street	Signal	**E**	**77.0**	**F**	**130.6**	**F**	**134.5**	**F**	**148.0**
#13	7th Street & Market Street	Signal	B	15.2	B	15.2	C	26.2	C	26.7
#14	7th Street & Broadway	Signal	B	14.9	B	15.5	C	22.3	E	57.6
#15	7th Street & Webster Street	Signal	B	13.2	B	13.7	B	14.8	B	15.7
#16	7th Street & Jackson Street	Signal	B	14.3	B	16.0	C	23.6	D	36.9
#17	7th Street & Madison Street	Signal	B	13.9	B	13.9	B	16.7	B	17.2
#18	7th Street & Oak Street	Signal	B	13.4	B	12.6	E	61.4	E	60.3
#19	8th Street & Market Street	Signal	B	10.3	B	10.4	B	14.2	B	14.2
#20	8th Street & Broadway	Signal	B	12.7	B	13.2	B	13.0	B	14.3
#21	8th Street & Webster Street	Signal	D	38.2	D	45.5	E	* c	E	* c
#22	8th Street & Jackson Street	Signal	C	24.4	D	39.6	B	16.5	C	19.5
#23	8th Street & Madison Street	Signal	A	10.0	A	10.0	A	9.6	A	9.4
#24	8th Street & Oak Street	Signal	B	15.5	B	15.5	B	15.4	B	15.2
#25	West Grand Ave. & Market Street	Signal	B	15.6	B	15.6	E	73.8	E	74.1
#26	West Grand Ave. & Broadway	Signal	E	60.4	E	60.3	E	78.0	E	78.9
#27	West Grand Ave. & Harrison Street	Signal	F	151.4	**F**	**156.0**	D	49.3	D	50.6
#28	10th Street & Oak Street	Signal	B	10.4	B	10.4	B	10.4	B	10.4
#29	1st Ave. & International Blvd	Signal	B	16.3	B	16.5	C	22.1	C	22.4
#30	Lakeshore Ave. & Foothill Blvd	Signal	E	58.1	**E**	**64.1**	B	18.3	B	19.7
#31	Lakeshore Ave. & East 18th Street	Signal	D	39.9	D	39.3	D	37.5	D	40.2
#32	Lakeshore Ave. & Hanover Avenue	Signal	A	6.2	A	6.2	A	7.4	A	7.4
#33	Lakeshore Ave. & Brooklyn Ave.	Signal	A	7.7	A	7.7	A	6.8	A	6.9
#34	Lakeshore Ave. & MacArthur Blvd	Signal	C	25.5	C	26.2	F	111.1	**F**	**111.4**
#35	Lakeshore Ave. & Lake Park Ave.	Signal	D	43.5	D	43.9	E	55.8	**E**	**58.9**
#36	Embarcadero & 5th Avenue	SSSC/ Signal	F	Overflow	D	49.2	F	Overflow	**F**	**511**
#37	Embarcadero & I-880 Northbound Off-Ramp – 6th Avenue	SSSC/ Signal	B	12.6	B	19.0	B	14.8	**F**	**350**
#38	Embarcadero & I-880 Southbound On-Ramp – 10th Avenue	AWSC	B	11.1	D	29.4	B	14.3	**E**	**42.7**
#39	Embarcadero & I-880 Southbound Off-Ramp – 16th Avenue	SSSC	B	14.7	C	15.5	B	13.0	C	16.5
#40	5th Avenue & 7th/8th Streets	Signal	B	14.7	B	16.8	D	37.4	**F**	**81.5**
#41	14th Avenue & 7th/12th St. (SB)	Signal	C	24.9	C	27.2	E	72.0	**F**	**87.7**
#42	14th Avenue & East 12th St. (NB)	Signal	B	16.0	B	16.0	B	12.1	B	12.6
#43	East 12th Street & 23rd Avenue	Signal	B	19.0	C	20.8	B	16.8	B	18.9
#44	East 12th Street & 5th Avenue	Signal	B	16.5	C	28.3	B	19.1	D	40.5
#45	International Blvd & 14th Avenue	Signal	B	12.8	B	13.1	B	16.8	B	17.3
#46	International Blvd & 23rd Avenue	Signal	B	19.0	C	21.0	B	19.0	C	24.2
#47	International Blvd & 5th Avenue	Signal	B	14.6	B	15.0	B	14.9	B	14.9
#48	Foothill Blvd & 5th Avenue	Signal	B	12.1	B	13.2	C	20.2	C	28.2
#49	Foothill Blvd & 14th Ave. (WB)	Signal	D	54.1	**E**	**55.8**	C	21.2	C	21.5
#50	Foothill Blvd & 14th Ave. (EB)	Signal	C	27.4	C	27.4	F	101.7	**F**	**108.4**
#51	Foothill Blvd & 23rd Avenue	Signal	C	21.5	C	21.3	B	13.1	B	13.7

No.	Intersection	Traffic Control	AM Peak Hour				PM Peak Hour			
			Baseline		With Project [a]		Baseline		With Project [a]	
			LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
#52	16th Street & 23rd Avenue	Signal	B	17.3	B	17.6	E	70.7	**E**	**74.2**

[a] Mitigation measures required for impacts in 2010 are assumed to be in-place under 2025 "with project" conditions

[b] See text on page IV.B-8 about how field observations show substantially worse LOS than calculated LOS under existing conditions.

[c] See text on page IV.B-10 about how field observations show worse LOS than calculated LOS under existing conditions**.**

Note: The LOS/Delay for Side-Street Stop-Control (SSSC) intersections represent the worst movement or approach; for Signalized and All-Way Stop-Control (AWSC) the LOS/Delay represent overall intersection. Significant impacts are denoted in **Bold** typeface.

SB = Southbound; NB = Northbound; WB = Westbound; EB = Eastbound

Significant impacts are denoted in **Bold** typeface.

SOURCE: Fehr & Peers Transportation Consultants

TABLE IV.B-8 REV

2025 AM AND PM PEAK HOUR MITIGATED INTERSECTION LEVEL OF SERVICE (LOS) AND DELAY (seconds/vehicle)

			Project Condition				Mitigated Condition			
			AM Peak		PM Peak		AM Peak		PM Peak	
No.	**Intersection**	**Mitigation**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**	**LOS**	**Delay**
#1	Atlantic & Webster (Alameda)	Add Lanes	**F**	**82.0**	E	61.7	E [a]	62.3	D	48.3
#3	Embarcadero & Broadway	Signal	B	14.5	**F**	**93.7**	A	7.5	B	10.7
#5	5th Street & Broadway	None feasible	E	75.2	**F** [a]	**104.5**	E	75.2	**F** [b]	**>104.5**
#9	5th Street & Oak Street	Optimize Timing	D	52.9	**F**	**111.7**	D	52.9	E	62.2
#12	6th Street & Jackson Street	None feasible	**F**	**134.5**	**F**	**148.0**	**F**	**134.5**	**F**	**148.0**
#27	West Grand Ave. & Harrison St.	Optimize Timing	**F**	**156.0**	D	50.6	C	31.4	D	50.6
#30	Lakeshore Ave. & Foothill Blvd	Optimize Timing	**E**	**64.1**	B	19.7	E [a]	59.3	B	19.7
#34	Lakeshore Ave. & MacArthur Blvd	None feasible	C	26.2	**F**	**111.4**	C	26.2	**F**	**111.4**
#35	Lakeshore Ave. & Lake Park Ave.	Optimize Timing	D	43.9	**E**	**58.9**	D	43.9	D	47.5
#36	Embarcadero & 5th Avenue	Widen Embarcadero	D	49.2	**F**	**511**	C	27.3	C	29.9
#37	Embarcadero & I-880 NB Off-Ramp	Widen Embarcadero	B	19.0	**F**	**350**	B	10.1	C	30.8
#38	Embarcadero & I-880 SB On-Ramp	Signal	D	29.4	**E**	**42.7**	B	17.6	B	19.0
#40	5th Avenue & 7th/8th Streets	Optimize Timing	B	16.8	**F**	**81.5**	D	38.7	D	47.9
#41	14th Avenue & 7th/12th St. (SB)	Optimize Timing	C	27.2	**F**	**87.7**	C	27.2	E [a]	63.8
#49	Foothill Blvd & 14th Ave. (WB)	Optimize Timing	**E**	**55.8**	C	21.5	C	26.7	B	17.9
#50	Foothill Blvd & 14th Ave. (EB)	Optimize Timing	C	27.4	**F**	**108.4**	C	25.1	C	28.7
#52	16th Street & 23rd Avenue	Optimize Timing	B	17.6	**E**	**74.2**	B	17.6	C	29.3

[a] After implementation of the identified mitigation measure, the increase in average delay from the No Project condition would be less than the four-second threshold of significance established by the City of Oakland, and the project impact would be mitigated to a less-than-significant level, even with an unacceptable LOS.

[b] See text on page IV.B-8 about how field observations show substantially worse LOS than calculated LOS under existing conditions.

Significant impacts are denoted in **Bold** typeface.

SOURCE: Fehr & Peers Transportation Consultants

D-25: The comment is noted. The Preliminary Development Plan (PDP) and Vesting Tentative Tract Map have been revised to delete the indication of proposed parking under the I-880 freeway structure south of the northbound Embarcadero off-ramp.

D-26: The project's new stormwater drainage system will be designed to accommodate drainage from the project site. Any existing drainage that flows through the site will continue to be accommodated.

B. Metropolitan Greater Oakland Democratic Club (MGO) Comments and Responses

The following comment letter on the Draft EIR was emailed to but not received by City staff prior to publication of the Final EIR, therefore, the letter was not included in the Final EIR. This omission was brought to the staff's attention after publication of the Final EIR, and the letter was resubmitted and received in March 2006. A copy of the letter was provided to the Planning Commission attached to its March 15, 2006 staff report. The correspondence is copied below, and the City's responses follow the letter.

From: Frank Russo [mailto:fdr@sbcglobal.net]
Sent: Monday, October 24, 2005 9:19 AM
To: 'Mstanzione@oaklandnet.com'
Cc: mgobd@yahoogroups.com
Subject: Letter of the Metropolitan-Greater Oakland Democratic Club on Draft Environmental Impact Statement on Oak to Ninth Development

To: Margaret Stanzione, Project Planner, City of Oakland, CEDA

RE: Draft EIR, Oak to 9th

Dear Ms. Stanzione:

The Metropolitan Greater Oakland Democratic Club (MGO) submits these comments on the draft EIR of the proposed development of Oak to 9th. We have held three club meetings on the subject of this project and heard from the developer and a number of other speakers. We concur with the League of Women Voters on a number of issues and concerns they have raised in a letter to you. 1

First, we have a process question: The Draft EIR was very hard to find online (and requires multiple clicks, with links that are not particularly intuitive). For this reason and those stated by others, we join them in requesting an extension of the comment period. 2

Secondly, MGO supports full compliance with Estuary Policy Plan (EPP). The EPP was developed through a process that included lengthy public discussion, debate and compromise - and that process should be respected. Further, by "full compliance with the Estuary Policy Plan", we mean just that - not 'most of the elements of', or 'in the spirit of', or 'many of the principles of' – but full compliance. 3

Third, the EPP calls for a "specific plan" for this site prior to development; there is a statement in the Draft EIR that "The City and Port of Oakland have not elected to prepare a specific plan for the Oak-to-Ninth District as called for in the Estuary Plan.", with the rationale that the process we are in now is 'essentially equivalent' to a specific plan. We ask that the Planning Commission look at this, and ensure 4

that ‘essentially equivalent’ doesn’t leave out anything, especially the chance for a back and forth public discussion about various alternatives.

Fourth, we have a somewhat technical question regarding the open space in the plan: How do we protect public use/access to public space? By assessing the condo owners to maintain the open space, the private ownership group has more control over the open space, potentially allowing them to place restrictions on public access to "their" space. 5

In addition to the above, MGO is insists that 25% of any housing created as a result of the project, should be affordable to Oaklanders. The requirement of affordable housing is an established principle in Oakland City law and precedents and must be included. 6

Pamela Drake
President
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Oakland, CA 94610
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pamelad205@mac.com

Responses to MGO Comments

1 The comment is noted, and the referenced League of Women Voters' letter is Letter N in the Final EIR. The responses to Letter N are presented on page VI-43 of the Final EIR.

2 The comment is noted. The Planning Commission considered several public comments requesting that the public review and comment period on the Draft EIR be extended. The Commission closed the public review and comment period on the DEIR on September 28, 2006, however, the Commission's action noted that the City would continue to accept written comments on the Draft EIR through October 24, 2005, as noticed in the Notice of Availability.

3 The Draft EIR discusses how the project relates to the Estuary Policy Plan on DEIR pages IV.A-11 through IV.A-17, and under Impact A.2 on pages IV.A-36 and IV.A-37. As concluded there, the project would not conflict with Estuary Plan policies or its overall vision for the Oak to Ninth District. The project would introduce a series of large open spaces along the waterfront that would be a major recreation designation in the city and transform the area from an industrial backwater to a recreational centerpiece and a regional and local asset.

The Draft EIR also discusses how conflict with a specific General Plan policy does not inherently result in a significant impact on the environment within the context of CEQA (DEIR pp. IV.A-6 and IV.A-36). Ultimately, in deciding whether to approve the project, the City will assess whether the project is consistent with the overall policies of the General Plan through its process of balancing competing General Plan goals and objectives.

4 The City's decision not to prepare a specific plan for the project is discussed in detail in Master Response A of the Final EIR. City decisionmakers will consider this information, all information provided about the project beyond that in the EIR, as well as the public input process conducted for the environmental and project review, and will then determine the appropriateness of the analysis and public input opportunities for the project and its relevant equivalence to a specific planning process.

5 The purpose of the proposed owners' assessment is to ensure the adequate and continued maintenance of the open space areas within the project site. The maintenance agreement mechanism and its purview is not an issue pertinent to the impacts of the project on the physical environment under CEQA. However, the City will ultimately establish the final mechanism and its details through the conditions of approval for the project or a Development Agreement between the City and the project sponsor. Additionally, all public open spaces on the project site would be owned by the City of Oakland and therefore public access would not be restricted. As discussed on Draft EIR page IV.L-18, the City of Oakland would review the adequacy of the public access to public parks, open spaces, and recreational facilities on the project site, as would the Bay Conservation and Development Commission (BCDC) for areas along the shoreline. The City also will

evaluate the extent to which the site arrangement of public and private areas on the site appears to limit public access, physically or perceptually.

6 Master Response H in the Final EIR discusses that the project's provision of affordable housing is not a topic pertinent to the physical environmental impacts addressed under CEQA. The project would assist the Oakland Redevelopment Agency (ORA) in meeting its affordable housing requirements under state law, as discussed on Draft EIR pages IV.A-28 and IV.A-29 within the context of the *Central City East Redevelopment Plan* and the *Central City Urban Renewal Plan*. Additional detail is provided on Draft EIR page IV.J-42 within the detailed analysis of *Potential for Indirect Physical Impacts* (*Development of Affordable Housing*). Since publication of the EIR (Draft and Final), Development Agreement discussions and negotiations among the City, the ORA, and the project sponsor have been ongoing and address the number (and other characteristics) of affordable housing units to be provided within the Oak to Ninth Avenue Project site and the Redevelopment Plan area.

C. Comments from Cynthia Shartzer, and Responses Previously Submitted to the Planning Commission

After the close of the public review and comment period on the Draft EIR, the City received comments from Cynthia Shartzer dated October 24, 2004. The City prepared and submitted responses to those comments (designated as Letter UU) to the Planning Commission, and that information was incorporated by reference into the Final EIR.

For convenience and documentation, the comment letter and responses are provided on the following pages.

October 24, 2005

Ms. Margaret Stanzione
Project Planner
City of Oakland
Community and Economic Development Department
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

Re: Comments on DEIR for Proposed Project 'Oak to 9th'

Dear Ms. Stanzione:

This letter supplements my June 30, 2004 letter on the 'Notice of Preparation of the EIR,' public comments I made at the June 16, 2004 Planning Commission meeting to advocate for the adaptive reuse of the entire Ninth Avenue Terminal-Ninth Avenue Transit Shed, as a member of the historic preservation group in the 'Small Group Interviews' (with Naomi Schiff and Leal Charonnat), and community meetings on March 30, 2004 and April 9, 2005. UU-1

The Process

Please note that although the public meetings, e.g., 'small group interviews' responded to public request for a participatory process they were not responsive to the public request. The request was for a 'National Charrette Institute-type' process. The key aspect of this participatory process is that it is progressive and iterative. The City of Oakland's small group interview process—a shadow of an authentic process of public participation— is now referred to in the community as 'charrette-lite.'

The way the City/Port's public process makes a mockery of genuine public process is best summarized by the Executive Summary and the summary report (see p. 9 of the Staff Report dated September 28, 2005) which states: "…Meetings attendees understand and respect the need for the project to be economically feasible for the developer…" UU-2

The one person that articulated this statement identified herself as a potential investor in the project. Therefore I believe that it is an overstatement and inaccurate reflection of 'the public' to include this sweeping generalization. Based on my personal observations, this individual and employees of the Port of Oakland were strategically placed in breakout groups, i.e., if enough individuals representing the interests of the developer fan out in a 'public' meeting the result is a sweeping generalizations that bring to mind Carpentier and Oakland's waterfront history.

With Oakland's historic ties to the waterfront and the challenges it experienced to return the waterfront to public ownership, it would be unfortunate if the Port and its political allies now hand over public property, i.e., Tidelands trust land, into private ownership. UU-3

October 24, 2005

Having followed the 'development' process in Oakland or the 'redevelopment' process as was the case of Jack London Square—beginning with 160 14th Street to 16th to Wood Street Train Station—to me the Oak to Ninth Street project reflects another example of how the system is 'gamed' and how the public process is manipulated. UU-4

Preserving Oakland's History by reusing its cultural resources
As the last survivor of the City of Oakland's three Municipal Terminals from the 1925 harbor bond, the preservation the Ninth Avenue Terminal—in its entirety—would honor the bond between the Port and City of Oakland and symbolized by the Terminal. The Ninth Avenue Terminal—completed in 1930—has a strong link with the establishment of the first Board of Port Commissioners of the Port of Oakland. UU-5

A copy of the landmark application for the Ninth Avenue Terminal, prepared for the Oakland Heritage Alliance and Friends of the Ninth Avenue Terminal was an attachment to my June 30, 2004 letter.

Proposed demolition of a building of such landmark distinction, even with retention a token portion, is not justified.

There are multiple examples of successful adaptive reuse projects, e.g., Ferry Building in San Francisco and the Subway Terminal Building in Los Angeles. The 500,000 square foot Subway Terminal Building—opened in 1925—has been converted into 277 live-work units called Metro 417. In San Francisco, the new Asian Art Museum is housed in the adaptively reused SF Library (one of the original Carnegie-funded libraries); architect Guy Aulenti also adaptively reused a Paris train station into a museum, the Musée D'Orsay. UU-6

In Richmond, Orton Development of Emeryville is leading the way in the Bay area by partnering with the National Park Service and the City of Richmond to adaptively reuse the Ford Assembly Plant. Oakland deserves similarly progressive development for its waterfront. The preservation of the Ninth Avenue Terminal-Ninth Avenue Transit Shed—in its entirety—offers an opportunity to build smart and to help Oakland join the ranks of cities around the world that recognize and reap the strategic and economic benefits of adaptive reuse of historic and cultural resources.

Respectfully submitted,

Cynthia L. Shartzer
cell 510-882-0371

Attachments:
Comments on Notice of Preparation of EIR for Proposed 'Oak to 9th' 30 June 2004

October 24, 2005

June 30, 2004

Ms. Margaret Stanzione
Project Planner
City of Oakland
Community and Economic Development Department
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, CA 94612

Re: Comments on Notice of Preparation of EIR for Proposed Project 'Oak to 9th'

Dear Ms.Stanzione:

This letter supplements public comment I made at the June 16, 2004 Planning Commission meeting to advocate for the adaptive reuse of the entire Ninth Avenue Terminal-Ninth Avenue Transit Shed. A copy of the landmark application for the Ninth Avenue Terminal, prepared for the Oakland Heritage Alliance and Friends of the Ninth Avenue Terminal, is provided (Attachment E).

As the last survivor of the City of Oakland's three Municipal Terminals from the 1925 harbor bond, the preservation the Ninth Avenue Terminal—in its entirety—would honor the bond between the Port of Oakland and the City of Oakland and symbolized by the Terminal. The Ninth Avenue Terminal—completed in 1930—has a strong link with the establishment of the first Board of Port Commissioners of the Port of Oakland. The 1925 harbor bond that funded the construction of the Ninth Avenue Terminal required that the Board of Port Commissioners be formed. The date the first Board of Port Commissioners was sworn in—February 12, 1927—is recognized as the birth date of the Port of Oakland. UU-7

The Ninth Avenue Terminal-Ninth Avenue Transit Shed was rated 'A' by City Staff —eligible for city landmark status—as well as appearing eligible for National Register status (Attachment A). The City of Oakland's Landmark Preservation Advisory Board (LPAB) unanimously approved Resolution 2004-3 to designate this property as an Oakland Landmark pursuant to Section 17.144 of the Oakland Planning Code (Attachment F). In addition, pursuant to the Historic Preservation Element (HPE) Policy 2.3(d) staff found the Ninth Avenue Terminal to have 'exceptional significance.' (Attachment D). The December 8, 2003 Staff report includes a discussion of the LPAB Policies & Procedures, General Plan—Historic Preservation Element Policy: 2.3 (d), 2.4(c), 3.2, 3.3 and notes that the Landmark Designation process "….will alter this application process [application process for a specific project] only with respect to LPAB Design Review" (Attachment C). The June 2, 2004 Planning Commission consideration of the Ninth Avenue Terminal landmark designation was postponed.

At its meeting of June 14, 2004 review of the Notice of Preparation for the Proposed Project 'Oak to Ninth' the LPAB requested that contrary to the described project

intent to demolish the Ninth Avenue Terminal shed building "…with the exception of a[n unspecified] portion…" serious consideration should be given to the preservation of the Transit Shed in its entirety and its adaptive reuse. In particular, the building's monumentality was recognized as part of its essential character.
I write in support of the preservation of the Ninth Avenue Terminal-Ninth Avenue Transit Shed, in its entirety. I echo requests by Oakland residents and social profit organizations such as Oakland Heritage Alliance that due consideration must be given in the EIR for the preservation of a significant portion of the Ninth Avenue Terminal. The Resolution 2004-3 to designate Ninth Avenue Terminal-Ninth Avenue Transit Shed an Oakland Landmark best summarizes the historic significance of this property (Attachment F). UU-7 (CONT.)

As an intact, original wharf and transit shed still in use the Ninth Avenue Terminal is a fine example of simple, Beaux-arts style applied to an industrial/commercial building. It's amalgamation of water, rail, and land transportation capability in one facility is an early example of an inter-modal transportation complex. The building is 1,004 feet long by 180 feet wide. On the interior the sense of its monumentality is carried out in four acres of enclosed space, soaring to 47 feet in the middle and 27 feet on its sides. There are twenty-one cargo doors along the length of the transit shed on the waterfront, each door 16 feet by 16 feet. Along the length of the transit shed on the land side there are eighteen cargo doors, each 14 feet by 10 feet. At both ends of the building—at the transit shed's main entrance and at its rear, open wharf entrance—there is a cargo door, 24 feet by 18 feet.

Proposed demolition of a building of such landmark distinction, even with retention of an unspecified portion, is not justified. Previously the California Supreme Court has ruled that documentation of the historical features of the building and exhibition of a plaque do not reasonably begin to alleviate the impacts of its destruction because, "a large historical structure, once demolished, normally cannot be adequately replaced by reports and commemorative markers." Luckily times are changing, "According to a report by the Harvard University Graduate School of Design, renovation, reuse and preservation of existing buildings represents more than 40 percent of the design and construction market in the United States, particularly in urban areas." (California Real Estate Journal, March 1, 2004)

There are multiple examples of successful adaptive reuse projects, e.g., Ferry Building in San Francisco and the Subway Terminal Building in Los Angeles. The 500,000 square foot Subway Terminal Building—opened in 1925—has been converted into 277 live-work units called Metro 417. Oakland's City officials could benefit from Los Angeles' lessons to develop an adaptive reuse ordinance. In San Francisco, the new Asian Art Museum is housed in the adaptively reused San Francisco Library (one of the original Carnegie-funded libraries); architect Guy Aulenti also adaptively reused a Paris train station into the Musée D'Orsay.

In an article in the California Real Estate Journal, March 1, 2004, "Adaptive Reuse of Older Buildings Can Turn Community Eyesores into Assets," Y. Gaffen notes that,

"…the economic benefits of adaptive reuse versus demolition can be enormous. According to the 'Journal of Property Management,' reuse projects are popular 'because they can significantly reduce construction costs for developers, and they present economically viable alternatives to commercial tenants in search of large spaces.' It is estimated that adaptive reuse projects cost an average of 16 percent less than new construction…Today, a number of economic incentives, primarily federal, are available to reuse historic buildings…." UU-7 (CONT.)

There are sustainable benefits to the adaptive reuse of the Ninth Avenue Terminal-Ninth Avenue Transit Shed and the preservation of its materials. Y. Gaffen notes conservation of raw materials along with sustainable benefits at the neighborhood, city-wide, and regional levels. At the regional level he states, "…the preservation of existing facilities contributes to smart growth by reducing pressure on undeveloped green space and decreasing the need to extend infrastructure into undeveloped areas." California Real Estate Journal, March 1, 2004

The Ninth Avenue Terminal is already built on the Oakland Inner Harbor waterfront. Its adaptive reuse would best serve the neighborhood, city, and region due to its significance both to the maritime history of the City of Oakland and of the Bay Area. The resolution for its landmark designation states that it "is an especially prominent visual element in the neighborhood and along the waterfront, a signature and anchor building, due to the building's distinctive design, focal location on the Oakland-Alameda Estuary, and large scale…"

An example of state of the art construction and engineering during an era when projects were 'built to last;' the wharf may be considered 'overbuilt' given current knowledge of the industry. However, because of its exceptionally high standard of construction and engineering, the Ninth Avenue Terminal-Ninth Avenue Transit Shed has survived intact and is a prime candidate for reuse.

During research I located the Invitation For Bids in the Port of Oakland archives. According to the Invitation For Bids (IFB) for the Ninth Avenue Terminal (issued July 16, 1929 and due August 5, 1929) the construction of the Ninth Avenue Pier was started at the west end of the pier and was built from east to west. The construction specifications for the wharf (called a pier) are described in explicit detail including the materials, standards, inspection, etc. Some excerpts from the specifications that reflect the high quality and standards are provided below:

The structural steel required for the pier was described as:

> …medium steel, with a tensile strength of at least 60,000 pounds per square inch, and workmanship thereon shall be subject to all the tests and conform with all the requirements of the standard specifications for structural steel for buildings adopted in 1901 by the American Society for Testing Materials and revised in 1921. (p. 21)

The dock iron required for the pier was described as:

> All bolt, spike and red iron shall have a tensile strength of at least 45,000 pounds per square inch of section. All wrought iron shall be fibrous in texture and capable of being bent double, cold, over a 2-inch cylinder without breaking the fibre. All forgings shall be perfect in every respect. (p. 22)

UU-7 (CONT.)

The preservation of the Ninth Avenue Terminal-Ninth Avenue Transit Shed—in its entirety—offers an opportunity to build smart and to help Oakland join the ranks of cities around the world that recognize and reap the strategic and economic benefits of adaptive reuse of historic and cultural resources.

Respectfully submitted,

Cynthia L. Shartzer
1528 Alice Street, Apt. 12
tel 510-763-7173; cell 510-882-0371

Attachments:
(A) LPAB Evaluation Sheet for Landmark Eligibility
(B) Port of Oakland November 10, 2003
(C) LPAB Staff Report December 8, 2003
(D) Findings of 'Exceptional Significance'
(E) Landmark and S-7 Preservation Combining Zone Application
(F) LPAB Resolution 2004-3
(G) S-7 Preservation Combining Zone Regulations

Responses to Cynthia L. Shartzer Comments

UU-1 The DEIR indicates on page I-2 that comments responding to the Notice of Preparation (NOP) of the Draft EIR and that involved environmental issues associated with the project site and proposed project are addressed in the DEIR. A summary of comments on the NOP was included in **Appendix B** of the DEIR, and copies of responses to the NOP are available for review at all locations where the DEIR was available for review (as specified on the Notice of Availability issued August 31, 2005). The comment is noted.

UU-2 The comment addresses the City-sponsored community outreach process conducted by CirclePoint consultants (retained by the City), which involved nine small group meetings and two community-wide meetings and that was conducted separate from the environmental review process for the project. The merits of the community outreach process or comments received during that process do not address physical environmental impacts under CEQA or the adequacy of the analysis in the DEIR. The comment is noted.

UU-3 The comment opines on a separate property transaction between the Port and the State Lands Commission that is not a part of the project, but that is already authorized by the Legislature to take place on behalf of the State. As such, the issue does not concern the environmental consequences of the project discussed in the DEIR. However, as discussed in Response to Comment GG-18, the Legislature delegated to the State Lands Commission the authority to approve and implement the property transaction of Tidelands Trust lands pursuant to specific conditions of Senate Bill (SB) 1622, the Oak to Ninth Avenue District Exchange Act. Additionally, a public hearing before the Board of Port Commissioners, as required by the Charter of the City of Oakland and SB 1622, would occur before the sale or exchange of Tidelands Trust lands may take place. The City's approval of the project will be conditioned upon subsequent compliance with the provisions of SB 1622.

UU-4 The comment addresses the merits of the redevelopment process for the project and does not address physical environmental impacts under CEQA or the adequacy of the analysis in the DEIR. The comment is noted.

UU-5 Impact E.3 regarding the proposed demolition of substantial portions of the Ninth Avenue Terminal would be significant and unavoidable, even after mitigation (DEIR p. IV.E-26). This determination considers the historic relevance of the Ninth Avenue Terminal to the development of the city, as discussed on DEIR pages IV.E-15 through IV.E-17 and within the historic resources evaluation (HRE) prepared by Carey & Co., historic resource consultants for the project. The HRE is included in Appendix G of the DEIR and contains and references much of the information provided in the 2003 landmark application for the Ninth Avenue Terminal structure (prepared by the commenter). As stated above in Response to Comment UU-1, information provided in responses to the NOP was addressed the DEIR.

The comment also suggests that demolition of the Terminal is "not justified." As stated in Response to Comment K-3, Chapter V (Alternatives) of the DEIR describes and analyzes a range of project alternatives that retain all or part of the Ninth Avenue Terminal: Alternative 3 (Enhanced Open Space/Partial Ninth Avenue Terminal Preservation and Adaptive Reuse) and Sub-Alternative (Full Ninth Avenue Terminal Preservation and Adaptive Reuse). Prior to its action on the project, City decisionmakers will evaluate the project alternatives analyzed in the DEIR. The City will either reject these alternatives and adopt the proposed project, or alternatively, they will elect one of the alternatives analyzed, instead of the project.

UU-6 The comment outlines examples of possible reuse scenarios for the preserved Terminal. See Master Response B regarding further analysis of reuse alternatives for the Ninth Avenue Terminal. Also, the alternatives described and analyzed in the DEIR include a number of reuse scenarios outlined by the community and comply with CEQA mandates for examining preservation alternatives for the historic resource. The City decisionmakers will consider this information before acting on the project.

UU-7 Previously submitted comments received in response to the NOP for the Draft EIR are provided as attachment to this comment letter. As previously indicated, comments received in response to the NOP were considered and incorporated in the DEIR as appropriate. Overall, the NOP response from the commenter discusses the historic merits of the Ninth Avenue Terminal, the City of Oakland's process of considering the landmark application to date, the commenter's support for preserving a "significant portion" of the Terminal, adequate mitigation, successful adaptive Terminal reuse projects and the economic benefits of reuse verses demolition, and the structural and architectural merits of the structure. As stated above, with regard to factors relevant to the physical environmental impacts of the project under CEQA, the DEIR includes accurate historical and architectural setting information about the Terminal, and an adequate range of preservation alternatives that incorporates a number of reuse scenarios outlined by the community. Also, since publication of the DEIR, the project sponsor has prepared an economic feasibility and constraints report (capital and operational) on retaining all or parts of the Ninth Avenue Terminal (as well as on each of the other project alternatives). The economic feasibility and constraints report will be provided to City decisionmakers separate from this environmental report for its consideration of the project and the alternatives evaluated in the DEIR. The City will determine the adequacy of the report for its purposes, and will consider all information provided in the DEIR and this FEIR prior to acting on the project.

D. Comments and Responses to Issues Raised by Dr. Rajiv Bhatia

After publication of the Final EIR, Dr. Rajiv Bhatia submitted to the City several letters that raised a number of issues, some of which pertain to environmental topics under CEQA. Dr. Bhatia's correspondence raised the following environmental issues (date of letter shown in parentheses):

1) Pedestrian safety and injuries (March 3, 2006)

2) Inclusion of affordable housing to reduced certain transportation and air quality impacts resulting from the project (March 8, 2006)

3) Air quality and noise related health impacts (March 22 and March 23, 2006, and undated list of recommendations)[2]

4) Project consistency with the Oakland General Plan Noise Element (April 12, 2006).

Each letter is included in this section, and the City's responses immediately follow each letter.

[2] Letters addressed to Councilperson Jane Brunner, dated March 22, 2006, and March 23, 2006, are essentially the same, except for variations in formatting. Both letters are included in this Addendum.

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March 3, 2006

Colland Jang
Chair, Oakland Planning Commission
Community Economic Development Agency
City of Oakland
250 Frank Ogawa Plaza, Suite 3315
Oakland CA 84612

Re: Analysis of Pedestrian Injuries Resulting from the Oak to Ninth Avenue Project; Oakland FEIR; Case ER 04-0009

Dear Chairperson Jang:

At the public hearing on the DEIR of the Oak to Ninth Development Proposal, you raised the important issue of pedestrian safety and requested the City to conduct in the EIR an adequate analysis of project related impacts on pedestrian safety impacts. As a member of the public health community, I appreciate your concern about this issue.

Adverse environmental impacts on humans and public health must be addressed under CEQA, including but are not limited to impacts on pedestrian safety, noise, air quality, and hazardous materials.[1] Several stakeholders identified deficiencies in the DEIR analysis of project effects on pedestrian injuries in the neighborhoods surrounding the proposed Oak to Ninth development. Unfortunately, the FEIR analysis of pedestrian safety remains inadequate; furthermore, I believe, many City of Oakland FEIR responses to comments on the DEIR are not based on evidence.

This letter provides additional evidence and original analysis demonstrating that pedestrian injuries will increase significantly directly due to project-related increases in traffic volume in several neighborhoods of Oakland surrounding the project. The evidence and analysis includes the following key points:

- **The definition and use of the term *pedestrian injury rate* in the DEIR and FEIR is neither accurate nor consistent with definitions used by the Federal Government or those used in epidemiologic investigations.** 1
- **Oakland has a rate of pedestrian injuries several times higher than Federal public health standards. The neighborhoods surrounding the project have a disproportionate share of pedestrian injuries relative to other neighborhoods in Oakland.**
- **Project-related impacts on pedestrian injuries are significant. Quantitative forecasting of changes to Oakland's pedestrian injury rate based on project related changes in traffic flows and a baseline injury rate of 100 injuries/year in the area of influence estimates that the project's traffic alone will contribute about 5.4 additional injuries per year or 268 pedestrian injuries in the years 2025-2075. The cumulative impact of increased traffic in the area by 2025 forecasts 20 additional injuries per year with a total of 1000 growth related additional injuries in the years 2025-2075.**
- **The DEIR and FEIR have not proposed or evaluated the feasibility of sufficient pedestrian safety improvements including circulation changes and street and intersection facility improvements, available to prevent increases in traffic related injuries.**

1 Section 15065 of the regulations for the California Environmental Quality Act (CEQA) mandates an environmental impact report (EIR) to analyze any "...environmental effects of a project [that] will cause substantial adverse effects on human beings, either directly or indirectly. CEQA guidelines section 15126.2, subdivision (a) requires an EIR to discuss "health and safety problems caused by the physical changes" that the proposed project will precipitate. Bakersfield Citizens for Local Control vs. the City of Bakersfield reaffirmed the necessity of health analysis in an EIR prepared under CEQA. Environmental Justice also demands a full analysis of the health impacts on low-income and minority populations.

Significance of Pedestrian Injuries, National Injury Standards, and Inadequacies in the Oak to Ninth FEIR

A significant error in the FEIR is the inaccurate definition of the term, *rate of injury*. The FEIR inaccurately defines "rate of injury" as "accidents per number of vehicles." Using this definition, the City of Oakland argues that *the project will not affect the rate at which motor vehicle accidents occur because it will not affect the roadways*. This statement is misleading. The number of accidents per vehicle and the number of accidents per mile might reflect the relative safety of vehicle and roadways, respectively, but these measures do not reflect the impacts to human health. With regard to human health impacts, an appropriate measure of adverse impact is the increase in the number of injuries or the increase in the rate of injuries ***defined as the number of injuries per unit time***. This definition is the one used by the Federal Department of Health and Human Services in pedestrian injury objectives for the Nation. Holding the number of accidents per vehicle trips constant, the rate of injuries will increase simply because the number of vehicle trips will increase. 2

The US Department of Health and Human Services (USDHHS) has established National objectives for the **rate of pedestrian injuries**.[2] Much like National Air Quality Standards, these objectives or standards can serve as thresholds for significance for pedestrian injuries within CEQA analysis. These objectives include:

- A rate of non-fatal vehicle injuries to pedestrians no greater than 19 injuries per year per 100,000 people.
- A rate of fatal vehicle injuries to pedestrians no greater than 1 injury per year per 100,000 people.

According to Oakland's Pedestrian Master Plan, Oakland residents suffer approximately 85.5 vehicle injuries to pedestrians per 100,000 every year including 3 pedestrian fatalities per 100,000 per year.[3] **This rate of injuries is about 4 times the USDHHS standards. The published rate of fatal injuries in Oakland is 3 times the USDHHS standard.** Based on current rates and national standards, any increase in pedestrian injuries should be considered a significant adverse effect.

A significant number of Oakland pedestrian injuries occur in the neighborhoods and streets (e.g., Downtown, Jack London Square, Chinatown, Lakeshore, East Lake, Lower San Antonio, International Blvd) surrounding the proposed project. Based on population and the intensity of pedestrian injuries, this impact analysis estimates a baseline injury rate of at least 100 pedestrian injuries per year in the area affected by the Oak to Ninth Project.[4] Furthermore, the neighborhoods surrounding this project contain sensitive populations more vulnerable to impacts on pedestrian safety, including children, the elderly, walking-dependent, and the low-income transit-dependent.

Vehicle injuries to pedestrians have significant economic costs beyond their physical toll on victims. A recent analysis of California data concludes that in 1999 economic costs resulting from 5634 fatal and non-fatal vehicle injuries to pedestrians resulted in over $3.9 billion in direct and indirect costs ($692,000 per injury). California Highway Patrol estimates of economic costs of vehicle injuries to pedestrians disaggregated by injury severity are provided in the table below. 3

Pedestrian Injury Severity	Economic Cost per Injury
Fatal Injury	$2,709,000
Severe Injury	$180,000
Visible Injury	$38,000
Complaint of Pain	$20,000

Environmental Factors Affecting Pedestrian Injuries 4

2 U.S. Department of Health and Human Services. Healthy People 2010 Objectives.

3 Oakland Pedestrian Master Plan. Page 30.

4 The author of this analysis has requested a map of counts of pedestrian injuries from the City of Oakland. A more precise estimate of pedestrian injuries in the area of influence of the Oak to Ninth project is pending this data.

The rate of pedestrian injuries in an area is dependent on several **environmental factors** such as vehicle volume, vehicle type (truck vs. car), vehicle speed, pedestrian volume, roadway width, vehicle speed, pedestrian facilities (sidewalk width, driveway conflicts, buffers), intersection design (crossing distance, signal phasing and timing, corner radii, cross walk treatments, median islands, curb extensions), lighting, and weather.[5 6 7 8 9]

Vehicle speeds are the most important predictor of the **severity** of pedestrian injuries. Below 20mph the probability of serious injury or fatal injury is generally less than 20%; this proportion rapidly increases with increasing speed and above 35mph, most injuries are fatal or incapacitating.[10] With regards to sensitive populations, the elderly and the very young populations are more vulnerable to vehicle injuries while walking because of slower walking speeds or slower reaction times.

4 (cont.)

Public health and transportation safety research consistently demonstrates that **vehicle volumes** are an **independent environmental predictor of pedestrian injuries.**[11 12 13 14] In other words, all things being equal, when the number of vehicle trips increases, the number of vehicle injuries to pedestrians will also increase. A national study of pedestrian injuries and crosswalks that included data from Oakland also found that higher average daily traffic and multi-lane roads were significant and independent environmental risk factors for vehicle-pedestrian crashes in multi-variate analysis.[15] One recent study found that traffic volume, traffic speed and lateral separation between pedestrians and traffic explained 85% of the variation in perceived safety and comfort for pedestrians.[16] The City of Oakland Pedestrian Master Plan also highlights the negative effect of high volumes on safety.[17] The magnitude of effect of vehicle volume on injuries is significant. For example, a study of nine intersections in Boston's Chinatown, researchers calculated an increase in 3-5 injuries per year for each increase in 1000 vehicles.[18]

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5 La Scala EA, Johnson FW, Gruenewald PJ. Neighborhood Characteristics of Alcohol-related Pedestrian Injuries. Prevention Science. 2001: 2:123-134.

6 Taylor M, Lynam D, Baruay A The effects of drivers speed on the frequency of road accidents. Transport Research Laboratory. TRL Report 421 Crowthorne, UK, 2000.

7 Morrison DS, Petticrew M, Thomson H. What are the most effective ways of improving population health through transport interventions? Evidence from systematic reviews. Journal of Epidemiology and Community Health 2003:57:327-333.

8 Evidence shows that pedestrian and bicycle injuries vary with the 0.4 power of the proportion of trips made by walking or bicycle. Jacobsen PL. Safety in numbers: more walkers and bicyclists, safer walking and bicycling. Injury Prevention. 2003: 9: 205-209.

9 Leden L. Pedestrian risk decrease with pedestrian flow. A case study based on data from signalized intersections in Hamilton, Ontario. Accident Analysis and Prevention. 2002: 34:457-464.

10 National Highway Traffic Safety Administration. Literature Review on Vehicle Travel Speeds and Pedestrian Injuries. Washington DC: USDOT, 1999.

11 LaScala EA, Gerber D, Gruenewald PJ. Demographic and environmental correlates of pedestrian injury collisions: a spatial analysis. Accident analysis and Prevention. 2000; 32:651-658.

12 Roberts I, Marshall R, Lee-Joe T. The urban traffic environment and the risk of child pedestrian injury: a case-cross over approach. Epidemiology 1995; 6: 169-71.

13 Stevenson MR, Jamrozik KD, Spittle J. A case-control study of traffic risk factors and child pedestrian injury. International Journal of Epidemiology 1995; 24: 957-64.

14 Agran PF, Winn DG, Anderson CL, Tran C. Del Valle CP. The role of the physical and traffic environment in child pedestrian injuries. Pediatrics. 1996; 98: 1096-1103.

15 Zegeer CV, Steward RJ, Huang HH, Lagerwey PA. Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations: Executive Summary and Recommended Guidelines. Federal Highway Administration, 2002.

16 Landis BW, Vatttikuti VR, Ottenberg RM, McLeod DS, Guttenplan M. Modeling the Roadside Walking Environment: A Pedestrian Level of Service. TRB Paper -1-0511 Tallahassee. 2000.

17 City of Oakland. Pedestrian Master Plan. Page 18.

18 Brugge D, Lai Z Hill C, Rand W. Traffic injury data, policy, and public health: lessons from Boston Chinatown. Journal of Urban Health 2002; 79: 87-103.

Impact Analysis

Empirical research on traffic safety and vehicle volumes shows that the rate of pedestrian injuries increase consistently as vehicle volume increases but the relative increase in this rate is attenuated as vehicle volumes rise. The attenuation may be caused to reduced pedestrian activity in areas with high traffic. A common parametric form of the injury-vehicle volume relationship is described as follows:

$$\textbf{Injuries} = \alpha \times (\textbf{Average Annual Daily Trips})^{\beta} \text{ ; typically where } \beta < 1$$ [19]

Several empirically tested pedestrian injury estimation models provide evidence that pedestrian crashes are proportional to the square root of vehicle volume (e.g., $\beta = 0.5$ in the equation above).[20] This means the number of pedestrian injuries after the project can be estimated simply as:

$$\textbf{Total Annual Injuries} = \textbf{Current Annual Injuries} \times (\textbf{Future AADT / Baseline AADT})^{1/2}$$

The Draft EIR acknowledges that development of the Oak-to-Ninth Avenue Project, which includes 3100 residential units and 3500 parking spaces, will result in an additional 27,110 daily vehicle trips external to the project. (Table IV.B-4) As described in the detailed intersection level traffic analysis in the DEIR, these trips will increase traffic volume on local streets in the downtown, Chinatown, and Jack London Square, and other neighborhoods. 4 (cont.)

According to traffic analysis in the DEIR, the increase in vehicle volumes at intersections in the neighborhoods around the project will varies considerably, ranging from about 2% to 127%. The average project-related increase in vehicle volume in the surrounding neighborhoods at the studied intersections is about 11% after project completion. The average cumulative increase in vehicle volume by 2025 at these intersections is 45%.

Assuming the current annual rate of pedestrian injuries in affected neighborhoods is 100 per year, the model described above estimates an increase in 5.4 injuries per year or 268 injuries between 2025 and 2075. [21] **Based on the cumulative increase in average daily trips of 45% in 2025, the impact is 20 injuries per year or 1000 injuries between 2025 and 2075.**

The figure below graphically illustrates the relationship between change in vehicle volume and the change in the number of injuries. The middle line represents a model with Beta set to equal 0.5 in the equation above. The upper and lower lines provide a reasonable upper and lower bound on this volume—injury relationship. A more refined analysis might estimate changes in pedestrian injuries based on vehicle flow on all segments on all roadways; nevertheless, this estimate shows that the Oak to Ninth Project will result in a significant environmental impact on pedestrian injuries in an area where the rate of pedestrian injuries already exceeds the national standard.

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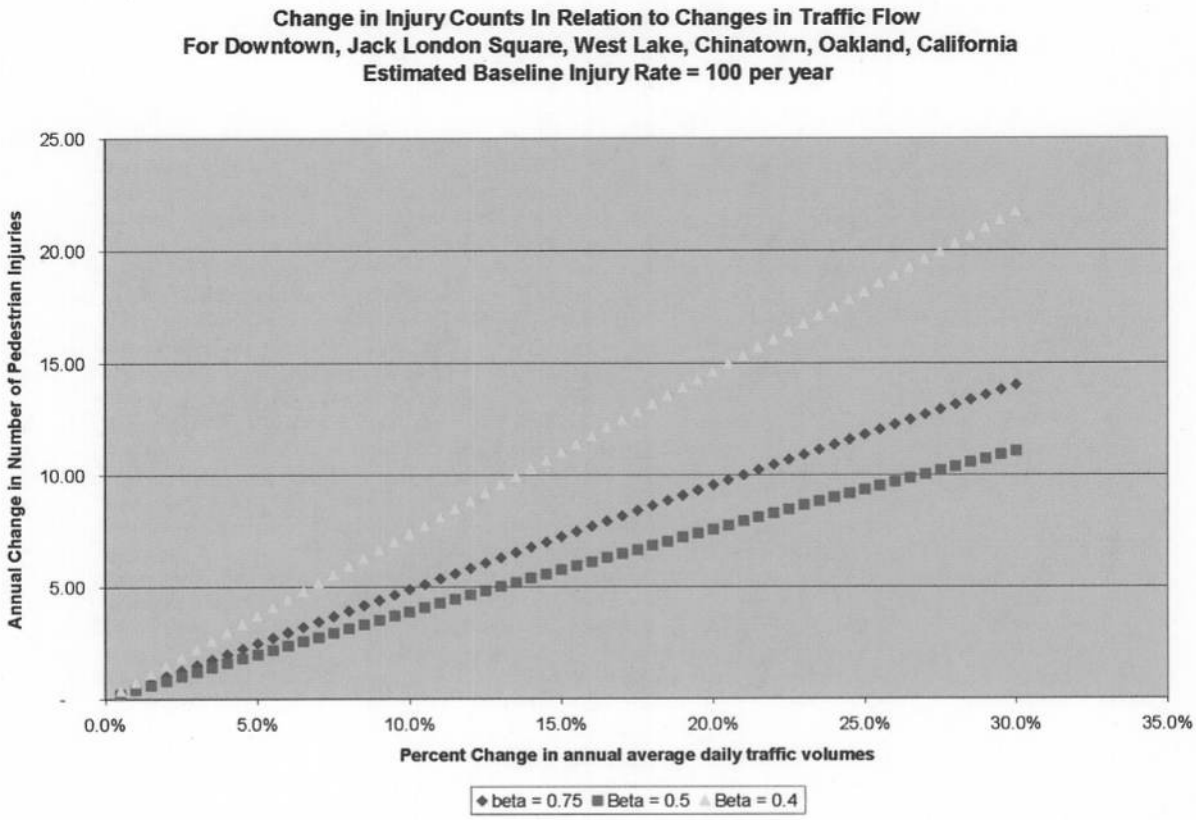
19 Lord D, Manar A, Vizioli A. Modeling crash-flow density and crash-flow-V/C ratio relationships for rural and urban freeway segments. Accident Analysis and Prevention 2005; 37: 185-199.

20 Lee C, Abdel-Aty M. Comprehensive analysis of vehicle-pedestrian crashed at intersections in Florida. Accident Analysis and Prevention 2005; 37: 775-786.

21 Estimates of pedestrian injuries in the project's area of influence are based on review of available injury data. This estimate will be updated based on the most recent pedestrian injury data when available.



Available Pedestrian Safety Mitigations are not Utilized

The DEIR indicates that as mitigations to intersection LOS impacts, the project will only include new signals with pedestrian signal heads at a few intersections (Embarcadero and Oak, Embarcadero and 5th Ave; Embarcadero and I-880 Northbound off-ramp; Embarcadero and Broadway.) A Master Response in the FEIR also includes further analysis of safety impacts around train crossings. However, no mitigations are proposed in other neighborhoods where traffic will increase significantly. The DEIR summarily concludes (without evidence) that these traffic control devices at these few intersections will "safely accommodate the added vehicle and pedestrian traffic and the project would have a less than significant impact." The following evidence argues against the City of Oakland's conclusions in the DEIR and FEIR:

- The DEIR does not fully analyze impacts on pedestrian injuries resulting from project-related vehicle trips in the neighborhoods surrounding the project. It is not possible to judge the effectiveness of mitigations if the impact is not fully characterized. 5
- Pedestrian Safety measures proposed by the project focus on intersections. Many vehicle injuries do not occur at intersections.[22]
- The mitigations proposed are for a limited number of intersections. The FEIR does not propose or evaluate environmental mitigations at other intersections in and around the project area that are impacted by significant changes in traffic volume.
- For the mitigations proposed, the FEIR does not provide any evidence to support the efficacy of these traffic signal devices as a means to reduce pedestrian injuries.
- The FEIR does not consider other environmental mitigations impacts on pedestrian safety including curb extinctions, median islands, cross walk treatments, presence of sidewalks, roadway buffers, street lighting, and reduced crossing speeds.
- The FEIR does not consider traffic calming as mitigation. Reviews of international studies demonstrate that on average traffic calming interventions reduce accidents by 15%.[23]

22 According to the National Highway Traffic Safety Administration 78% of pedestrian injuries occur at non-injury locations. NHTSA. Traffic Safety Facts. 2002.

- The FEIR inaccurately states that pedestrian safety measures in the Revive Chinatown Plan include only the fully funded short term measures. The FEIR also mischaracterizes sidewalk widening as a pedestrian amenity but *not a safety measure*. Sidewalk widening and one-way to two-way conversions are two of the longer term recommendations proposed in the Revive Chinatown Plan that are also pedestrian safety measures. The study by Landis cited above demonstrates that sidewalk widths are a determinant of pedestrian safety. Sidewalk widening also may require lane reductions which may alter vehicle flows.
- The FEIR suggests that the Pedestrian Master Plan provides a framework for mitigating the adverse impacts of vehicles on pedestrians but the project does not contribute to improvements suggested by the Plan.

Further analysis of pedestrian safety impacts and mitigations should focus on all Oakland streets and intersections with significant increases in traffic volume resulting from the Oak to Ninth Project. The mitigations should consider all appropriate and effective practices in pedestrian safety including but not limited to: 5 (cont.)

- Traffic Calming including vehicle lane narrowing, raised crosswalks, raised intersections and traffic circles;
- Bulb outs and center median refuge islands;
- Diversion of through traffic around mixed use neighborhoods;
- One-way to two way conversions and lane reductions in mixed use residential areas;
- Speed limit reductions in mixed-use residential areas;
- Grade separated crossings where significant pedestrian pathways cross high volume multi-lane streets;
- Pedestrian warning signs or lights at crossings or cross walks without traffic signal lights
- Sidewalk widening or buffers between sidewalks and vehicle lane buffers.

Summary

Overall, the analysis of pedestrian safety in the DEIR and FEIR includes little substantive evidence or original analysis, just unsupported conclusions. An evidence based analysis shows that project-related impacts on pedestrian safety are significant. The project has provides for no mitigations specific to the needs of pedestrians in the mixed use neighborhoods surrounding the project area. I strongly urge the Developer, the City of Oakland, the Planning Commission, and the Oakland City Council to provide additional pedestrian safety mitigations as described above to prevent the pedestrian injuries expected to result from this project.

Thank you for your consideration of this analysis and the proposed mitigations. I look forward to learning of Oakland Planning Commission actions to prevent pedestrian injuries. Please do not hesitate to call me with questions.

Sincerely,

Rajiv Bhatia, MD, MPH.

CC: Claudia Cappio, Douglas Boxer, Nicole Franklin, Suzie Lee, Michael Lighty, Mark McClure, Anne Mudge, Zac Wald, Jane Brunner, Nancy Nadel, Pat Kernanhan,

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23 Morrison DS, Petticrew M, Thomson H. What are the most effective ways of improving population health through transport interventions? Evidence from systematic reviews. Journal of Epidemiology and Community Health 2003:57:327-333.

Responses to March 3, 2006 letter regarding Pedestrian Safety and Injuries

1 The discussion summarizes the key points addressed in letter. Responses to the key points are provided below.

2 The comment provides an alternative definition for *rate of pedestrian injury* as the "number of injuries per unit of time," which the comment indicates is used in national objectives for the rate of pedestrian injuries. The comment suggests that certain national standards of injuries per year per population be applied to determine significant adverse pedestrian safety impacts resulting from the Oak to Ninth Project. However, the national standards cited by the comment, do not relate to the impacts of individual projects.

The comment relies on the macro-level assumption that increasing traffic volumes increases the likelihood of pedestrian collisions, a conclusion that fails to consider the several other relevant factors that influence the potential for pedestrian injury, particularly the site specificity - the unique characteristics of a development site. This consideration is discussed further in Response to Comment 5, below, however, it is relevant to this response regarding significance criteria because, as stated in the Fehr & Peers technical memo of June 6, 2006 (**Appendix C**), there is currently no safety consideration comparable to the Highway Capacity Manual that would allow the assessment of whether an intersection is safe and specifically whether project-level changes to an intersection increases the likelihood of pedestrian collisions.[3] Also, the City of Oakland does not have a policy, standard, or significance criterion to form the basis of a significance criterion that would accurately determine if additional pedestrian impacts are a significant impact under CEQA. Overall, the necessary site-specific level of analysis of pedestrian safety considerations is limited by the lack of state-of-the-practice tools.

3 First, the comment states a minimum, baseline estimate of injuries per year in the area affected by the Oak to Ninth Project. The commenter's analysis is based on hypothetical numbers of pedestrian collisions rather than actual data regarding pedestrian collisions, particularly in the project area. As presented in the Fehr & Peers memo in **Appendix C**, an assessment of historical reported data for pedestrian collisions at the 50 study intersections analyzed in the Draft EIR suggests that there is not sufficient numbers of pedestrian collisions to allow a reliable statistical analysis of the incidence or rate of collisions - even with a sampling of 50 intersection (many located in the high pedestrian traffic areas of Chinatown and the downtown core, as shown in **Appendix C**, Figure 1) and a total of 98 reported pedestrian-involved collisions. However, based on data provided by the City of Oakland, 20 of the 50 study intersections had no reported pedestrian-related collisions from 1995 to 2004, as shown in **Appendix C**, Figure 2.[4]

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[3] A new Highway Safety Manual is currently being developed.

[4] Minor collisions, particular those with no injuries, are unreported in collision reporting systems throughout the US, therefore the data provided here is not all-inclusive, but suitable to provide cross-intersection comparisons.

This finding is typical given that pedestrian-related collisions normally represent only a fraction (generally less than ten percent) of total collisions. An additional 20 of the study intersections reported three or fewer pedestrian collisions a period of nine years (1995 to 2004), which represents one or fewer collision per three-year period. However, at one intersection, Webster and 8th Street, an average of one pedestrian collision per year occurred, which, given the low rates per year previously mentioned for 80 percent of the study intersections, supports the conclusion that there is not sufficient data to allow a reliable statistical analysis specific to the Oak to Ninth Project. Furthermore, the number of pedestrian collisions by year of the 50 study intersections varied significantly, as depicted in **Appendix C**, Figure 3. The highest number occurred in 1995 with 20 collisions at study intersections. In other years, the number of collisions varied between 6 and 12 per year at study intersections. Again, the data is not sufficient to conclude a clear trend of pedestrian collisions increasing or decreasing over the nine-year period.

4 As stated in the comment and indicated by Fehr & Peers (**Appendix C**), the number or rate of pedestrian collision at an intersection is a function of several factors. As such, the comment oversimplifies these complex relationships by suggesting that traffic volume growth can be isolated as the factor contributing to increased pedestrian volumes or collisions. Data fail to support a direct correlation between increased numbers of pedestrian collisions and increased traffic volumes at the same intersection. The PMP identifies ten intersections where a majority of pedestrian collisions occur in Oakland. These intersections generally averaged one collision per year over four years, 1996 to 2000, and the recent trend is downward. None of these ten intersections carry a significant amount of project traffic. None of the studies cited by the commenter and other relevant studies identified by Fehr & Peers (and provided in **Appendix C**) identified an instance where an increase in pedestrian collisions was correlated with a historical increase in volume at the same intersection. **Appendix C** includes a list of and synopsis of the findings of most citations provided by the commenter.

5 As discussed in the Fehr & Peers memo in **Appendix C**, the macro-level conclusion that increasing traffic volumes increases the likelihood of pedestrian collisions lacks the consideration of site specificity necessary to draw a nexus between the potential impact and proposed improvements or mitigations. This nexus is critical under CEQA. As previously mentioned, it is important to be able to provide site specificity to the question of pedestrian collisions. The traffic impact analysis and mitigation measures in the EIR are site specific, and it is likely that any increase in pedestrian collisions may occur at certain locations or at locations with certain characteristics (e.g., unsignalized intersections or those lacking crosswalks). However, without site specificity it is not possible to draw a nexus between the impact and mitigation measures. Additionally, site specificity allows specific intersections with safety concerns to be identified and collision data monitored over time to determine whether there are engineering solutions to minimize the impact. Furthermore, given the pedestrian collision data limitations discussed in Response to Comment 4, there would no way to determine if a significant

impact would occur under CEQA, as well as whether an adequate mitigation for such an impact exists.

As stated in the Final EIR, the design of the project site, augmented by mitigation measures identified in the Draft EIR, incorporates a circulation system that accommodates traffic streams (vehicle, bicycle, and pedestrian) in a safe, efficient way. As also described in the Draft EIR, consistent with the PMP, traffic control devices (traffic signals with pedestrian signal heads), as well as striped crosswalks and signage would safely accommodate the added vehicular and pedestrian traffic by controlling the flow of the traffic streams through positive guidance. PMP Policy 1.2 recommends traffic signals and their associated features to improve pedestrian safety, and according to Fehr & Peers, the addition of signals with full pedestrian treatments (countdown timers, crosswalks, etc.) could improve pedestrian safety, with documented cases showing reductions in pedestrian collisions of approximately 52 percent.

The Draft EIR's finding of a less-than-significant impact to pedestrian safety is further supported by the project's provision of a continuous public Class I trail and the inclusion of appropriate internal street and sidewalk and crosswalk characteristics (location, width, configuration) consistent with all City regulations and safety standards. The comment identifies several general design or traffic calming measures that purportedly reduced accidents, and while this EIR does not discount the benefits of such measures, the standard improvements proposed by the project, including those identified in the Final EIR related to pedestrian safety at rail crossings, are adequate to find the impact on pedestrian safety (onsite or in nearby areas) less than significant and that no additional measures beyond those identified in the EIR would be required.

Pedestrian safety measures in the Draft EIR focus on intersections in particular since the City summarizes and provides the pedestrian collision data at intersection level. Note that in some cases, these accidents actually occur at the intersections. In other cases, the accident occurs near the intersection but is associated with the intersection for reporting purposes.. Therefore, the information analysis considers and responds to accidents that occur at and near intersections.

The information provided the Final EIR about the Revive Chinatown Plan improvements was provided for information only. Although short- and mid-term pedestrian improvements are mentioned, the plan also includes long-term improvements. Several of these improvements, such as intersection bulb-outs and pedestrian scramble signals, will directly benefit pedestrian travel. There are other proposed improvements which serve as both an amenity as well as a potential pedestrian safety improvement. For example, changing the parking meter design to create additional clear space on the sidewalks. The sidewalk widening measures outlined in the Revive Chinatown Plan are intended primarily as an amenity but could also provide a secondary safety benefit.

Regarding improvements outlined in the PMP, the Draft EIR discusses the project's consistency with the PMP starting on page IV.A-24 of the Draft EIR. Specifically, the

project supports key policies most relevant to the project in that it will improve pedestrian crossings, incorporated pedestrian-focused streetscape elements including sidewalks, recreational paths, street furniture signage, lighting and landscaping, art), and will facilitate safe routes to transit. As mentioned above, the project will adhere to the City's standard regulations and safety standards regarding sidewalks, including sidewalk width.

Rajiv Bhatia, MD, MPH
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University of California
Berkeley, CA 94720-7360

March 8th, 2006

Colland Jang
Chair, City of Oakland Planning Commission
Community Economic Development Agency
250 Frank Ogawa Plaza, Suite 3315
Oakland CA 84612

Re: Housing Affordability Can Mitigates Adverse Transportation and Air Quality Impacts of the Oak to Ninth Project; Case ER 04- 0009

Dear Mr. Jang:

This letter provides compelling evidence and analysis demonstrating that modifications in the Oak to Ninth project with regards to housing affordability would mitigate adverse transportation and air quality impacts.

The Draft EIR acknowledges that development of the Oak-to-Ninth Avenue Project, which includes 3100 residential units and 3500 parking spaces, will result in an additional 27,110 daily vehicle trips external to the project. The indirect impacts of these trips on Transportation System Performance, Air Quality, and Pedestrian Safety are significant. The analysis below, using existing regional transportation data and Air Resources Board modeling tools, shows that by modifying project design and increasing the number and type of units below market rate, the project could mitigate a significant portion of these transportation and air quality impacts.

Based on this analysis, the City of Oakland has a legal responsibility to transparently evaluate the environmental impacts of affordability as well as the feasibility of increasing affordability either as a project alternative or as potential air quality and transportation impacts mitigation. The letter makes the following key points:

- **The Oak to Ninth FEIR inappropriately denies a nexus between housing affordability and environmental impacts on transportation and air quality.**
- **The Metropolitan Transportation Agency (MTC) Bay Area Travel Survey (BATS) provides evidence for an unequivocal relationship between household income and personal vehicle trip generation.**
- **Based on MTC data, relative to the project as proposed, 15% affordability requirements would generate 1113 fewer weekday vehicle trips while a project that balances affordability relative to regional household incomes would produce 3426 fewer vehicle trips.**
- **Reducing vehicle trips would mitigate indirect effects of trips including those on traffic congestion and pedestrian safety.**
- **The Urban Emissions Model (URBEMIS) includes a parameter (variable) for housing affordability as an emissions mitigation measure.**

- **The URBEMIS model has the capacity to estimate changes in emissions for different proportions of restricted below market rate housing unit. The Oak to Ninth FEIR did not use this functionality to analyze the effects of varying levels of affordability on air emissions.**
- **Analysis using the URBEMIS model shows that greater housing affordability would reduce indirect air quality impacts of the Oak to Ninth Project.**
- **Increasing affordability would also increase the number of vehicle free households resulting in less need for parking and potentially allowing a greater proportion of the site to serve open space needs.**
- **The feasibility of project alternatives or mitigations with greater affordability must be analyzed by the City of Oakland as part of the FEIR.**
- **The results of negotiation between the developer, the City, and other stakeholders on affordability should be made transparent in the EIR because of their impacts on the significance of traffic, noise, air quality, and pedestrian safety impacts.**

Regulatory Context

Sections 15131 and 15064 of the California Environmental Quality Act require the analysis of significant physical environmental impacts resulting indirectly from project-related social effects or produced through project-related socio-economic mechanisms.[1] [2] Case law has affirmed this requirement.[3] An EIR must similarly consider socioeconomic measures that mitigate significant effects of the project[4] .

The FEIR addresses the concern related to housing affordability in Master Response H: Non-CEQA Topics and Considerations. The Section acknowledges the responsibility of the EIR to evaluate social and economic effects if evidence suggests that these effects will produce significant environmental impacts. The Section claims that this analysis has occurred in Section IV.J of the DEIR on Population and Housing.

The City of Oakland's Oak to Ninth FEIR is deficient in not mitigating effects on transportation and air quality through altering project design with regards to housing affordability. Neither the DEIR nor Master Response H acknowledge that housing affordability is directly related to several of the significant and potentially significant environmental effects of the project, including impacts on transportation, pedestrian safety, noise, air quality, and open space adequacy.

It is important to also note that housing affordability is an important policy goal within the City of Oakland's Housing Element of the General Plan.

Master Response H also notes that the City, the Developer, and the Redevelopment Agency are currently negotiating the inclusion of some affordable units in the project. The results of this negotiation should be described in the EIR because, as described below, the percentage of affordable housing will affect the significance of traffic, noise, air quality, and pedestrian safety impacts of the project.

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1 California Code of Regulations. §15131

2 California Code of Regulations. §15064

3 Citizen's Association for Sensible Development v. County of Inyo, 172Cal.App.3d 151 (1985)

4 CEQA Guidelines section 15126.4

Housing Affordability—Vehicle Trips Analysis

The mechanism of the relationship between housing affordability and vehicle trips is mediated through relationships among household income, vehicle ownership, and vehicle driving. Abundant evidence in the transportation and planning research literature has documented this relationship. Specific to the Bay Area, the MTC quantified the relationship between household income, travel behavior, and vehicle trips based on results from their Bay Area Travel Survey. The results show the strong relationship between household income and vehicle trip generation. Households in the highest income quartile generate almost 4 more vehicle trips per day (160 percent increase) than those in the lowest quartile.

Quartile of Household Income	**Q1**	**Q2**	**Q3**	**Q4**
Range of Household Income	<$30,000	$30,000-59,999	$60,000-99,999	$100,000 +
Weekday Vehicle Driver Trips	2.402	4.102	5.302	6.327

The relationship between household income and vehicle trips suggests that variants of project design with greater affordability would be a mechanism by which the project could generate fewer vehicle trips and consequently fewer environmental impacts indirectly related to vehicle trips. The table below provides an illustration of this relationship based on three scenarios:

- Project as currently proposed with housing affordable only to those making greater than the median income[5];
- Project meeting minimum redevelopment area requirements for housing affordability with 15% of units affordable to those making less than the median income;
- Project with housing affordability in balance with the regional distribution of household income.

Scenario	**Housing Affordable to Each Household Income Quartile**				**Weekday Trips**
	Q1	Q2	Q3	Q4	
Market Rate (Current Project)	0.0%	0.0%	50.0%	50.0%	**18025**
Min Affordability Requirements	6.0%	9.0%	42.5%	42.5%	**16912**
Regionally Balanced	16.0%	30.6%	29.5%	23.8%	**14599**

Based on MTC data, relative to the project as proposed, a modified design with minimum Redevelopment Area affordability requirements would generate 1113 fewer weekday vehicle trips. **A design which balances affordability relative to regional household incomes would produce 3426 fewer vehicle trips.**

The analysis shows that a project with affordability balanced to regional needs would have significantly less adverse environmental impacts of the proposed project. Increasing affordability would also increase the number of vehicle free households resulting in less need for parking and potentially allowing a greater proportion of the site to serve open space needs.

Housing Affordability—Air Quality Analysis

5 Median Household income is defined as $60,000 in order to be consistent with the quartiles of income used in the MTC Bay Area Travel Survey.

The California Air Resources Board (CARB) developed the "Urban Emissions Model" (URBEMIS) to assist local public agencies with estimating air quality impacts from land use projects when preparing a CEQA environmental analysis. The model is situated in a user-friendly computer program that estimates construction, area source, and operational air pollution emissions from a wide variety of land use development projects in California. The model further estimates emission reductions associated with specific mitigation measures including transportation demand reduction measures and affordable housing.

This analysis applied the URBEMIS model to the Oak to Ninth project and found that the emission estimates were mitigated by increasing the proportion of below market rate (BMR) housing (See table below). We used the following land use inputs: (1)3100 condo/townhouse high rise, (2) 170,000 sq. feet regional retail, (3) 30,000 sq. feet supermarket; (4) 28.4 acres city park. Operational emission sources were set at default with temperature site specific and target year 2025.We varied the proportion of BMR units between 0 and 50%.

OPERATIONAL (VEHICLE) EMISSION ESTIMATES (lbs/day)

	ROG	NOx	CO	SO2	PM10
unmitigated	64.80	46.97	539.25	1.29	194.36
BMR 15%	64.42	46.57	534.53	1.27	192.62
BMR 25%	64.16	46.30	531.37	1.27	191.47
BMR 50%	63.51	45.63	523.49	1.25	188.58

It is important to note that the URBEMIS model provides very conservative estimates of the effect of greater affordability on reduced air emissions, and we believe the above estimates likely underestimate the beneficial effect of affordability. The URBEMIS model assumes a 4% reduction in vehicle trips for each deed-restricted below market rate housing unit. [6] The 4% reduction parameter is significantly less that the three fold difference in vehicle trip generation between households in the lowest and highest income quartiles in the Bay Area Region based on regional travel survey data. The URBEMIS parameter may reflect differences in the income—vehicle trips relationship between the Bay Area and the rest of the State of California. While this analysis provides sufficient evidence for an effect of affordability on air emissions, we would recommend modifying this parameter using Bay Area specific data in future analyses.

Summary and Recommendations

Numerous comments on the project and the DEIR including those made by Oakland City Council Members, Oakland Planning Commissioners, stakeholder organizations, and Oakland residents have stressed the need for the project to make housing created through the project affordable to average Oakland residents. The many articulate comments related to project affordability reflect the sensible position that ensuring affordability balanced with the needs of local residents is a critical requirement of social, economic, and environmental sustainability. This analysis provides specific evidence that greater affordability has a role in mitigating transportation and air quality impacts.

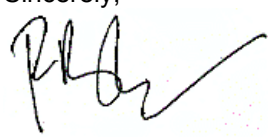
- **The Oak to Ninth FEIR should acknowledge and describe the nexus between housing affordability and environmental impacts on transportation and air quality.**

6 Software User's Guide: URBMEIS2002 for Windows with Enhanced Construction Module, Version 8.7, South Coast Air Quality Management District, April 2005.

- **The Oak to Ninth FEIR should analyze the effects of 15%-50% affordability requirements on vehicle trips and air pollution emissions using MTC data and the URBEMIS model.**
- **The Oak to Ninth FEIR should analyze the effects of 15%-50% affordability requirements on open space preservation.**
- **The Oak to Ninth FEIR should transparently analyze the feasibility of project variants with greater affordability, including the substance and results of any financial analysis or negotiations between the developer, the City, and other stakeholders on affordability.**

Thank you in advance for your consideration of this analysis. I look forward to learning of your actions to analyze the effects and feasibility of greater housing affordability in the FEIR. Please do not hesitate to call me with questions about this analysis.

Sincerely,



Rajiv Bhatia, MD, MPH Edmund Seto, PhD

CC: Claudia Cappio, Douglas Boxer, Nicole Franklin, Suzie Lee, Michael Lighty, Mark McClure, Anne Mudge, Zac Wald, Jane Brunner, Nancy Nadel, Pat Kernanhan,

Responses to March 8, 2006 letter regarding Affordable Housing, relative to Transportation and Air Quality Impacts

The following comprehensive response addresses the overall premise of the comment letter.

> The comment letter focuses on the claim that there is a correlation between the provision of affordable housing in the project and the resulting reductions in transportation and air quality impacts. Specifically, the comment asserts that, because of this relationship between affordable housing and environmental impacts, the EIR should analyze increased percentages of affordable units in the project in order to reduce or mitigate significant impacts resulting from increased vehicle trips and air emissions, and to explore increased open space area.
>
> The Draft EIR reported that, to assist the Oakland Redevelopment Agency (ORA) meet its legally-required affordable housing obligation, development of the project would require at least 420 low- to moderate-income units in the Central City East Redevelopment Project Area. However, as of publication of the Final EIR, the affordable housing component of the project had not been specifically determined. *Since* publication of the Final EIR, discussions among the City, ORA and the project sponsor have established that the project will provide between 420 and 465 units of affordable housing units within the project site – approximately 14 to 15 percent of the total 3,100 units proposed by the project. To the extent that the provision of these units will result in reduced vehicle trips and related emissions, these benefits would accrue to the Oak to Ninth Project.
>
> There is significant research that links travel behavior to land use changes. As indicated in the comment, some of this research is incorporated into URBEMIS and other tools. While the comment suggests that the EIR analysis should consider increased affordable housing to reduce environmental impacts, there is no CEQA or City requirement that this analysis automatically be incorporated into an EIR analysis, and the Oak to Ninth EIR purposely does not take advantage of such reductions in order to ensure the most conservative (maximum impact) analysis and avoid potentially understating the impacts of the project. This approach is especially appropriate given other factors that could influence the degree that affordable housing correlates with reduced vehicle trips, such as proximity of residences to transit and/or linkages to transit. City's policies that encourage the provision of affordable housing by development projects will guide the City's deliberations on the project, and the information provided in the EIR and this Addendum is adequate to allow decisionmakers to consider both the policy and potential environmental aspects of providing such below-marking housing.

COEH

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Berkeley, CA 94720-7360

March 22, 2006

Honorable Jane Brunner
One Frank Ogawa Plaza
One City Hall Plaza, 2nd Floor
Oakland, CA 94612

RE: Air Quality and Noise Related Health Effects of the Oak to Ninth Proposal

Dear Councilwoman Brunner:

This letter requests the Oakland City Council's attention to the potential public health impacts of poor air quality and high levels of noise on future residents of the Oak to Ninth Project and residents of surrounding neighborhoods.

Even in the context of our State's housing shortage, housing should be built where it will be healthful. The central issues raised in this letter are the avoidable conflicts between residential uses and noise and vehicle emissions due to the I-880 freeway. Without mitigations, many future residents of the Oak to Ninth Avenue will experience levels of noise unacceptably high for residential uses; furthermore, residents living within 500 feet of a busy freeway might experience higher rates of respiratory illnesses. The project also indirectly increases exposure to roadway particulate matter emissions in neighborhoods surrounding the project. **What is most important is that these health impacts due to air quality and noise have not been adequately or accurately evaluated in the CEQA process and the full range of feasible mitigations has not been considered by the City.** This letter will provide evidence for the following key points.

- **The City has a responsibility to study freeway related air quality and noise health impacts and their feasible mitigations under CEQA;**
- **The project creates potentially significant environmental impacts on air quality by locating a residential use in proximity to Interstate 880**
- **The FEIR for the Oak to Ninth Project fails to fully acknowledge the potential health impacts due to compromised air quality and fails to document that wintertime winds can blow from the freeway over the project;**
- **Oak to Ninth residents are likely to experience some adverse health effects due to freeway related traffic noise;**
- **Project design changes can potentially mitigate and prevent health impacts due to noise and poor air quality.**

A. The City has a responsibility to study freeway related air quality and noise health impacts and their feasible mitigations under CEQA

It is the responsibility of an EIR to analyze environmental effects that may cause either direct or indirect adverse effects on humans. 1

> A lead agency shall find that a project may have a significant effect on the environment and thereby require and EIR to be prepared for the project where any of the following conditions

occur: (d) the environmental effects of the project will cause substantial adverse effects on human beings, either directly or indirectly.[1]

While the freeway predates the project, CEQA guidelines specifically recognize that bringing people into *proximity* with a known environmental hazard is itself a potentially significant impact.

> The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there.[2]

B. The project creates potentially significant environmental impacts on air quality by locating a residential use in proximity to Interstate 880

The California Air Resource Board, Air Quality and Land Use Handbook: A Community Health Perspective (2005) recommends not locating sensitive land uses, including residential developments, within 500 feet of a highway with more than 100,000 vehicles per day.[3] The average daily traffic on I-880 is in excess of a quarter of a million vehicles with over 18,000 vehicles traveling this highway during the peak hour. These traffic conditions put 1400 future residences located on parcels A, F, G, K, and M at risk for respiratory diseases due to poor air quality. 1 (cont.)

The CARB guidelines are based on findings from extensive health research, demonstrating that proximity to high traffic density or flow results in reduced lung function and increased asthma hospitalizations, asthma symptoms, bronchitis symptoms, and medical visits. The research literature includes the following specific findings:

- Reduced lung function in children associated with traffic density, especially trucks, within 1,000 feet and the association was strongest within 300 feet[4]
- Increased asthma hospitalizations associated with living within 650 feet of heavy traffic and heavy truck volume.[5]
- Increased asthma symptoms with proximity to roadways with the greatest risk within 300 feet. [6]
- Asthma and bronchitis symptoms in children associated with high traffic in a San Francisco Bay Area community with good overall regional air quality[7]
- Increased medical visits in children living within 550 feet of heavy traffic in San Diego.[8]

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[1] CEQA Guidelines. Section 15065.
[2] CEQA Guidelines Section 15126.2 Consideration and Discussion of Significant Environmental Impacts. Subsection (a)
[3] California Environmental Protection Agency Air Resources Board Air Quality and Land Use Handbook: A Community Health Perspective May 2005.
[4] Brunekreef, B. et al. *"Air pollution from truck traffic and lung function in children living near motorways."* Epidemiology. 1997; 8:298-303.
[5] Lin, S. et al. *"Childhood asthma hospitalization and residential exposure to state route traffic."* Environ Res. 2002;88:73-81.
[6] Venn. et al. *"Living near a main road and the risk of wheezing illness in children."* American Journal of Respiratory and Critical Care Medicine. 2001; Vol.164, pp. 2177-2180.
[7] Kim, J. et al. *"Traffic-related air pollution and respiratory health: East Bay Children's Respiratory Health Study."* American Journal of Respiratory and Critical Care Medicine 2004; Vol. 170. pp. 520-526.
[8] English P., Neutra R., Scalf R. Sullivan M. Waller L. Zhu L. *"Examining Associations Between Childhood Asthma and Traffic Flow Using a Geographic Information System."* (1999) Environmental Health Perspectives 107(9): 761-767.

C. The FEIR for the Oak to Ninth Project fails to fully acknowledge the potential health impacts due to compromised air quality and fails to document that wintertime winds can blow from the freeway over the project

The Oak to Ninth EIR includes an air quality and health analyses that focuses exclusively on diesel particulate exposure and cancer risk, finding that the project will have less than a significant impact. This air quality and health analysis has three major flaws.

- First, the CARB handbook bases its land use guidelines both on the long term lung cancer risks as well as short term health effects, including reduced lung function[9], bronchitis, asthma, and cardiovascular mortality.[10] These non-cancer health effects are not related exclusively to diesel exhaust particulates but also to non-diesel particulates from gasoline fueled cars and trucks. In addition, driving and vehicle emissions are expected to increase on I-880.

- Second, the EIR argues that because prevailing winds are westerly, project residents would not experience exposure from freeway vehicle emissions. According to the Bay Area Air Quality Management District, the highest levels of traffic related air pollutants occur during the winter.[11] **The EIR fails to disclose that, based on a 20 year analysis of wind at Lake Merritt, wintertime winds often blow from the southeast and northwest and winds are calm over 40% of the year.**[12] Given that the I-880 freeway runs from the northwest to the southeast, one can expect that freeway related vehicle emissions will often be entrained directly over the project resulting in particulate matter and nitrogen dioxide exposures to Oak to Ninth residents. 2

- Third, the EIR has not evaluated vehicle-related particulate matter effects on residents of Jack London Square, Chinatown, Downtown, Lower San Antonio, and around Lake Merritt. Traffic volume increases of 11% in surrounding neighborhoods will also increase exposure to particulate matter for residents and workers in these areas. Furthermore, westerly winds would blow cold start pollution emissions due to vehicle trips originating at the project to neighborhoods to the east.

D. Oak to Ninth residents will potentially experience adverse health effects due to freeway related traffic noise

The residents of parcels A, F, G, K, and M will be exposed to noise levels between 70 and 85 dBA depending upon proximity to the freeway. The EIR clearly documents that the exterior traffic noise will impact the parcels adjacent to I-880 and residential uses on these parcels would be considered normally unacceptable to clearly unacceptable based upon the noise element of the Oakland General Plan. The USEPA estimates that these unmitigated noise levels will result in community reactions ranging from threats of legal action to vigorous protest.[13] This level of annoyance is directly related to several health effects associated with noise induced stress response, including: elevated blood pressure, circulatory disease, ulcer, colitis, and sleep deprivation. In addition, the traffic noise will prevent normal voice level communication at unprotected exterior locations.[14] The EIR concludes that full mitigation is not possible due to the height of the proposed residential towers. In addition, while code-requirements can reduce indoor 3

[9] Venn. etal. "Living near a main road and the risk of wheezing illness in children." American Journal of Respiratory and Critical Care Medicine. 2001: Vol.164, pp. 2177-2180

[10] Peters, A , et al, "Increased particulate air pollution and the triggering of myocardial infarction." Circulation, 103:2820-2815 (2001)

[11] Fairley, David, "Sources of Bay Area Fine Particles: A Chemical Mass Balance Analysis" BAAQMD, April, 2005, draft. http://www.baaqmd.gov/CARE/documents/050609-fine-particles-7-fairley.pdf.

[12] Monteverdi, John P., Background Information: "Wind and Rainfall Climatology for the Lake Merritt Area of Oakland", CA: Period 1950-1970, http://www.mayacamaswx.com/Examples/Report.pdf

[13] EPA, Noise Effects Handbook, 1979, p. 8-1, http://www.nonoise.org/library/handbook/handbook.htm

[14] ibid., p. 4-4, http://www.nonoise.org/library/handbook/handbook.htm

noise levels substantially, residents will be exposed to high noise levels whenever they open their windows or walk outside. 3 (cont.)

E. Project design changes can potentially mitigate and prevent health impacts due to noise and poor air quality

We believe a number of potentially feasible design changes might reduce environmental exposures to project residents and residents of surrounding neighborhoods. Our recommended mitigations are as follows:

- Provide each residential unit located within 500 feet of the freeway with individual HVAC systems in order to allow adequate ventilation with windows closed
- Locate all air intakes as far as reasonably practicable from areas of poor air quality due to traffic and filter all supplied air that cannot be delivered from a clean source.
- Provide each residence within 500 feet of the freeway with HEPA filtration to remove air pollution particles from air within residences.
- Notify all potential buyers that the property they are occupying has air quality risks and educate them in the proper use of any installed air filtration.
- Design units exposed to high noise levels with interior courtyards and patios that open into acoustically protected and shielded areas. 4
- Require, as a condition of development, all feasible traffic demand management actions, including shuttle service to BART at frequency of no less than every 15 minutes, a pedestrian and bike pathway connecting development to the BART and surrounding neighborhoods, and greater affordable housing.
- As a comprehensive mitigation, consider modifying the layout of the project in a way that places multilevel parking structures between the residences and the freeway and re-aligns the Embarcadero between the residences and the waterfront; the parking structure could serve as an acoustical barrier, a visual barrier, and distance residents from air emissions.
- Require, as an additional condition of development, prospective monitoring of particulate matter hot spots both on the Oak to Ninth site and in neighborhoods to the east, northeast, and southeast. Develop requirements for additional air quality mitigation measures and / or traffic demand management measures that would be triggered by local particulate matter levels that exceed California standards.

Overall, we recommend that the Oakland City Council fully analyze the health effects of air quality and noise on current and future area residents and require the developer to plan, engineer, design, and build the new development in such a manner that mitigates air quality and noise exposures.

Thank you in advance for your consideration of these issues and recommendations. If you have any questions please do not hesitate to contact me at ucbhig@gmail.com.

Sincerely,

Rajiv Bhatia, MD, MPH.
UC Berkeley Health Impact Group

CC: Oakland City Council; Claudia Cappio

Repeat of March 22, 2006 letter

COEH

Rajiv Bhatia, MD, MPH
Assistant Clinical Professor of Medicine
Center for Occupational and Environmental Health
School of Public Health
University of California
Berkeley, CA 94720-7360

March 23, 2005

Honorable Jane Brunner
One Frank Ogawa Plaza
One City Hall Plaza, 2nd Floor
Oakland, CA 94612

RE: Air Impact Assessment of the Oak to Ninth Proposal

Dear Councilwoman Brunner:

This letter requests the Oakland City Council's attention to the public health impacts of poor air quality and high levels of noise on future residents of the Oak to Ninth Project

The central issue raised in this letter is conflict between residential uses and environmental health the I-880 freeway. Even in the context of our current housing shortage, housing should be built where it will be healthful. Oakland's General Plan, many parts of the Oak to Ninth Avenue will have unacceptably high levels of noise for residential uses. The best environmental and public health evidence suggests residents living within 500 feet of a busy freeway will experience higher rates of respiratory illnesses. **What is most important is that health impacts due to air quality and noise have not been adequately studied in the CEQA process and the full range of feasible mitigations has not been considered by the City.** This letter will provide evidence for the following key points.

- The City has a responsibility to study freeway related air quality and noise health impacts and their feasible mitigations under CEQA;
- The project creates potentially significant environmental impacts on air quality by locating a residential use in proximity to Interstate 880
- The FEIR for the Oak to Ninth Project fails to fully acknowledge the potential health impacts due to compromised air quality and fails to document that wintertime winds can blow from the freeway over the project;
- Oak to Ninth residents are likely to experience some adverse health effects due to freeway related traffic noise;
- Project design changes can potentially mitigate and prevent health impacts due to noise and poor air quality.

The City has a responsibility to study freeway related air quality and noise health impacts and their feasible mitigations under CEQA

It is the responsibility of an EIR to analyze environmental effects that may cause either direct or indirect adverse effects on humans.

> A lead agency shall find that a project may have a significant effect on the environment and thereby require and EIR to be prepared for the project where any of the following conditions occur: (d) The environmental effects of the project will cause substantial adverse effects on human beings, either directly or indirectly.[1]

[1] CEQA Guidelines. Section 15065.

While the freeway predates the project, CEQA guidelines specifically recognize that bringing people into *proximity* with a known environmental hazard is itself a potentially significant impact.

> The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there.[2]

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The CARB guidelines are based on findings from extensive health research, demonstrating that proximity to high traffic density or flow results in reduced lung function and increased asthma hospitalizations, asthma symptoms, bronchitis symptoms, and medical visits. The research literature includes the following specific findings:

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The FEIR for the Oak to Ninth Project fails to fully acknowledge the potential health impacts due to compromised air quality and fails to document that wintertime winds can blow from the freeway over the project

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The Oak to Ninth EIR uses and air quality and health analyses that focus on diesel particulate exposure and cancer risk, finding that the project will have less than a significant impact. This air quality and health analysis has two major flaws.

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- Second, the EIR argued that prevailing westerly winds would limit exposure from freeway vehicle emissions to project residents. According to the Bay Area Air Quality Management District that the highest levels of these traffic caused air pollutants occurs during the winter.[11] The EIR also failed to note that wintertime winds often blows from the southeast and northwest or that winds are calm over 40% of the year.[12] Given that the I-880 freeway runs from the northwest to the southeast, one can expect that freeway related vehicle emissions will often be entrained directly over the project resulting in particulate matter and nitrogen dioxide exposures to Oak to Ninth residents.

Oak to Ninth residents will potentially experience adverse health effects due to freeway related traffic noise

The residents of parcels A, F, G, K, and M will be exposed to noise levels between 70 and 85 dBA depending upon proximity to the freeway. The EIR clearly documents that the exterior traffic noise will impact the parcels adjacent to I-880 and residential uses on these parcels would be considered normally unacceptable to clearly unacceptable based upon the noise element of the Oakland General Plan. The USEPA estimates that these unmitigated noise levels will result in community reactions ranging from threats of legal action to vigorous protest.[13] This level of annoyance is directly related to several health effects associated with noise induced stress response, including: elevated blood pressure, circulatory disease, ulcer, colitis, and sleep deprivation. In addition, the traffic noise will prevent normal voice level communication at unprotected exterior locations.[14] The EIR concludes that full mitigation is not possible due to the height of the proposed residential towers. In addition, while code-required can reduce indoor noise levels substantially, residents will be exposed to high noise levels whenever they open their windows or walk outside.

Project design changes can potentially mitigate and prevent health impacts due to noise and poor air quality

We believe a number of potentially feasible design changes might reduce environmental exposures to project residents. These recommended mitigations are as follows:

- Provide each residential unit located within 500 feet of the freeway with individual HVAC systems in order to allow adequate ventilation with windows closed

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- Locate all air intakes as far as reasonably practicable from areas of poor air quality due to traffic and filter all supplied air that cannot be delivered from a clean source.
- Provide each residence within 500 feet of the freeway with HEPA filtration to remove air pollution particles from air within residences.
- Notify all potential buyers that the property they are occupying has air quality risks and educate them in the proper use of any installed air filtration.
- Design units exposed to high noise levels with interior courtyards and patios that open into acoustically protected and shielded areas.
- Require, as a condition of development, all feasible traffic demand management actions, including shuttle service to BART at frequency of no less than every 15 minutes, a pedestrian and bike pathway connecting development to the BART and surrounding neighborhoods, and greater affordable housing.
- As a comprehensive mitigation, consider modifying the layout of the project in a way that places multilevel parking structures between the residences and the freeway and re-aligns the embarcadero between the residences and the waterfront; the parking structure could serve as an acoustical barrier, a visual barrier, and distance residents from air emissions.

Overall, we recommend that the Oakland City Council fully analyze the health effects of air quality and noise on project residents and require the developer to plan, engineer, design, and build the new development in such a manner that mitigates air quality and noise exposures.

Thank you in advance for your consideration of these issues and recommendations. If you have any questions please do not hesitate to contact us at ucbhig@gmail.com.

Sincerely,

Rajiv Bhatia
For the UC Berkeley Health Impact Group

CC: Oakland City Council
Claudia Cappio

COEH

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Oak to Ninth Avenue Development: Priority Recommendations for Health Promotion and Illness and Injury Prevention

The UC Berkeley Health Impact Group has analyzed the Oak to Ninth Avenue Development proposal in response to significant public debate on health related land use and design issues. We are recommending that the City Council take the following eight actions to promote and protect the health of Oakland residents.

Recommendation I Oak to Ninth should model ethnic and economic integration by providing housing affordable so that 1) the distribution of housing costs reflects the current household income distribution of Oakland, (2) at least 25% of housing is affordable to low income and very low income households, and (3) an additional 25% of housing is affordable to households earning the area's median income.

Human Health Rationale Policies such as zoning and redevelopment can either facilitate or prevent segregation. Residents of low-income economically segregated communities in Oakland and elsewhere now live about six fewer years and experience a much greater burden of chronic disease than those in non-poverty neighborhoods. Research has demonstrated that reductions in life expectancy and are caused by many place based factors including air pollution, violence, traffic hazards, poor schools, the absence of parks, and limited economic opportunity and mobility. In contrast, mixed income neighborhoods are assured the health benefits of access to healthier foods, better schools, better public transit, safer neighborhoods, park access and cleaner environments. In addition, based on MTC data and the Air Resources Board URBEMIS, higher levels of affordability will significantly reduce traffic congestion and reduce vehicle air pollution emissions.

Recommendation II Project should maximize accessibility to waterfront natural areas and recreation for Oakland residents by (1) modifying the project's footprint and bulk to create some unobstructed views of the water and open spaces from the Embarcadero OR by re-aligning the Embarcadero between residential uses and the shoreline park, (2) requiring high quality bicycle and pedestrian trails between the waterfront and neighborhoods and transit stations east of I-880, (3) providing infrastructure and facilities necessary for diverse recreational uses identified through outreach with residents of surrounding neighborhoods, (4) requiring safe, frequent public transportation to the site, and (5) creating a oversight body with citywide membership for Oak to Ninth's waterfront parks. 5

Human Health Rational Contact with and views of natural landscapes reduce stress and depression, reduce violent and anti-social behaviors, and improve the ability to focus, pay attention, work, and learn. Access to open space facilitates physical activity reducing population levels of obesity, diabetes and hypertension.

Recommendation III The project should mitigate increases in the pedestrian injury rate caused by the project in the project area itself and in surrounding neighborhoods through: (1) crosswalk improvements (e.g. median islands), (2) sidewalk improvements (e.g. bulb-outs), and (3) grade separated bicycle and pedestrian trails and paths between the project, surrounding neighborhoods, and transit stations

Human Health Rationale Oakland currently has ~85 pedestrian injuries per year per 100,000 people which is about ~4 times the Federal objective. Our pedestrian injury impact analysis shows that the project would contribute to 5 additional injuries per year in the surrounding neighborhoods, and when combined cumulatively with other projects, to an additional 20 injuries per year, generating medical and lost productivity costs of roughly $3 to 13 million dollars annually.

Recommendation IV The project should mitigate adverse air quality impacts by: (1) building HVAC systems with air intakes oriented away from particulate sources and (2) requiring all feasible and effective transportation demand management measures, and (3) advising future residents that living in proximity to a freeway can worsen with asthma or other chronic respiratory conditions. The city should require the

developer to conduct long-term monitoring for particulate matter hot spots both at Oak to Ninth site and at neighborhoods to the east.

Human Health Rationale According to the California Air Resources Board (ARB) the project is likely to result in increased frequency of respiratory symptoms and asthma exacerbations among project residents because of its location adjacent to I-880. Winds blowing from the North and Northwest in the wintertime have the potential of concentrating freeway particulate matter emissions directly over the project area.

Recommendation V The project should protect residents from outdoor environmental noise by (1) orienting buildings to buffer roadway noise in courtyards and open spaces and (2) considering a multi-level parking as an additional acoustical buffer

Human Health Rationale Exposure of 1400 residents to exterior noise levels up to 85 dBA in parcels A, F, G, K, and M will potentially result in mental stress, hypertension, speech disturbance, annoyance, and protest.

Recommendation VI The Oak to Ninth Project should include an on-site public elementary school.

Human Health Rationale Neighborhood schools reduce traffic and air pollution, facilitate physical activity, promote parent involvement in schools and their children's educational success.

Recommendation VII The design and placement of housing units at Oak to Ninth design should support person-to-person contact, social relationships and social capital by (1)creating crossing points and common paths of access and (2) providing common courtyards with benches, plants and fountains. 5 (cont.)

Human Health Rationale Social capital and community ties can promote an individual's sense of security and satisfaction, reduce stress and blood pressure levels, provide material and emotional support, and facilitate recovery from illness.

Recommendations VIII The City of Oakland should specifically document how the project design has been responsive or not to public concerns and constructive design change recommendations raised in the numerous public meetings and hearings on the Oak to Ninth Project.

Human Health Rationale Government responsiveness and accountability to needs articulated by the public is a critical determinant of population health. Meaningful participation means creating the opportunities for all affected people to understand what is at stake, to speak to their needs and concerns, and to have their needs addressed by people making the decision. A review of transcripts and public meeting summaries reveals that several concerns have been made repeatedly by diverse stakeholders at various stages of this process. Some of the most common statements are related to lack of attention to the existing Estuary Policy Plan, insufficient consideration of the impact upon traffic congestion and access to public transportation, the need for affordable housing for lower-income individuals and families, preservation of open space and the 9th avenue terminal, and lack of meaningful and responsive public engagement.

About The UC Berkeley Health Impact Group *The UC Berkeley Health Impact Group, which includes graduate students and faculty within the School of Public Health, has been analyzing the Oak to 9th project as a class project in the winter and spring of 2006. Our aim has been to understand how the project might best contribute to community health assets, whether the project might lead to adverse health impacts, and how can the project be improved in a way that best protects and promotes health? These recommendations take as a given the need for a residential neighborhood at Oak to Ninth Avenue. We also recognize that development of well-designed higher density housing in surrounding neighborhoods such as the San Antonio and Chinatown districts, with existing transit, civic, educational, and urban infrastructure may also be a feasible and potentially superior alternative to meeting regional housing needs. We anticipate a full draft report of our findings will be available for review by the City Council in late April. UCBHIG members are: Edmund Seto PhD, Alberto Ortega, Ray Minjares, Miriam Rotkin-Ellman, Tom Rivard, MS, Heather Kuiper, Megan Gaydos, Rajiv Bhatia, MD, MPH. Please email comments and questions about UCBHIG to ucbhig@gmail.com.*

Responses to March 22 and March 23, 2006 letter regarding Air Quality and Noise Related Health Impacts, and Related Recommendations

1 The EIR analysis fully examined the potential air quality and noise impacts of the project, including those associated with potential health related effects, and appropriate mitigation measures are identified where necessary and feasible.

Regarding air quality, as discussed in Response to Comment Q-6 in the Final EIR, the Draft EIR analyzes potential health risks to project residents due to exposure to diesel emissions on I-880, the rail line north of the site, and from boats in the Estuary, south of the site. This is discussed in the Air Quality Section of the Draft EIR, starting on page IV.C-21, under *Toxic Air Contaminants*. The analysis finds that these potential health impacts would be less than significant due to prevailing with conditions, new regulations for diesel emissions, and the level of human exposure necessary for health risk to occur.

The comment specifically relies on the ARB Handbook's recommendation that sensitive land uses (e.g., residential) should not be located within 500 feet of a freeway. As addressed in Final EIR Response to Comment Q-6, and supported by the subsequent analysis prepared by ENVIRON subconsultants in response to these comment letters provided in **Appendix D** to this Addendum, the ARB Handbook states that the recommendations provided therein are advisory and should not be interpreted as defined "buffer zones." Furthermore, ENVIRON clarifies that some of the support used to develop the Handbook's recommendations on freeways makes clear the critical factor of wind direction in determining health risk. The site-specific analysis presented in **Appendix D** uses the actual distance of the nearest residential units on the project site from I-880 (200 feet) and detailed data on prevailing winds at the project site.

As discussed on page 2-2 of **Appendix D**, based on the meteorological data from the Alameda Naval Air Station (NAS), winds have the greatest potential to blow from the freeway towards potential residents 9.1 percent of the time during between 5AM and 9PM, when freeway traffic is likely to be most significant. Therefore, the combination of the low rate of winds blowing from the freeway toward the project residents during the most impactful times of day, and the distance of the residential units from the freeway, project residents would be less impacted by emissions from the freeway than other areas where winds blow with higher frequency from freeways to residential areas, such as the conditions studied for much of the Handbook's recommendations.

Also addressed in the ENVIRON report, data presented in the Handbook indicates that "all elevated levels of particulate matter (both from diesel and gasoline-burning sources) is unlikely to persist at levels greater than background [levels] for more than between 300 feet from the edge of the freeway, therefore, "accounting for the small fraction of winds from I-880 to the proposed residences [proposed 200 feet downwind], the annual average distances that elevated particulate matter would persist above background in this location is likely less than the distance cited in the Handbook." This analysis supports the

findings in the Draft EIR that cancer health risk to project residents would not be significant.

2 First, as stated above, the data provided in the Handbook, and the analysis conducted in the Draft EIR, address potential effects from both diesel and gasoline-burning vehicles. Also, project traffic is likely to be gasoline-burning vehicles rather than diesel vehicles. Second, as discussed in the ENVIRON report in **Appendix D** to this Addendum, many of the commenter's assertions regarding wintertime wind conditions at Lake Merritt are inaccurate base on ENVIRON's review of the cited references. In fact, the cited reference as well as subsequent analyses that uses newer data show that the fraction of calm winds throughout the year ranges from 4.7 to 15.7 percent compared to the 40 percent cited by the comment. Also, the reference cited by the commenter shows only a small fraction of winds from directions relevant to the project site (see **Appendix D**, page 2-3). Thus, the EIR fully acknowledges the potential health impacts related to air quality with regard to prevailing winds at the project site year-round. Lastly, given the above discussion in Response to Comment 1, increases in particulate matter from the development that would affect residents in the cited nearby areas would likely be indiscernible from the existing background produced by existing mobile sources.

3 The EIR analysis fully examined the potential noise impacts of the project, including those associated with locating residences in proximity to the freeway. Impact G.4 in the Draft EIR acknowledges the potential adverse effects of located project residences in an environment where outdoor noise levels are above what is considered "normally acceptable" - near I-880 – and that the impact would be significant and unavoidable. As presented in the EIR, the main open spaces proposed by the project would be located *at least* 200 feet from I-880, and outdoor sound attenuation can occur for areas located away from I-880, with some sound blockage *potentially* attributable to buildings sited between open spaces and I-880. (See also Response to Comment 2 to the April 12, 2006 letter regarding consistency with the Oakland Noise Element.)

The comment states that "residents will be exposed to high noise levels whenever they open their windows or walk outside." This is an inaccurate and overstated assertion since noise levels perceived at the project site are generated primarily by traffic noise along I-880, which varies throughout the day. The noise levels experienced by residents would depend on the specific location and orientation of the unit relative to I-880, landscaping and adjacent buildings. Also, the main open space areas are proposed along the waterfront and away from the primary noise source of I-880. What is also relevant to the commenter's assertions is that, as indicated in the Draft EIR (Table IV.G-3), the existing noise measurements that were taking along key points on the Embarcadero for the analysis were obtained at heights of 45 to 70 feet in order to evaluation the effect of noise at higher elevations where the project residences would be located.

Regarding indoor noise impacts relative to project residences, Response to Comment RR-11 in the Final EIR acknowledges the potential effects of noise on residents and human

health. Mitigation Measure G.3 identified in the Draft EIR addresses indoor noise exposure and requires the project to adhere to the maximum interior noise levels prescribed by the requirements of Title 24 through the use of sound-rated assemblies (i.e., windows, exterior doors, and walls). Compliance will reduce the impact to less than significant. In addition, standards, regulations and guidelines included in the proposed draft Planned Waterfront Development Zoning District as well as the Preliminary Oak to Ninth Design Guidelines include setback and landscaping requirements intended to reduce potential noise effects to the project. For example, the design guidelines acknowledge noise issues along the Embarcadero and require that the project maintain a minimum setback of 25 feet from the back of sidewalk and generous landscape buffer along the Embarcadero frontage. As discussed in the Draft EIR for Impact G.4 (outdoor noise), while the construction of sound walls along the northern perimeter of the project (Embarcadero) would reduce the outdoor noise level at the site, this is not considered feasible given the height of the walls that would be required, which would effectively block the line of sight of the Embarcadero and I-880 traffic, negatively affect the aesthetics of the area and separate the project from the surrounding neighborhood, thus reducing the publicly-accessible character of the development and access and visibility of the waterfront, new waterfront open spaces, and to both.

4 Based on the information provided in the above responses, the analysis and mitigation measures in the EIR, and the analysis prepared by ENVIRON consultants (provided in **Appendix D** to this Addendum), the potential health impacts related to air quality and noises are presented and mitigated to the extent feasible. Health related air quality impacts resulting from diesel emissions in particular would be less than significant, therefore no mitigation is required. The proposed development and design guidelines for the project, which are incorporated into the Oak to Ninth Preliminary Development Plan (PDP), as well as standard building standards required for the project, include requirements and standards specific to aspects of the project that would effectively reduce indoor and outdoor noise levels perceived by residents and users on the site. The design changes suggested by the commenter are not required or relevant to the potential impacts identified for the project.

5 ENVIRON consultants prepared specific responses to each of the recommendations put forth by the commenter in the undated correspondence to the City. These responses are provided in **Appendix D** to this Addendum and summarized below:

Recommendation 1: The commenter's opinion regarding the preferred distribution of affordable housing should occur on the project site is noted. See Response to the March 8, 2006 letter from Dr. Bhatia.

Recommendation 2: The recommendation is not specific to the project site and the effectiveness of the recommendation is not substantiated with documentation or rationale. As stated in the EIR, the project layout of streets and buildings will increase the opportunity for views to the Estuary where none currently exist. The project proposes a

system of bicycle and pedestrian trails that will connect to future pathways to Lake Merritt as well as access to public transportation (BART, AC Transit). The Transportation Demand Management Plan (TDMP) will expand access to transit and benefit accessibility of the waterfront areas by the public. As discussed in Chapter II of this Addendum, the project proposes a total of 23.11 acres of new open spaces, and the Preliminary Oak to Ninth Design Guidelines include elements aimed at ensuring a diverse network of public open spaces.

Recommendation 3: See Responses to the March 3, 2006 letter from Dr. Bhatia, and Response to Recommendation 2, above, regarding the proposed bicycle and pedestrian trail network.

Recommendation 4: The commenter misstates the ARB Handbook, which does not state that the project is likely to result in increased frequency of respiratory symptoms and asthma exacerbations among Project residents because of its location adjacent to I-880. This is the commenter's interpretation of the Handbook's policy. See Responses to Comments 1 and 2, above. Also, the TDMP includes comprehensive measures aimed at encouraging and facilities alternative modes of transportation to driving automobiles.

Recommendation 5: See Response to Comments 3 and 4, above.

Recommendation 6: The comment provides no documentation or technical support showing that the provision of an elementary school on site would have any positive effects on the impacts claimed by the commenter, or that attendance at a nearby existing school would have negative effects.

Recommendation 7: The comment provides no documentation or technical support showing that the alternative site design or placement of housing units on the project site would have significant positive effects on the health impacts claimed by the commenter. The project will include several parks that will provide opportunities for a variety of passive and active activities. Additionally, the project will incorporate a system of new pedestrian and bicycle paths that will connect to parks and neighborhoods beyond the project site, particularly via the Bay Trail. This system will create natural venues for "person-to-person contact, social relationships, and social capital."

Recommendation 8: The record of the environmental process and the design development process of the project over time has been available to the public throughout the process. The Final EIR includes public comments, responses to those comments, and changes that were made to the project or information provided in the environmental document, either as a result of public input or other reasons. A complete history of the project is documented on the City of Oakland's website and includes all public notices, agendas, staff reports, postings for public outreach by the project sponsor, and other relevant reports and information.

COEH

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April 12, 2006

Honorable Pat Kernighan
Oakland City Councilmember, District 2
One City Hall Plaza, 2nd Floor
Oakland, CA 94612

RE: Oak to Ninth Project Inconsistency with the General Plan Noise Element

Dear Councilmember Kernighan:

This letter calls attention to the significant inconsistency between certain Oak to Ninth Avenue Project proposed residential uses and the City of Oakland Noise Element as well as related environmental justice impacts.

Correspondence submitted to the Oakland City Council prior to the informational hearing of March 28th, 2006 provided evidence of the potential public health impacts of poor air quality and high levels of noise on future residents of the Oak to Ninth Project secondary to extremely high motor vehicle volumes on the I-880 freeway. Infill residential development, undertaken in areas with existing public infrastructure and connections to public transit, has clear regional environmental health benefits; however, the prior correspondence pointed out that residential uses on parts of the project are inconsistent with State of California Air Resource Board Guidelines for land use and would result in relatively high exposures to environmental noise for future residents. The correspondence suggested additional analyses of these concerns and provided a list of project and building design changes to mitigate these effects. 1

I am writing this letter because City of Oakland staff reports and planning documents have not adequately or accurately addressed the issue of violations of the City's Noise Element and related public health and safety effects. I would like to call attention to the following facts and evidence:

- Noise and air quality related health impacts associated with this project are of significance equal to or greater than groundwater and soil contamination.
- Measured long term environmental noise levels on parcels A, G, F, K, and M are very loud, ranging from 75 to 85 dB Ldn. (DEIR IV.G-11)
- The Oakland General Plan Noise Element's Land Use Compatibility Chart proscribes residential uses as "clearly unacceptable" where noise levels are greater than 75 dB Ldn, stating that such "development should not be undertaken". 2
- The March 15th City Planning Staff Report did not inform the Oakland Planning Commission that project clearly violates the Oakland Noise Element in its description of General Plan consistency (pages 11-23)
- The March 15th Staff report recommended the Commission adopt findings of consistency with the General Plan and findings stating the absence of health and safety problems in order to approve Vesting Tentative Tract Map (page 26).
- As written, Impact G.4 in the CEQA findings document presented to the Planning Commission did not provide an accurate or reasonable description of inconsistency between the Noise Element and the project.

- The March 28th, 2006 informational report to the City Council does not identify the violation of the City's Noise Element or conflicts with California ARB air quality guidelines as key issues.
- Mitigating indoor environmental noise through construction practices is feasible; however, it can typically add 20% to residential construction costs.
- Limited mitigation of environmental noise in outdoor residential is feasible; the existing outdoor noise levels of 75-85 dB means that outdoor conversation at normal speech volumes will not be likely.
- Limited mitigation of project-related adverse air quality impacts is possible, for example, by ensuring building HVAC systems, orienting HVAC air intakes oriented away from particulate sources, and implementing air filtration.
- Members of low income households should be expected to be more sensitive to the health and developmental impacts of high environmental noise levels and high airborne particulate matter levels.
- The City of Oakland Redevelopment Agency is contemplating purchasing project area parcels with the highest levels of noise for the construction of below market rate housing, potentially creating new environmental health and justice impacts.

Increasing housing supply in Oakland and integrating BMR housing and market-rate housing in new projects is certainly good health and social policy; still, the following remain significant and unresolved policy questions for the City of Oakland regarding noise and air quality: 2 (cont.)

1. **The Noise Element is arguably the most important public health regulation to limit adverse environmental exposure to excessive noise. If the City Council approves residential development where the General Plan Noise Element clearly prohibits such development, does this action set a precedent for future land use decisions in Oakland?**
2. **Will the purchase of the land most compromised by noise and poor air quality for below market rate units result in a disparate environmental health burden for lower income Oakland residents and, if so, would this act be consistent with State Environmental Justice Statutes?**
3. **Does the City have the ability to purchase parcels other than parcels A, G, F, K, and M that are less compromised by environmental noise and air quality for BMR housing?**
4. **Has the City investigated best practices in building design and orientation for limiting noise in outdoor residential areas on parcels A, G, F, K, and M**
5. **Has the City investigated best practices in building design, ventilation and orientation for mitigating adverse air quality secondary to freeway emissions?**
6. **Has the City considered requiring the developer to conduct long-term monitoring for particulate matter hot spots and noise hot spots at Oak to Ninth site?**

Thank you in advance for your consideration of these issues, questions, and suggestions. If possible and appropriate, I would appreciate a written response from City staff. If you have any questions please do not hesitate to contact me at ucbhig@gmail.com.

Sincerely,

Rajiv Bhatia, MD, MPH.
UC Berkeley Health Impact Group

CC: Oakland City Council; Claudia Cappio; David Vanderpriem

Responses to April 12, 2006 letter regarding the Project's Consistency with the General Plan Noise Element

1 The comment states that the residential uses on parts of the project site are inconsistent with State of California Air Resources Board Guidelines for land use and that the project would violate the City's Noise Element. The comment also states that the City's staff reports and planning documents have not adequately or accurately addressed the issue of the project's violation of the City's Noise Element. The comment notes that the Noise Element "prescribes residential uses" in areas where the noise environment exceeds 75 dB Ldn. Based on this interpretation, the letter poses a number of policy questions and states various conclusions. While the April 12, 2006 letter primarily does not address issues concerning the adequacy of the environmental analysis provided in the Draft EIR, it is addressed in this Addendum.

See Response to Comments 1 and 2 to the March 22 and March 23, 2006 letters from Dr. Bhatia regarding air quality impacts. The commenters concerns and assumptions about the environmental and potential health impacts related to noise at the project site are provided in the March 22 and March 23, 2006 letters, and responses to those are presented in Responses to Comments 3 and 4 to those letters.

2 The comment bullets numerous points, many unsubstantiated or rationalized, related to noise impacts, potential mitigations, the effectiveness of potential mitigations, and a number of City's considerations for the project. Again, a number of considerations about the project and its requirements suggest that noise levels will not occur as asserted by the commenter or presented in the EIR. With respect to the noise issue, the Draft EIR disclosed that certain noise readings taken near and along the Embarcadero would fall into the "clearly unacceptable" category in the Noise Element's "Land Use Compatibility for Community Noise Environment" chart. In fact, this incompatibility was determined be to an unavoidable significant impact of the project (Draft EIR VI- p.G-27, Impact G-4). Thus, the public and the City decision makers were fully informed about the potential incompatibility.

Table IV.G-3 in the Draft EIR lists various existing noise environment measurements. Certain of these measurements show noise levels that would fall into the Noise Element range for "clearly unacceptable" for residential development. As mentioned in Response to Comment 3 to the March 22 and March 23, 2006 letters, of the twelve measurements over 75 Ldn, few reflect ground level conditions. The other measurements were taken above ground level (between 14 and 70 feet) and do not represent conditions that residents would experience while outside of the buildings in these locations. Moreover, these measurements do not represent 24-hour conditions and noise levels will be lower during nighttime and other off-peak hour traffic times. Although the comment implies that these noise conditions will affect entire lots, the readings were taken close to the edge of the Embarcadero (at 45 to 70 feet high at key locations) and do not reflect conditions across the parcels.

As also discussed in previous responses to noise issues, the majority of the open space planned for the site will be in areas shielded from the I-880 noise either because these areas are located along the water's edge or because the distance to the freeway is significant. Gateway Park is located near the Embarcadero along one edge, but most of the park will be far enough away from the road that noise will be attenuated. Additionally, Gateway Park is primarily an entry area and it is expected that most visitors to the park will be passing through to other locations.

In accordance with the proposed Planned Waterfront Development Zoning District, all project buildings will be required to undergo design review. The design review process will examine all aspects of the building and its location on the site. Appropriate siting and landscaping to reduce potential noise impact will be one of the many considerations examined in the design review process. The project's Preliminary Oak to Ninth Design Guidelines call for buildings along the Embarcadero to be set back and screened with landscaping to limit the impact of the roadway and the freeway. Additionally, all of the buildings must comply with state interior noise standards so that residents will be shielded from noise while in their units.

As previously stated, given the combined affect of these characteristics, regulations, guidelines and City review processes required for the project design, the actual noise impacts that would occur are likely to be less than those characterized by the comment or represented in the EIR.

In summary, it is important to note that the Noise Element acknowledges that "because the various elements of the Oakland general plan contain policies that address numerous different goals and some policies might compete with each other. If deciding whether to approve a proposed project, the City's Planning Commission and City Council must balance the various policies and decide whether the project is consistent (that is, in general harmony) with the general plan overall." (Noise Element, p. 2.) Thus, in deciding whether to approve the project the City Council will weigh compatibility with the noise element, based on the facts described above, in relation to other General Plan goals and policies, such as the provision of housing, the provision of open space, environmental remediation of the site, and economic revitalization of this area, among others.

APPENDIX A

Traffic Impacts Resulting from New Site Plan

FEHR & PEERS
TRANSPORTATION CONSULTANTS

MEMORANDUM

Date: May 18, 2006

To: Patrick Van Ness, Signature Properties

From: Chris Gray, Fehr & Peers

Subject: ***Oak to 9th Project Traffic Impacts Resulting from New Site Plan***

1031-1998

This memorandum documents our analysis of the newly proposed site plan for the Oak to 9th Development. The major change from the previous site plan is that the dwelling units and commercial space were deleted from the site of Estuary Park (formerly known as Parcel N), with these units redistributed to other areas of the project.

We reviewed the new site plan to determine if these land use changes would result in additional traffic impacts beyond those previously identified in the Draft and Final EIR published previously. Our analysis considered three questions:

1. Does the new site plan contain more overall development than the previous one, which could lead to additional traffic impacts beyond those previously identified at off-site intersections?

2. Does the redistribution of dwelling units and commercial space increase traffic volumes at project driveways, particularly the major access routes into and out of the project at Embarcadero/5th Avenue and Embarcadero/6th Avenue/I-880 off-ramp?

3. Does any increase in traffic volumes lead to additional traffic impacts at project driveways, particularly the major access routes into and out of the project at Embarcadero/5th Avenue and Embarcadero/6th Avenue/I-880 off-ramp?

QUESTION #1- DOES THE NEW SITE PLAN CONTAIN MORE DEVELOPMENT?

A review of the new site plan indicates that there are 3,100 multi-family dwelling units proposed within the project site. 200,000 square feet of commercial space are proposed to be constructed as well. The old site plan also contained 3,100 multi-family dwelling units and 200,000 square feet of commercial space. Therefore, the dwelling unit and commercial space totals are identical between both uses. The overall project trip generation would also therefore be identical.

Since the trip generation between the two alternatives is identical, and the distribution of project-generated traffic would be unaffected by changes to the site plan, we would expect the project impacts to be the same at all off-site intersections. Off-site intersections would include all intersections except those directly adjacent to the project site. 49 of the 51 study intersections can be classified as off-site. The only study intersections directly adjacent to the project site would be Embarcadero/5th Avenue and Embarcadero/6th Avenue/I-880 off-ramp.

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QUESTION #2- DOES THE REDISTRIBUTION OF UNITS INCREASE TRAFFIC VOLUMES AT PROJECT DRIVEWAYS

As noted above, the major change in the site plan is the movement of dwelling units and commercial space from the former Parcel N to the remaining areas of the development. The number of driveways proposed along Embarcadero is proposed to remain the same. At one of these driveways (Estuary Drive near the former Parcel N), the traffic volume is expected to decrease significantly with the removal of dwelling units and commercial space from this driveway.

At the remaining six parcels, the number of trips is expected to increase, although the increase at any one driveway is expected to be minimal. The trip increase at each driveway ranges from 5 AM peak hour trips at Embarcadero / 5th Avenue to 40 PM peak hour trips at Embarcadero / 6th Avenue/I-880 off-ramp. The other driveways would also experience minimal increases in traffic volumes. This minimal increase occurs for the following reasons:

1. The change in the site plan results in the redistribution of no more than 10 percent of the uses on site (300 dwelling units and 15,000 square feet of commercial)

2. These dwelling units and the commercial space are distributed across the remaining areas of the project

3. There are six driveways which provide access to the site

4. The project maintains an extensive internal roadway system which allows vehicles from the various parcels to access multiple driveways

Therefore, the redistribution of land uses results in a minimal increase in trips across all driveways.

QUESTION #3- DOES ANY INCREASE IN VOLUMES AT PROJECT DRIVEWAYS RESULT IN ADDITIONAL IMPACTS AT PROJECT DRIVEWAYS

The impact analysis for the EIR included two of the major intersections adjacent to the project site. These intersections are Embarcadero/5th Avenue and Embarcadero/6th Avenue/I-880 off-ramp. As noted in the response to Question #2, above, there will be a minor increase in the number of vehicles at these intersections.

The traffic study documented in the Draft and Final EIR identified impacts and recommended mitigation measures at these two intersections. With the recommended mitigations, mainly a widening of Embarcadero from 5th Avenue along the project frontage, both of these intersections would operate at an acceptable service levels (LOS D or better).

An analysis of intersection operations indicates that the additional trips cause a minimal increase in delay and no change in LOS. The delay change ranges from less than 1 second at the intersection of Embarcadero/5th Avenue in the AM peak hour to a change in delay of 3 seconds at the intersection of Embarcadero/6th Avenue/I-880 off-ramp in the PM peak hour. During all analysis periods, the change in delay is insufficient to cause a change in LOS. Therefore, these two intersections would continue to operate at acceptable levels even with the change in the project site, assuming implementation of the mitigation measures identified in the Draft and Final EIR.

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SUMMARY

The answers to the three questions posed at the beginning of this memo are as follows:

1. Does the new site plan contain more overall development than the previous one, which could lead to additional traffic impacts beyond those previously identified at off-site intersections?- ***No, trip generation and trip distribution the same. No additional off-site impacts.***

2. Does the redistribution of units increase traffic volumes at project driveways, particularly the major access routes into and out of the project at Embarcadero/5th Avenue and Embarcadero/6th Avenue/I-880 off-ramp?- ***Yes, slight increase in traffic at driveways.***

3. Does any increase in traffic volumes lead to additional traffic impacts at project driveways, particularly the major access routes into and out of the project at Embarcadero/5th Avenue and Embarcadero/6th Avenue/I-880 off-ramp?- ***No, minimal increase in volume leads to minimal increase in delay. No additional impacts.***

We hope you find this information to be helpful. If you have any questions or comments about this analysis, please call me at 949.859.3200 or e-mail me at cgray@fehrandpeers.com.

APPENDIX B

Project Traffic Impacts on 12th and 14th Streets

FEHR & PEERS
TRANSPORTATION CONSULTANTS

MEMORANDUM

Date: May 18, 2006

To: Patrick Van Ness, Signature Properties

From: Chris Gray, Fehr & Peers

Subject: ***Oak to 9th Project Traffic Impacts on 12th/14th Street***

1031-1998

At your request, we have conducted an additional analysis related project traffic impacts on 12th/14th Street in the City of Oakland adjacent to Lake Merritt. It is our understanding that the City of Oakland will be reconfiguring theses roadways to create a six-lane boulevard along the waterfront. Our analysis below estimates whether or not the development of the Oak to 9th site would impact the operations of this reconfigured roadway system along Lake Merritt.

LEVEL OF SERVICE (LOS) ANALYSIS

The transportation impact analysis for Oak to 9th focused on project impacts at the intersection level. We also evaluated impacts to the freeways and other major regional roadways throughout Alameda County, based on the requirements of the Alameda County Congestion Management Agency (ACCMA).

Our previous analysis, as documented in the DEIR, concluded that the intersections along both the west side and east side of this roadway segment would operate at acceptable service levels.

As an additional level of analysis, presented in this memo, we also estimated the 2025 level of service for this roadway segment using the following information:

- Traffic volumes from adjacent intersections at First Avenue/International Boulevard, 1st Avenue/Foothill, and 5th Avenue/East 12th Street. Based on the roadway configuration, it is likely that traffic on this roadway segment would pass through these three intersections. By combining the traffic volumes at these intersections, we can estimate the volumes on the segment of 12th/14th Street adjacent to Lake Merritt

- The roadway capacity can be estimated by applying a per lane capacity of 800 vehicles per hour. This capacity was used for the impact analysis on regional roadways, except for freeway facilities. Therefore, the directional capacity on this roadway segment would be 2,400 vehicles per hour, in each direction

The results of the LOS analysis are provided in Table 1. As indicated in this table, the westbound direction is expected to be deficient during the AM period while the eastbound segment will be deficient during the PM period. In both cases, the addition of project traffic would increase the volumes on the deficient segments by less than 3 percent.

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TABLE 1

LOS RESULTS FOR 12TH/14TH STREET ROADWAY SEGMENT

		2025 No Project			2025 With Project		
Period	**Direction**	**Volume**	**V/C**	**LOS**	**Volumes**	**V/C**	**LOS**
AM	Eastbound	894	0.37	A	912	0.38	A
AM	Westbound	2775	1.16	F	2850	1.19	F
PM	Eastbound	3290	1.37	F	3381	1.40	F
PM	Westbound	1262	0.53	A	1326	0.55	A

Source: Fehr & Peers, April 2006

IMPACT ANALYSIS

To determine if the project impacts on these roadway segments is significant, we applied the following criteria:

- The project would cause a roadway segment on the Metropolitan Transportation System to operate at LOS F or would increase the V/C ratio by more than three (3) percent for a roadway segment that would operate at LOS F without the project

While these roadway segments are not located on the Metropolitan Transportation System, the above criteria does relate to a roadway segment and was applied for this analysis. As indicated in the above table, the V/C ratio increases by 3 percent or less on all segments. The impact is therefore less than significant.

We hope you find this information to be helpful. If you have any questions or comments about this analysis, please call me at 949.859.3200 or e-mail me at cgray@fehrandpeers.com.

APPENDIX C

Fehr & Peers Response to Rajiv Bhatia Letter of March 3, 2006

FEHR & PEERS
TRANSPORTATION CONSULTANTS

MEMORANDUM

Date: June 6, 2006

To: Patrick Van Ness, Signature Properties

From: Chris Gray, Fehr & Peers
Matthew Ridgway, Fehr & Peers

Subject: ***Response to Rajiv Bhatia's March 3, 2006 Letter Related to Pedestrian Injuries Related to the Oak to 9th Development***

1031-1998

At your request, we have completed a review of a letter prepared by Rajiv Bhatia, MD, related to the proposed Oak to 9th Development. In his letter, Dr. Bhatia asserts that increased traffic from the project would cause a significant number of pedestrian injuries at various locations throughout the City of Oakland. Dr. Bhatia supports his assertion through a review of the City of Oakland's *Pedestrian Master Plan*, various research studies, and a collision prediction model.

Based on our review of this letter, we have identified the following comments:

1. Pedestrian safety is an important consideration but the methodology used in the letter to draw a connection between the Project and the need for pedestrian safety enhancements lacks nexus.

    a. The macro-level conclusion that increasing traffic volumes increases pedestrian collision likelihood lacks site specificity. Our analysis of traffic impacts and mitigation measures is based on a site specific analysis. It is likely that any increased pedestrian collisions may occur at only a few locations or at locations with certain characteristics, for instance at unsignalized intersections or those lacking crosswalks.
    b. Without site specificity, it is not possible to draw a nexus between the impact and a proposed improvement/mitigation. This nexus is critical under CEQA to require a project to contribute to a specific mitigation measure.
    c. Dr. Bhatia's analysis is based on hypothetical numbers of pedestrian collisions rather than actual data regarding pedestrian collisions.

2. Analysis of site-specific pedestrian safety considerations is not supported by state of the practice tools.
    a. There is no safety-consideration comparable to the Highway Capacity Manual (although a new Highway Safety Manual is under development) that would allow assessment of whether an intersection is safe and whether project-level changes to the subject intersection increases the likelihood of pedestrian collisions.
    b. The City of Oakland does not have a policy or other guidance to form the basis of significance criteria even if there were a basis for conducting the site-specific

safety analysis. Without a policy, standard, or significance criteria, we can not determine if additional pedestrian impacts are a significant impact under CEQA.

3. There is no precedent, in Oakland or elsewhere, for such an analysis.
    a. As noted in the studies cited by Dr. Bhatia and other relevant studies identified by Fehr & Peers, there was no instance identified instance where an increase in pedestrian was correlated with a historical increase in volume at the same intersection. Copies of these studies are attached to this document.
    b. There were no studies which analyzed the impact of a development project's traffic on a pedestrian system.
    c. The nearest thing would be an analysis of collisions per million vehicles or collisions per million pedestrians for study intersections. A potential basis for determining whether the observed collision rates are problematic would be to compare the rate of collisions per million vehicles with statewide average collision rates for comparable intersections published by Caltrans annually. (There is no basis for determining an appropriate rate of collisions per million pedestrians because the is little or no data on pedestrian volumes).
    d. Such a comparison would allow us to identify intersections with safety concerns and we could proceed to review actual collision reports for the subject intersection to determine whether there are engineering solutions (for example - if a disproportionate number of collisions were between right-turning vehicles and pedestrians in a particular crosswalk, we could then recommend a No Right Turn on Red sign).
    e. Even if this process were to be employed, there would be no way to determine if a significant impact occurs under CEQA and if there is adequate mitigation for such an impact.

4. The number of pedestrian collisions at an intersection is a function of the traffic volume, speed, intersection configuration, traffic control, surrounding land uses, location, and number of pedestrians. At any location, it is difficult to isolate the contribution of traffic volume growth to any increases in pedestrian volumes.

5. The City's Pedestrian Master Plan lists 10 intersections where a majority of the pedestrian collisions occur. These intersections generally averaged 1 collision per year or more from 1996 to 2000. None of these 10 intersections carry a significant amount of project traffic.

Fehr & Peers has also obtained data from the City of Oakland regarding historical reported pedestrian collisions at the 50 study intersections that are analyzed in the Oak-to-Ninth EIR. Figure 1 shows the locations of these intersections, many of which are in the downtown core and Chinatown areas, which have high levels of pedestrian traffic. A significant shortcoming of collision reporting systems throughout the US is that minor collisions, particularly those within no injuries are unreported. As a result, the data presented below should not be considered all-inclusive, but is good for cross-intersection comparisons.

1. As shown in Figure 2, nearly half (20) of the 50 study intersections had no reported pedestrian-related collisions from 1995 to 2004. Given that pedestrian-related collisions normally represent only a fraction (generally less than 10 percent) of the total collisions, this is not an unusual finding.

2. At 20 of the remaining 30 intersections, three or fewer pedestrian collisions took place over the nine-year period (1995 to 2004), which represents one or fewer collision per three-year period.

3. At one intersection, Webster/8th, an average of one pedestrian collision per year occurred. The conclusion from this and the prior two bullets is that there are not sufficient numbers of pedestrian collisions to allow a reliable statistical analysis; this despite a sampling of 50 intersections with a total of 98 reported pedestrian-involved collisions. This also highlights the complexities of collision prediction, which is normally based on a statistical analysis of collision trends and factors.

4. The number of pedestrian collisions by year varied significantly. As shown on Figure 3, the highest number of pedestrian collisions occurred in 1995 with 20 collisions. In other years, the number of pedestrian collisions varied between 6 and 12 per year at our study intersections. There was no clear trend of pedestrian collisions increasing or decreasing over the nine-year period.

We hope you find this information helpful. If you have any questions, comments, or require any additional information, please call me at 949.859.3200.

Articles referenced by Dr. Bhatia (letter's endnotes are included in the references below):

7. Morrison, DS, Petticrew, M, Thomson, H. What are the most effective ways of improving population health through transport interventions? Evidence from systematic reviews. Journal of Epidemiol Community Health. 2003: 57: 327-333.

The authors reviewed published and unpublished research articles pertaining to transportation interventions to improve health. Traffic calming and nighttime lighting was found to reduce accidents, however it is unclear the type of accidents the authors are referencing in the review.

8. Jacobsen, PL. Safety in numbers: more walkers and bicyclists, safer walking and bicycling. Injurty Prevention. 2003: 9: 205-209.

Jacobsen studied bicycle and pedestrian collision data sets from around the world. He found that a motorist is less likely to collide with a pedestrian or bicyclists the more non-motorized users are present. The research demonstrates that this is the case at all levels of analyses, from intersections to regions.

9. Leden, Lars. Pedestrian risk decrease with pedestrian flow. Study based on data from signalized intersections in Hamilton, Ontario. Accident Analysis and Prevention. 2002: 34: 457-464.

The researcher studied pedestrian accidents at 300 signalized intersections in Hamilton, Ontario, Canada between 1983 and 1986. The results show that as the number of pedestrians increase the number of vehicle-pedestrian collisions decrease, pedestrian accidents increase with increases in vehicle flow, and that left-turning vehicles are more of a risk to pedestrians than right-turning vehicles.

11. LaScala EA, Gerber D, Gruenewald PJ. Demographic and Environmental Correlates of Pedestrian Injury Collisions: a spatial analysis. Accident Analysis and Prevention. 2000: 32: 651-658.

In this study, the researchers use a spatial analysis to study pedestrian injury collisions from San Francisco, California in 1990. The results found that a variety of environmental factors, including vehicle flow, population density, the local population's age, unemployment, gender, education, and availability of alcohol are all related to pedestrian injury rates.

14. Agran PF, Winn DG, Anderson CL, Tran C. Del Valle CP. The Role of the Physical and Traffic Environment in Child Pedestrian Injuries. Pediatrics. 1996: 98: 1096-1103.

This analysis was performed in Orange County, California during the afternoon hours, when more young pedestrians are present on streets. The authors conclude that residential streets with multifamily residences and on-street parking should receive high priority for intervention programs reducing children pedestrian injuries.

15. (Different Source but same author and topic) Zegeer CV, Stewart RJ, Huang HH, Lagerwey PA. Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations. Transportation Research Record. 1773: 56-68.

Research in this study includes five years of pedestrian crash statistics at 1,000 marked crosswalks and 1,000 unmarked crosswalks located at sites without traffic signals or stop signs in various United States' cities. Results found that marked crosswalks on two-lane roads presented no difference in pedestrian crash rates than unmarked crosswalks on two-lane roads. On multi-lane roads with 12,000 or more vehicles per day, the research found marked crosswalks increased pedestrian crash rates compared to unmarked crosswalks.

16. Landis, BW, Vattikuti, VR, Ottenberg, RM, McLeod, DS, Guttenplan, M. Modeling the Roadside Walking Environment: A Pedestrian Level of Service. TRB Paper No. 01-0511.

This research develops a Pedestrian Level of Service (LOS) Model for the state of Florida based on 1250 observations of 75 pedestrians in Pensacola, Florida. The Pedestrian LOS focuses on pedestrians' perception of safety and the "primary" factors that affect perception of safety. Factors include: separation between pedestrians and traffic, traffic volume, traffic speed, percentage of truck traffic, and driveway access and frequency.

20. Lee, C, Abdel-Aty M. Comprehensive Analysis of Vehicle-Pedestrian Crashes at Intersections in Florida. Accident Analysis and Prevention 2005: 37: 775-786.

This study focuses on vehicle-pedestrian crashes in Florida between 1999 and 2002. The authors found that demographic factors, road geometries, and traffic and environmental conditions are all related to the frequency of pedestrian crashes. The research found that higher average traffic volumes at intersections increases pedestrian crashes, but the rate of increase is steeper at lower average traffic volumes (in rural areas).

Other articles reviewed:

Houton, RV. The Effects of Advance Stop Lines and Sign Prompts on Pedestrian Safety in a Crosswalk on a Multilane Highway. Journal of Applied Behavior Analysis. 1988: 21: 245-251.

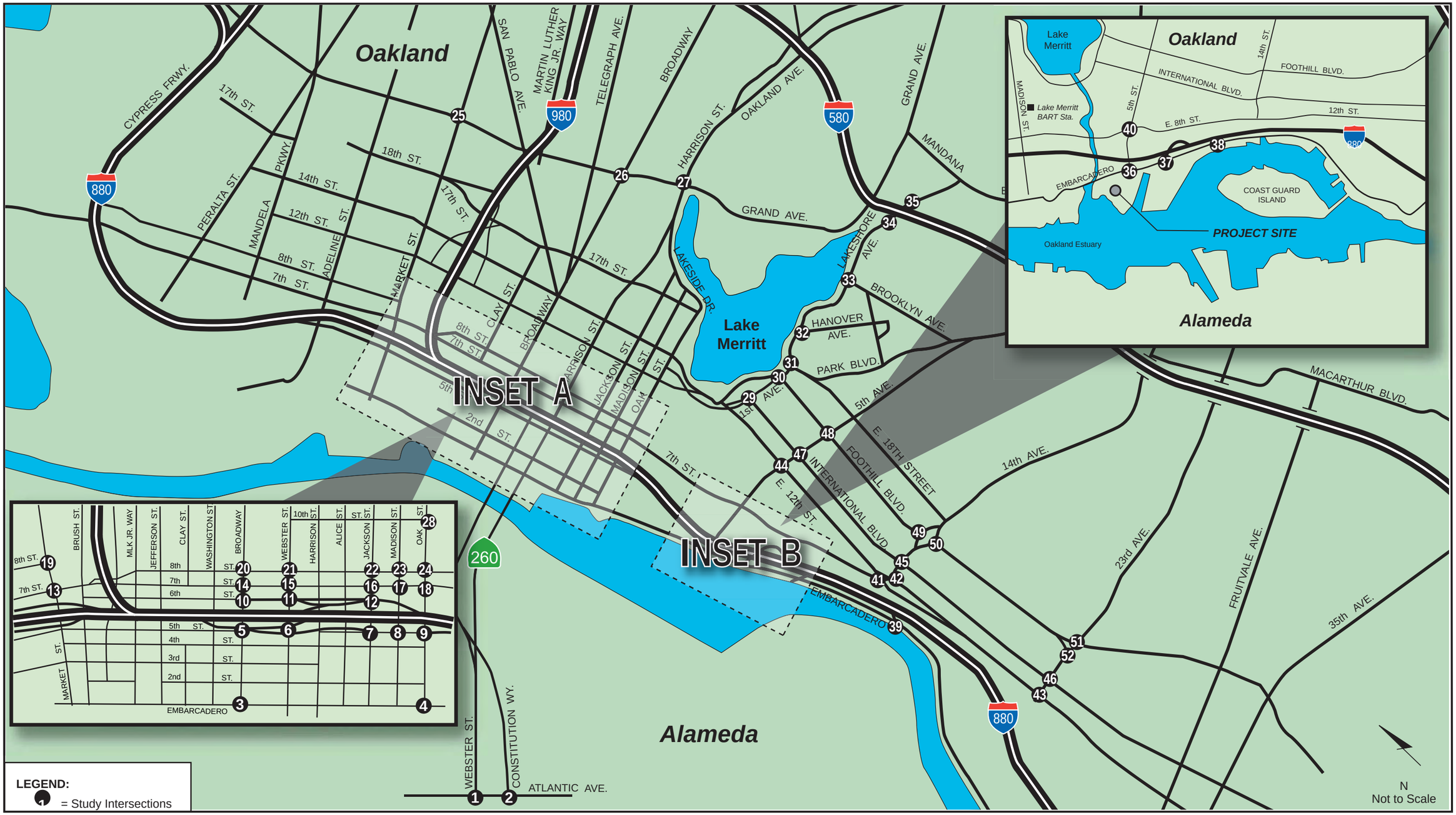
A study in Dartmouth, Nova Scotia, Canada focuses on the use of stop line bars at unsignalized crosswalks. The results found that stop line bars with pedestrian crossing signs reduce vehicle-pedestrian collisions or near vehicle-pedestrian collisions by almost 80 percent.

Lord, Dominique. Analysis of Pedestrian Conflicts with Left-Turning Traffic. Transportation Research Record. 1538: 61-67.

Lord analyzed pedestrian-vehicle conflicts at eight intersections in Hamilton, Ontario, Canada. In the analysis, he found that T-intersections have a greater traffic conflict rate between vehicles and pedestrians than four-legged intersections.

Markowitz, F, Sciortino, S, Fleck, JL, Yee, BM. Pedestrian Countdown Signals: Experience with an Extensive Pilot Installation. ITE Journal. January 2006, 43-48.

Researchers conducted a pedestrian countdown signal "before and after" study in San Francisco where 600 crossings were evaluated before installation and over 900 after installation. The results found that the number of pedestrian injury crashes with vehicles decreased by 52 percent after the installation of the countdown signals.



Brooklyn Basin - Oak to 9th Development Plan

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January 2005
1998-2

PROJECT STUDY INTERSECTIONS

FIGURE 1

Figure 2- Total Number of Pedestrian Collisions (1995 to 2004)

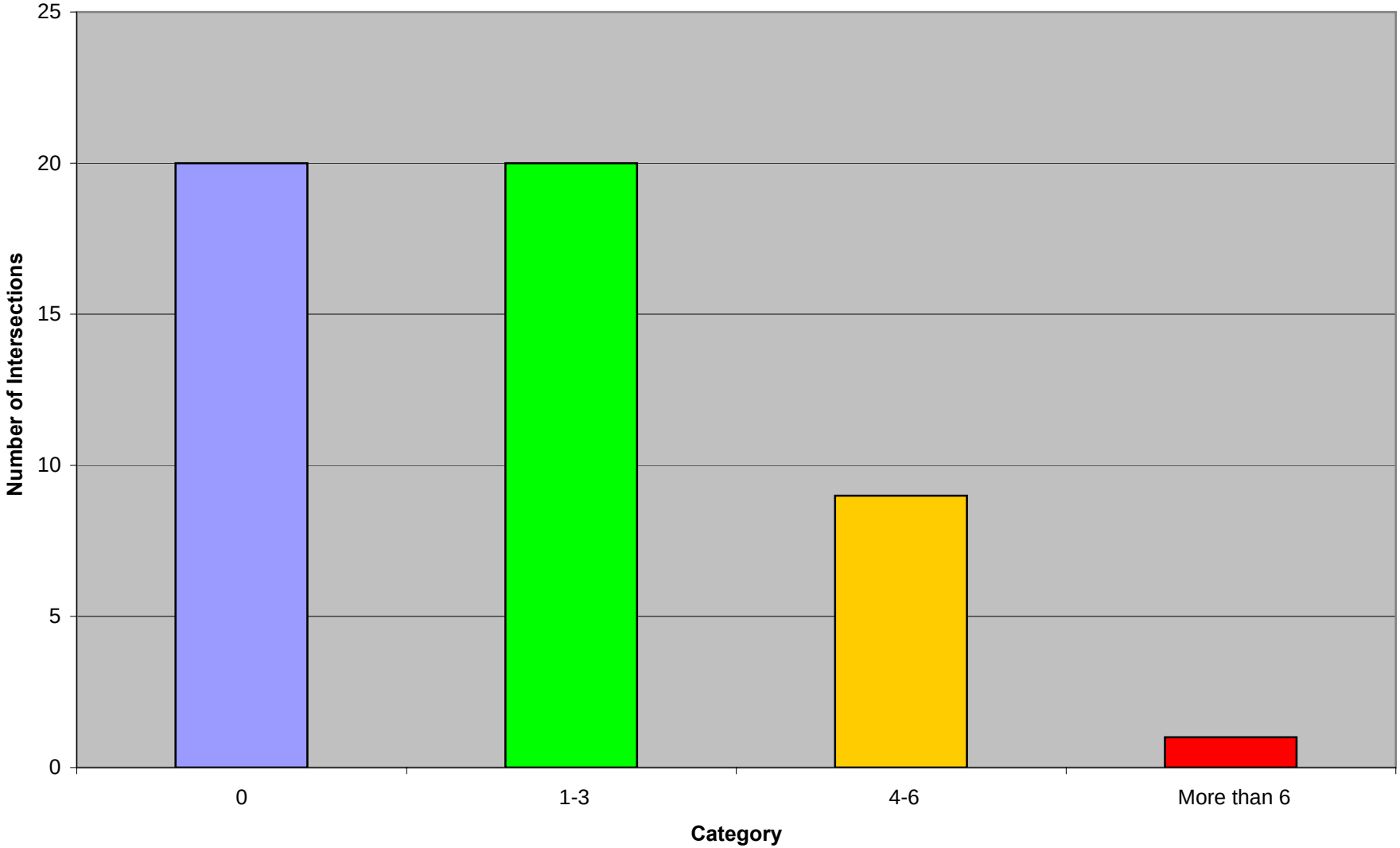

Figure 3- Yearly Pedestrian Collisions (1995 to 2004)

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Comprehensive analysis of vehicle–pedestrian crashes at intersections in Florida

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Abstract

This study analyzes vehicle–pedestrian crashes at intersections in Florida over 4 years, 1999–2002. The study identifies the group of drivers and pedestrians, and traffic and environmental characteristics that are correlated with high pedestrian crashes using log-linear models. The study also estimates the likelihood of pedestrian injury severity when pedestrians are involved in crashes using an ordered probit model. To better reflect pedestrian crash risk, a logical measure of exposure is developed using the information on individual walking trips in the household travel survey. Lastly, the impact of average traffic volume on pedestrian crashes is examined. As a result of the analysis, it was found that pedestrian and driver demographic factors, and road geometric, traffic and environment conditions are closely related to the frequency and injury severity of pedestrian crashes. Higher average traffic volume at intersections increases the number of pedestrian crashes; however, the rate of increase is steeper at lower values of average traffic volume. Based on the findings in the analysis, some countermeasures are recommended to improve pedestrian safety.
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Keywords: Pedestrian; Crash frequency; Injury severity; Exposure; Intersection

1. Introduction

As population and traffic volume increase, the conflicts between pedestrians and vehicles on roads are more frequent and consequently, vehicle–pedestrian crashes have become a major concern in improving traffic safety. According to the National Highway Traffic Safety Administration (2004), approximately 4700 pedestrians were killed and 70,000 pedestrians were injured in the United States in the year 2003. Although the number of pedestrian victims has continuously decreased over the last 16 years (1988–2003), actual pedestrian crash risk may not have been reduced considering the fact that the number of pedestrian trips has been reduced as more people own and drive cars. In particular, the current intersection design guidelines mainly focus on the operation and safety of vehicles rather than pedestrian safety (Pietrucha and Opiela, 1993).

For the improvement of pedestrian safety at intersections, understanding the effects of crash-related factors on pedestrian crashes can help develop more effective countermeasures as the types of pedestrian crashes vary with these factors (Stutts et al., 1996). Thus, the past studies on frequency and injury severity of pedestrian crashes have generally focused on the effects of pedestrian and driver characteristics, vehicle characteristics and conditions, and road geometric and traffic characteristics of intersections.

A number of studies identified that there exists strong relationship between demographic factors of pedestrians (particularly age) and crash risk. For example, Zegeer et al. (1993) observed high fatality of older pedestrians in daytime, on weekdays, and in winter. They also found that since older pedestrians reacted slowly with reduced vision and wore dark clothing at nighttime, dark lighting conditions were more hazardous to older pedestrians. Fontaine and Gourlet (1997) found that children and the elderly were the most vulnerable to pedestrian crashes among age groups. Oxley et al. (1997) found that when cars approached closely, older pedestrians crossed more frequently and adopted unsafe road crossing

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strategy (e.g. slow walking speed, delay in reaction). Similarly, Tarawneh (2001) observed that old pedestrians walked slower than younger pedestrians and their level of exposure to vehicle traffic increased. Al-Ghamdi (2002) found that the fatality rate of the old-age pedestrian group (age 60 and over) was the highest whereas the fatality rate of the young-age pedestrian group (age 20–29) was the lowest. These results suggest that old pedestrians are most likely to be involved in a crash and also severely injured when they are involved in a crash.

Some studies claimed that a pedestrian's alcohol use is also an important factor affecting pedestrian crashes. Miles-Doan (1996) suggested that alcohol-impaired pedestrians were more involved in pedestrian crashes and their odds of dying relative to surviving were higher than non-alcohol-impaired pedestrians. Öström and Eriksson (2001) found that intoxicated pedestrians were more severely injured and suffered more head injuries than non-intoxicated pedestrians. Some studies considered the combined effect of pedestrian age, gender and alcohol use on crash risk. For example, Holubowycz (1995) reported that young and middle-age intoxicated males are high-risk pedestrian groups.

Vehicle characteristics and conditions such as vehicle speed, vehicle types, and vehicle movement are also closely associated with pedestrian crashes. For instance, Anderson et al. (1997) observed that when the speed limit was reduced, the number of fatal pedestrian crashes was also reduced. Some researchers compared the injury severity of pedestrian crashes caused by different vehicle types and vehicle movement. Lefler and Gabler (2004) found that the pedestrian fatality rate when struck by light trucks and vans (LTV) was two to three times greater than the fatality rate when struck by passenger cars since LTVs have higher bumpers and more blunt frontal profiles. Preusser et al. (2003) found that turning vehicles often caused pedestrian crashes because drivers failed to yield the right of way to pedestrians at intersections.

A few studies examined the effect of road geometric and traffic characteristics on pedestrian crash risk. Given that median not only blocks vehicle interactions in different directions but also provides safe refuge area for pedestrians, Bowman et al. (1994) demonstrated that different types of median have different effects on pedestrian crashes. LaScala et al. (2000) observed that injuries in pedestrian crashes were greater in the areas with higher population density, average daily traffic, and number of cross-streets per kilometer roadway through a spatial analysis using a geographic information system. On the other hand, Garber and Lienau (1996) reported contradicting results that fatality rate of pedestrian crashes in rural areas with lower population density was higher than the fatality rate in urban areas. Similarly, Zajac and Ivan (2003) found that pedestrian injury severity was higher in village and downtown fringe areas than downtown and low-to-medium density commercial areas.

In spite of significant research efforts in the past studies, there still remain some unanswered questions: (1) do we need to analyze pedestrian crashes at driver's fault and pedestrian crashes at pedestrian's fault separately since their causal factors may be different? (2) Does higher frequency of pedestrian crashes actually reflect higher crash risk by pedestrians? As daSilva et al. (2003) suggested, due to lack of information on walking patterns by different age groups, most studies on pedestrian crashes could not properly reflect risk by age groups. (3) Are there any other important road geometric and traffic characteristics affecting pedestrian crashes, such as average traffic volume at intersections, that we are unable to identify since they are not readily available in typical crash reports?

Thus, this study has three objectives: (1) to investigate the relationship between frequency/injury severity of pedestrian crashes at intersections and various driver, pedestrian, traffic, and environmental characteristics; (2) to explore exposure of pedestrian walking on the roads for estimating the risk of pedestrian crashes; and (3) to examine the effect of average traffic volume at intersections on the occurrence of pedestrian crashes.

2. Frequency and injury severity of pedestrian crashes

This study analyzed pedestrian crashes that have occurred at intersections in Florida over 4 years (1999–2002) using the crash information compiled in Florida Traffic Crash Records Database (Florida Department of Highway Safety and Motor Vehicles, 2002). Approximately 7000 pedestrian crashes occurred at intersections or are influenced by intersections. The crashes at mid-block crosswalks and unmarked locations are not included in this study. Five percent of these crashes were fatal crashes. The study considered the variables associated with the characteristics of pedestrians, drivers and vehicles that are involved in crashes, and traffic/road geometry and environmental conditions at the time of crashes as shown in Table 1. Continuous variables (e.g. pedestrians' and drivers' age, vehicle speed) were classified into several categories based on the classification used in the past studies and the authors' subjective judgment. The number of lanes was classified into 1, 2, and 3 or more lanes.

This study develops two types of models to analyze frequency and injury severity of pedestrian crashes. In the analysis of crash frequency, log-linear models were used to identify the relationship between crash frequency and the crash-related variables. This analysis identifies which factors, or the combination of factors, mainly contribute to the occurrence of pedestrian crashes. In the analysis of crash injury severity, an ordered probit model was used to identify the factors causing higher injury severity of pedestrians who are involved in crashes. The following two subsections illustrate the methodology and discuss the results of model estimates.

2.1. Frequency analysis

The analysis of crash frequency identifies the group of drivers/pedestrians and various traffic and environmental

Table 1
Description of variables

Type	Variables	Categories
Pedestrian characteristics	Pedestrians' age	Children (~14 year old) Very young (15–19 year old) Young (20–24 year old) Middle 1 (25–44 year old) Middle 2 (45–64 year old) Old (65–79 year old) Very old (80 year old and over)
	Pedestrians' gender	Male Female
	Pedestrians' alcohol/ drug use	No alcohol/drug use Alcohol and/or drug use
Driver characteristics	Drivers' age	Very young (15–19 year old) Young (20–24 year old) Middle 1 (25–44 year old) Middle 2 (45–64 year old) Old (65–79 year old) Very old (80 year old and over)
	Drivers' gender	Male Female
	Drivers' alcohol/ drug use	No alcohol/drug use Alcohol and/or drug use
Vehicle characteristics	Vehicle type	Passenger car Bus, truck, van
	Vehicle speed	Low (0–29 mph) Medium (30–39 mph) High (40 mph and over)
Traffic/road geometric characteristics	Traffic control	No traffic control Traffic signal Other traffic control (Stop, yield, etc.)
	Divided/undivided	Divided Undivided
	Number of lanes	1 lane 2 lanes 3 lanes and over
Environmental characteristics	Lighting	Daylight, dusk, dawn Dark
	Weather	Clear Adverse
	Location	Urban areas Rural areas

conditions that are most involved in pedestrian crashes as causers. The analysis does not estimate risk of each driver and pedestrian group in the form of crash rates. The reason for not being able to consider crash rates is that it is difficult to estimate exposure of some factors and the combination of multiple factors used for modeling. For instance, we cannot accurately measure the proportion of intoxicated drivers/pedestrians in total population of drivers/pedestrians, or the proportion of middle-age male drivers during dark lighting on a divided 3-lane road at signalized intersections in urban areas. To correctly identify factors affecting frequency of pedestrian crashes, it is more appropriate to classify crashes into different types based on actual causes of crashes. Since both drivers and pedestrians make errors leading to crashes, pedestrian crashes are classified into the following two types: (1) crashes at driver's fault and (2) crashes at pedestrian's fault. The premise of this classification is that crashes at driver's fault are more associated with driver characteristics whereas crashes at pedestrian's fault are more associated with pedestrian characteristics. In this study, if the drivers who were involved in pedestrian crashes were cited for moving violation, the crashes were classified as crashes at driver's fault. Otherwise, the crashes were classified as crashes at pedestrian's fault. The data show that the percentage of crashes at pedestrian's fault is substantially higher (80%) than the percentage of crashes at driver's fault (20%).

The two log-linear models were developed for the two types of crashes. The following describes general structure of a log-linear model and the method of calculating odds multipliers (i.e. likelihood of crash occurrence relative to a reference) based on the model estimates. If the two factors affecting pedestrian crashes (categorical variables x and y) are considered, the functional specification of a second-order log-linear model including main effects and the interaction between the two factors is as follows:

$$\ln(F_{ij}) = \theta + \lambda_{x(i)} + \lambda_{y(j)} + \lambda_{xy(ij)} \tag{1}$$

where F_{ij} is the expected number of pedestrian crashes when $x=i$ and $y=j$, θ a constant, $\lambda_{x(i)}$ the effect of the ith level of a factor x, $\lambda_{y(j)}$ the effect of the jth level of a factor y, and $\lambda_{xy(ij)}$ the interaction between the ith level of a factor x and the jth level of a factor y.

For instance, to estimate the odds of the ith level of a factor x relative to the base level ($i=1$) of the same factor with respect to interaction with the jth level of a factor y, odds multipliers are calculated using the following equation:

$$\begin{aligned} \ln\left(\frac{F_{ij}}{F_{1j}}\right) &= \ln\left(F_{ij}\right) - \ln\left(F_{1j}\right) = \left(\theta+\lambda_{x(i)}+\lambda_{y(j)}+\lambda_{xy(ij)}\right) \\ &\quad - \left(\theta + \lambda_{x(1)} + \lambda_{y(j)} + \lambda_{xy(1j)}\right) \\ \frac{F_{ij}}{F_{1j}} &= \exp\left(\lambda_{x(i)} + \lambda_{xy(ij)} - \lambda_{x(1)} - \lambda_{xy(1j)}\right) \\ &= \exp\left(\lambda_{x(i)} - \lambda_{x(1)}\right) \exp\left(\lambda_{xy(ij)} - \lambda_{xy(1j)}\right). \end{aligned} \tag{2}$$

If only main effects are considered (i.e. a first-order log-linear model), the interaction terms no longer exist and odds multipliers are $\exp(\lambda_{x(i)} - \lambda_{x(1)})$. Tables 2 and 3 show the estimated parameters of the log-linear models for crashes at driver's fault and crashes at pedestrian's fault, respectively. Positive estimates indicate higher number of crashes relative to the base case and negative estimates indicate lower number of crashes relative to the base case. Initially a Poisson distribution of the crash frequency was assumed but did not produce a good fit indicating a possible over-dispersion.

Table 2
Estimated parameters of pedestrian crashes at driver's fault

Parameter	Estimate	S.E.
Constant	−4.3884	0.3206
Drivers' age		
Very young (15–19)	0.7284	0.2192
Young (20–24)	0.9392	0.2140
Middle 1 (25–44)	2.1799	0.1989
Middle 2 (45–64)	1.6940	0.2037
Old (65–79)	0.8974	0.2153
Very old (80∼)[a]	0	0
Drivers' sex		
Male	0.7046	0.1075
Female[a]	0	0
Vehicle type		
Passenger car	1.1981	0.1094
Van, truck, bus[a]	0	0
Traffic control		
No traffic control	−0.8357	0.2103
Traffic signal	−0.9764	0.2113
Other traffic control[a]	0	0
Location		
Urban areas	1.0062	0.1575
Rural areas[a]	0	0
Traffic control–location interaction		
No traffic control–urban areas	−0.2687	0.2648
Traffic signal–urban areas	0.7794	0.2524
Other control–urban areas	0	0
No traffic control–rural areas	0	0
Traffic signal–rural areas	0	0
Other control–rural areas	0	0
Drivers' alcohol/drug use		
No alcohol and drug	2.0834	0.2266
Alcohol and/or drug[a]	0	0
Lighting		
Daylight, dawn, dusk	−0.4151	0.3176
Dark[a]	0	0
Alcohol–lighting interaction		
No alcohol–daylight	1.8559	0.338
No alcohol–dark	0	0
Alcohol–daylight	0	0
Alcohol–dark	0	0
Pearson chi-square	486.1	
Degrees of freedom	560	
p-Value	0.989	
Number of observations	1168	

[a] Base case to calculate odds multipliers.

Table 3
Estimated parameters for pedestrian crashes at pedestrian's fault

Parameter	Estimate	Standard error
Constant	−1.8557	0.1889
Pedestrians' age		
Children (∼14)	1.6779	0.1531
Very young (15–19)	1.0867	0.1613
Young (20–24)	0.7725	0.1666
Middle 1 (25–44)	2.3792	0.1536
Middle 2 (45–64)	1.9239	0.1550
Old (65–79)	0.9925	0.1615
Very Old (80∼)[a]	0	0
Pedestrians' sex		
Male	0.6235	0.0723
Female[a]	0	0
Divide		
Divided	−0.4466	0.0753
Undivided[a]	0	0
Number of lanes		
1 lane	−4.1076	0.1804
2 lanes	−0.6803	0.0790
3 lanes and over[a]	0	0
Traffic control		
No traffic control	0.0150	0.1308
Traffic signal	−0.4030	0.1370
Other traffic control[a]	0	0
Location		
Urban areas	0.7523	0.1210
Rural areas[a]	0	0
Location–traffic control interaction		
No traffic control–urban areas	−0.2293	0.1733
Traffic signal–urban areas	0.2700	0.1765
Other control–urban areas	0	0
No Traffic control–rural areas	0	0
Traffic signal–rural areas	0	0
Other control–rural areas	0	0
Pedestrian's alcohol/drug use		
No alcohol and drug	1.0348	0.1054
Alcohol and/or drug[a]	0	0
Lighting		
Daylight, dawn, dusk	−1.1162	0.1404
Dark[a]	0	0
Alcohol–lighting interaction		
No alcohol–daylight	2.2127	0.1649
No alcohol–dark	0	0
Alcohol-daylight	0	0
Alcohol–dark	0	0
Pearson chi-square	1812.5	
Degrees of freedom	1997	
p-Value	0.999	
Number of observations	3340	

[a] Base case to calculate odds multipliers.

Therefore, the final models were calibrated using a negative binomial distribution, which showed a very good fit.

In case of crashes at driver's fault, the results showed that middle-age (25–64) and male drivers are more involved in crashes as causers than other driver groups. When only main effects are considered, it appears that crashes occur more frequently at the intersections with other traffic control (e.g. stop signs, yield signs, etc.) in urban areas when non-intoxicated drivers are driving passenger cars at night. Some results are reasonable from a practical sense as there are more middle-age drivers who drive passenger cars, there are more intersections in urban areas, and drivers tend to make more misjudgment at night due to their reduced vision. However, it should be noted that due to over-representation of 25–64-year-old drivers in total population of drivers (approximately 70% according to Highway Statistics 2003 (FHWA, 2004)), the result does not imply that middle-age drivers are the most

dangerous driver group. The result should be interpreted in a way that middle-age drivers are more involved in pedestrian crashes as causers than any other driver groups. On the other hand, given that the proportions of total licensed male drivers (50.26%) and female drivers (49.74%) in Florida are almost equal (FHWA, 2004), the result indicate that male drivers are more likely to cause pedestrian crashes than female drivers and we can speculate that male drivers may be more risk-taking than female drivers. In the case of crashes at pedestrian's fault, the crashes occur more frequently under the similar conditions to crashes at driver's fault, but also at the undivided and wide (i.e. more number of lanes) intersections. The results also seem logical since pedestrians, particularly older pedestrians, have difficulty in walking a longer crosswalk without a median and they are more exposed to approaching vehicles.

However, more investigation is needed to explain some counter-intuitive results of main effects: (1) more crashes occurred at the intersections with traffic control (other than traffic signal) than the intersections without traffic control and (2) more crashes occurred when drivers are not intoxicated than when drivers are intoxicated. Thus, the interactions of alcohol/drug use–lighting and traffic control–location were considered. To better understand the relative impact of factors on the expected number of crashes, the odds multipliers were calculated using Eq. (2) as shown in Table 4.

From the interaction of alcohol/drug use–lighting, it was observed that the odds multiplier of the expected number of crashes for drivers' alcohol/drug use was higher when drivers were intoxicated than when they were not intoxicated in dark lighting. The same trend was observed for pedestrians' alcohol/drug use. These results suggest that drivers' and pedestrians' alcohol/drug uses lead to more pedestrian crashes at night. Thus, drinking and walking at night is equally problematic as drinking and driving.

From the interaction of traffic control–location, the effects of traffic control on the expected number of pedestrian crashes were found to be different between urban and rural areas. First, for crashes at driver's fault, it was found that the odds multipliers were higher at the intersections with traf-

Table 4
Comparison of odds multipliers between two types of pedestrian crashes

Variables	Crashes at driver's fault	Crashes at pedestrian's fault
Age		
Very old (80~)	1	1
Children (~14)	–	5.35
Very young (15–19)	2.07	2.96
Young (20–24)	2.56	2.17
Middle 1 (25–44)	8.85	10.80
Middle 2 (45–64)	5.44	6.85
Old (65–79)	2.45	2.70
Sex		
Female	1	1
Male	2.02	1.87
Vehicle type		
Van, truck, bus	1	–
Passenger car	2.74	–
Divide		
Undivided	–	1
Divided	–	0.64
Number of lanes		
3 lanes and over	–	1
2 lanes	–	0.51
1 lane	–	0.02

	Traffic control	Location			
		Urban areas	Rural areas	Urban areas	Rural areas
Traffic control–location interaction	No traffic control	1	1	1	1
	Traffic signal	2.48	0.39	1.11	0.81
	Other traffic control	3.02	1.06	0.52	0.77
	Lighting	Alcohol use			
		No alcohol	Alcohol	No alcohol	Alcohol
Alcohol use–lighting interaction	Daylight, dawn, dusk	1	1	1	1
	Dark	0.23	1.51	0.33	3.05

fic control than the intersections without traffic control in urban areas whereas the odds multiplier was significantly lower at the intersections with traffic signals than the intersections without traffic signals in rural areas as shown in Table 4. This result suggests that drivers tend to drive more carefully when they approach traffic signals than stop or yield signs in rural areas and pedestrian crashes occur less frequently at rural signalized intersections. Second, for crashes at pedestrian's fault, it was found that the odds multiplier was higher at signalized intersections but lower at the intersections with other control in urban areas whereas the odds multipliers were relatively lower at the intersections with traffic control than the intersections without traffic control in rural areas. The low odds multipliers of both types of pedestrian crashes at signalized intersections in rural areas indicate that the installation of traffic signals in rural areas may provide significant reduction of pedestrian crashes.

The odds multipliers of variables were compared between crashes at driver's fault and crashes at pedestrian's fault to identify the difference in causal factors as shown in Table 4. Middle-age males are more involved in pedestrian crashes as both drivers and pedestrians. In particular, high odds multiplier for children (age of younger than 14) in crashes at pedestrian's fault suggests that many pedestrian crashes occurred due to children's carelessness and misjudgment.

In comparison of traffic control–location interaction, the frequencies of crashes were consistently lower at signalized intersections in rural areas for both types of crashes but the different trend was observed in urban areas. The frequency of crashes at driver's fault was higher at the intersections with traffic control than the intersections without traffic control whereas the frequency of crashes at pedestrian's fault was only higher at signalized intersection. The results reflect that pedestrian crashes occur more frequently in urban areas when drivers violate traffic signals or signs while pedestrians observe them. On the other hand, the frequency of crashes at pedestrians' fault only increases at the signalized intersections but decreases at the intersections controlled by traffic signs. This may be because pedestrians tend to be more careful at the intersections controlled by traffic signs than traffic signals.

In comparison of alcohol use–lighting interaction, the impacts of alcohol use on chances of nighttime crashes were higher for crashes at pedestrian's fault than crashes at driver's fault. This result indicates that the intoxicated pedestrians are more involved in pedestrian crashes as causers than the intoxicated drivers at night.

2.2. Injury severity analysis

The analysis of crash injury severity examines the likelihood of pedestrian injuries and fatalities when pedestrians are involved in crashes. In the crash database, the severity of pedestrians' injury is classified into one of the following five categories: (1) no injury, (2) possible injury, (3) non-incapacitating evident injury, (4) incapacitating injury, and (5) fatal injury.

This study uses an ordered probit model since the model can account for the ordinal nature of injury severity categories. The functional specification of an ordered probit model is as follows:

$$y_i^* = \beta' x_i + \varepsilon_i \tag{3}$$

where y_i^* is the predicted injury by a pedestrian i, β' a row vector of unknown parameters, x_i a vector of explanatory variables, and ε_i the random error term that follows normal distribution. The injury level is classified based on the predicted injury using the following criteria (μ_1, μ_2 and μ_3 are the thresholds estimated by the model):

$$y_i = \begin{cases} 0 & \text{if } y_i^* \le 0 \quad \text{(no injury)} \\ 1 & \text{if } 0 < y_i^* \le \mu_1 \quad \text{(possible injury)} \\ 2 & \text{if } \mu_1 < y_i^* \le \mu_2 \quad \text{(non-incapactating evident injury)} \\ 3 & \text{if } \mu_2 < y_i^* \le \mu_3 \quad \text{(incapacitating evident injury)} \\ 4 & \text{if } y_i^* > \mu_3 \quad \text{(fatal injury).} \end{cases}$$

Most factors used in the frequency analysis were also used as explanatory variables in this analysis. In addition to these variables, the speed of vehicles and weather at the time of crashes were included as they have close relationship with the impact of collision. Since this analysis focuses on the severity of pedestrians' injury after the crash occurrence, all pedestrian crashes were analyzed regardless of causes (driver's fault or pedestrian's fault). The ordered probit models were estimated using the LIMDEP software (Greene, 1998). The results of the models show that older pedestrians are more likely to sustain higher injury than younger pedestrians as indicated by generally increasing parameter values as pedestrians are older as shown in Table 5. In particular, the likelihood of injury severity was significantly higher for the old and very old pedestrians (age 65 and over) whereas the likelihood of injury severity was lower for the young and very young pedestrians (age 15–24) who are most physically healthy. This result reflects that as people age, their physical strength is weakened and the impact of crashes on their bodies is likely to be more severe. The result also indicates that each pedestrian age group tends to cross intersections at different speeds and consequently the impact of crashes is different. It was also found that female pedestrians had higher injury severity than male pedestrians as indicated by higher parameter value that is marginally significant.

Table 5
Estimated parameters of pedestrian injury severity

Variables	Parameter	t-statistics
Constant	−0.423	−1.324
Dummies for pedestrians' age		
1 = very young (15–19), 0 = otherwise	−0.047	−0.703
1 = young (20–24), 0 = otherwise	−0.050	−0.666
1 = middle 1 (25–44), 0 = otherwise	−0.032	−0.627
1 = middle 2 (45–64), 0 = otherwise	0.172	3.293
1 = old (65–79), 0 = otherwise	0.337	5.356
1 = very old (80 and over), 0 = otherwise	0.488	5.949
Pedestrians' sex (1 = female, 0 = male)	0.064	1.885
Pedestrians' alcohol/drug use (1 = intoxicated pedestrians, 0 = non-intoxicated drivers)	0.217	4.106
Vehicle speed	0.474	19.738
Vehicle type (1 = van, truck, bus, 0 = passenger cars)	0.096	2.648
Weather (1 = adverse conditions, 0 = clear)	0.106	2.639
Lighting (1 = dark, 0 = daylight, dawn, dusk)	0.219	5.778
Traffic control (1 = presence of traffic control, 0 = no traffic control)	−0.113	−2.978
Location (1 = rural areas, 0 = urban areas)	0.122	3.357
Thresholds		
α_1	1.421	36.095
α_2	2.562	60.523
α_3	3.909	69.925
Log likelihood at convergence[a]	−5367.3	
Number of observations	4351	

[a] Maximized value of the log-likelihood function.

Alcohol/drug use by pedestrians also increased the severity of pedestrians' injury since alcohol and drug impaired pedestrians' perception and made high impact with vehicles inevitable.

The results also showed that the higher speed of vehicles that collided with pedestrians increased the severity of pedestrians' injury due to higher impact of crashes. High likelihood of injury of pedestrians struck by high-speed vehicles was also found in the past studies (Anderson et al., 1997; Gårder, 2004). Environmental conditions such as adverse weather and dark lighting were also found to contribute to higher pedestrian injury severity. This may be because adverse weather (in particular, heavy rain in Florida) and dark lighting severely reduce both drivers' and pedestrians' sight and in turn their reaction times to avoid crashes increase. Consequently, these conditions increase braking distance of vehicles and lead to higher impact at the time of crashes. Also, vans, buses, and trucks tended to cause higher injury severity than passenger cars due to larger area of impacts on pedestrians as consistent with the findings in the past studies (Al-Ghamdi, 2002; Lefler and Gabler, 2004).

In comparing crashes in different locations, the severity of pedestrian' injury was higher in rural areas than urban areas although the frequency of crashes was lower in rural areas as shown in the previous section. This may be because (1) there are relatively fewer medical facilities in rural areas and pedestrian victims are less likely to receive timely treatment leading to higher fatality rate; and/or (2) average speed is generally higher in rural areas (average posted speed limits were higher in rural areas than urban areas) and consequently the impact of collision increases. On the other hand, compact building layout in urban areas increases a driver's awareness of pedestrian activity (Zajac and Ivan, 2003) and reduces vehicle speeds resulting in lower impact of collision. For a similar reason, the severity of pedestrians' injury was higher at the intersections without traffic control. In the absence of traffic control, drivers tend to drive faster and increase the impact of crashes when they collide with pedestrians.

In summary, the results of the ordered probit model suggest that pedestrian injury severity caused by crashes is closely related to the following factors (the associated variables in parentheses): (1) pedestrians' physical condition (age and alcohol/drug use), (2) the speed of vehicles (speed at the time of crashes, location of crashes, and the presence of traffic control), (3) drivers' and pedestrians' perception and reaction (weather, lighting), and (4) the area of impacts (vehicle type).

3. Exposure of pedestrian crashes

Despite statistically significant results in the previous sections, it is still uncertain whether the model estimates properly reflect the risk of pedestrian crashes in the absence of exposure measures. In fact, crash risk from a pedestrian's perspective is more influenced by pedestrian volume than vehicle volume (Gårder, 2004). In this regard, population has been often used as exposure to calculate pedestrian crash rate in the form of the number of crashes per capita. Using the classification of ages in Florida in Census 2000 (U.S. Census Bureau, 2004), the number of pedestrian crashes per capita in Florida by age is shown in Fig. 1. The figure shows that in spite of high frequency of pedestrian crashes for middle-age people (age 35–44) (Fig. 1a), the number of crashes per capita is higher for younger people (age 10–19) (Fig. 1c).

However, the number of crashes per capita only shows what types of people have crashes, but do not show the relationship between crashes and the amount of trips these people make (Ampt, 1995). In fact, we do not know how many pedestrians in the total population of each age group crossed intersections (exposure of risk) and what proportion of the pedestrians was actually involved in crashes. More specifically, the population of age groups does not reflect different walking travel patterns by different age groups. For instance, since older people spend more time on walking and make more frequent walking trips during weekdays than middle-age people, it is expected that their exposure to pedestrian crashes is higher although their population is lower (Fig. 1b). Thus, similar to vehicle-kilometers of travel that are frequently used as exposure to vehicle–vehicle crashes, the frequency and length of walking trips by pedestrians are important in the determination of exposure to vehicle–pedestrian crashes. Clearly, we

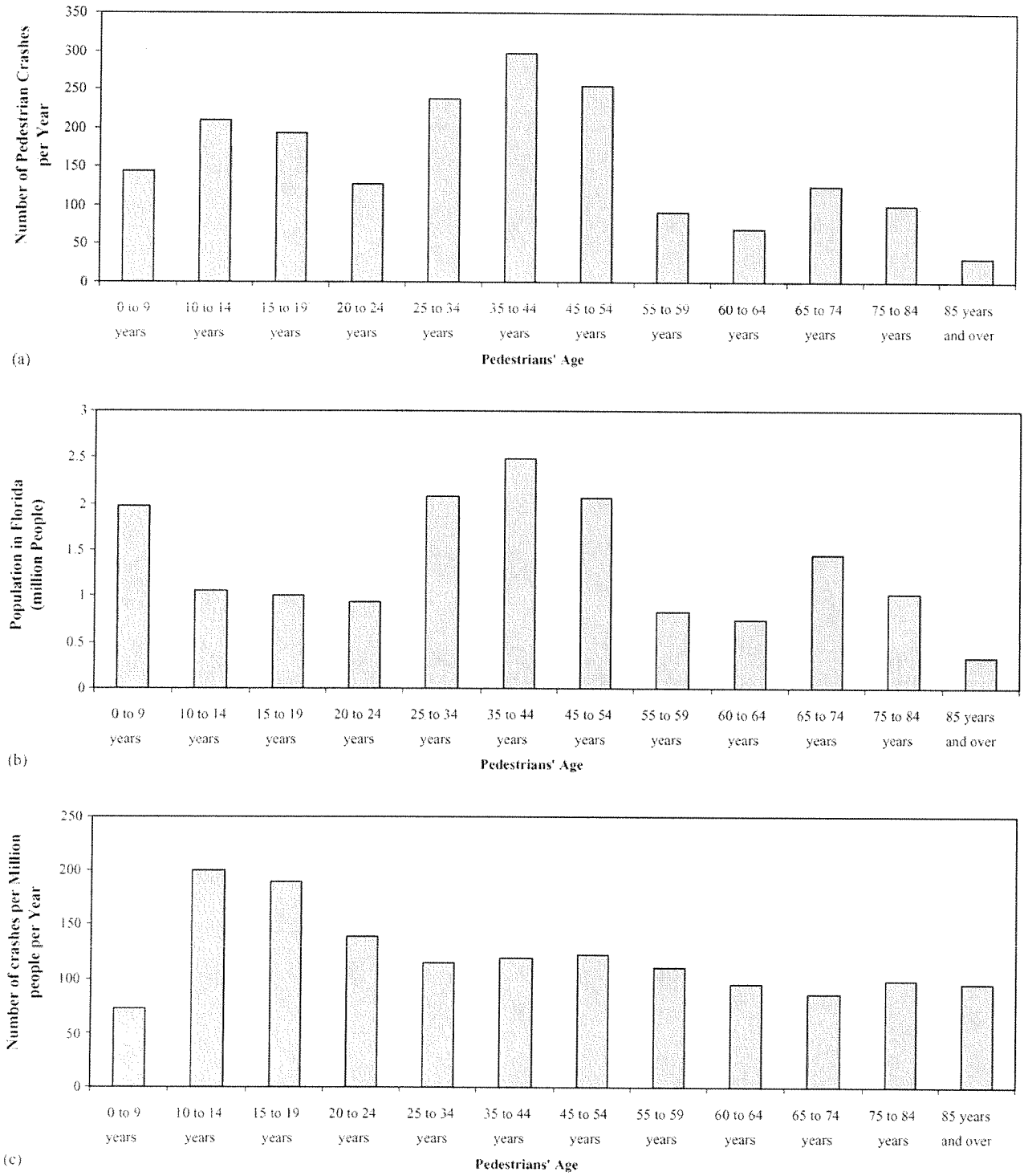


Fig. 1. Number of crashes, population and number of crashes per capita by age. (a) Number of pedestrian crashes by age. (b) Population in Florida by age. (c) Number of pedestrian crashes per capita by age.

need to estimate more accurate pedestrian exposure to calculate pedestrian crash rates.

In this regard, Keall's pioneering work (1995) developed better measures of pedestrian exposure to risk of crashes using the New Zealand travel survey data. He used the number of walking trips, the time spent walking on streets, and number of roads crossed by each pedestrian age group as exposure measures. Similarly, Baltes (1998) estimated exposure to pedestrian risk by age in terms of total distance of walk in kilometers using the Nationwide Personal Transportation Survey. However, if exposure by age is estimated, total distance may not reflect actual "duration" of walking trips due to different walk speed by different age groups. For example, the duration of older pedestrians' walking trips is generally longer than that of younger pedestrians' walking trips even for the same trip distance. However, if exposure by gender or by some other traffic and environmental factors is considered, there may be no difference in walking speed among different groups and travel distance can represent exposure.

Similar to the previous works, this study used the travel survey data for U.S. households (U.S. Department of Transportation, 2004) to estimate pedestrian exposure. Since this study analyzes pedestrian crashes in Florida, only responses from the residents in Florida were extracted from the National Household Travel Survey (NHTS) database. The NHTS database contains the total number of daily walking trips, duration (travel time), distance, and purpose of each walking trip by each household member during a 13-month period (April 2001–April 2002). Although trip distance is included in the survey, the study did not use trip distance as an exposure measure because of the difference in walk speed by age group as explained earlier. Also from the authors' point of view, it appears that the distance included in the survey is relatively less accurate than travel time as people tend to remember travel time better than distance in their daily lives.

In this study, pedestrian exposure is defined as the sum of the durations of individual walking trips as follows:

$$\mathrm{EXP}_j = \sum_i \sum_j D_{ij} \tag{4}$$

where EXP_j is the exposure of pedestrian j to crash risk and D_{ij} the duration of walking trip i by pedestrian j. Since the travel survey does not show the details of pedestrian movements (e.g. crossing intersections, walking along the intersections, etc.), it is uncertain whether all walking trips occur on the road. However, given that walk is often considered as an alternative mode to automobiles for short-distance work and shopping trips, it is expected that most walking trips do occur on the road. Thus, it is reasonable to assume that the proposed exposure measures represent the frequency of the events that pedestrians are exposed to crash risk on the road.

Since the travel survey was conducted for only sample of households, the number of sample walking trips needed to be expanded to estimate representative walking patterns of whole population in Florida. For this purpose, specific weights were applied to account for non-response and under-representative person groups in the survey (U.S. Department of Transportation, 2004). The weights were determined based on the national-level distribution of personal characteristics such as age, gender, education, income, etc.

Fig. 2 shows the distributions of the frequency and total duration of walking trips by different pedestrian age groups and pedestrian crash rate defined as the number of crashes divided by total duration of walking trips in hour. It was found that the frequency of walking trips was highest for young pedestrians (age 25–34) (Fig. 2a) whereas the total duration of walking trips was highest for old pedestrians (age 65–74) (Fig. 2b) as shown in solid lines. This clearly reflects that young people are physically more active than old people and they are willing to walk more frequently. However, since old pedestrians walk slower, their duration of walking trip is longer than young pedestrians.

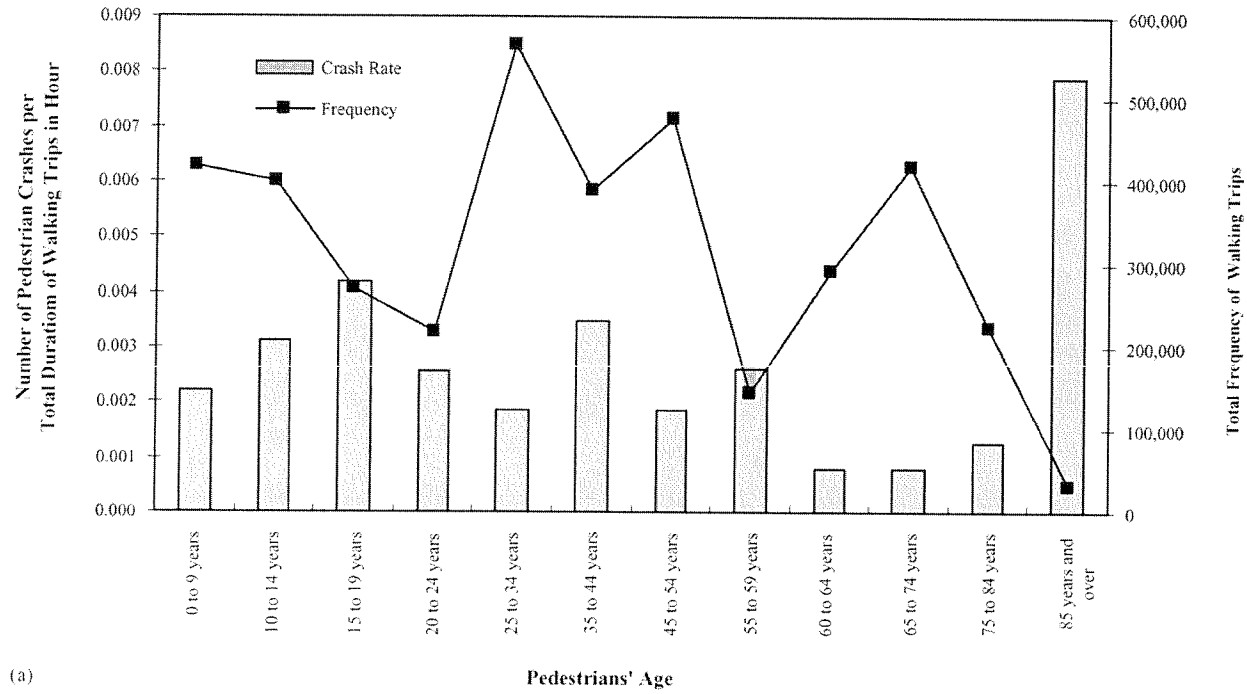
It was also observed that the distribution of the proposed pedestrian crash rate by age was different from the distribution of the number of crashes per capita by age (Fig. 1c). It can be seen that the crash rate was highest for very old pedestrians (age 85 and over) unlike the number of crash per capita that is highest for very young pedestrians (age 10–14). This implies that the number of crashes per capita underestimates high crash risk by very old pedestrians. There were also large differences across crash rates for middle-age pedestrians (age 25–59) whereas the number of crashes per capita was almost the same for the same age group. This suggests that certain middle-age group walks in different patterns and their crash risk is relatively higher.

Although only pedestrians' age was considered in this analysis, the suggested exposure can also be classified by many other factors such as pedestrians' gender, time of walking trips (daytime/nighttime), purpose of walking trips, etc. The findings of this analysis suggest the need of more detailed information on pedestrian travel behavior and understanding its impact on pedestrian exposure to crash risk.

4. Effects of average traffic volume at intersections

It should be noted that all the possible factors affecting pedestrian crashes were not considered in this study, since the factors were limited to only the information included in the crash database. In other words, there may exist more important factors affecting crashes but they could not be captured in the earlier analysis due to lack of data. Thus, this study obtains average traffic volume at intersections that is not typically available in crash reports and investigates its effect on pedestrian crashes. Traffic volume normally reflects the typical traffic condition at each intersection. Traffic volume was measured in the form of average annual daily traffic (AADT) on major roads of the intersections.

In this study, the number of pedestrian crashes and traffic volume at 1563 signalized intersections were ob-



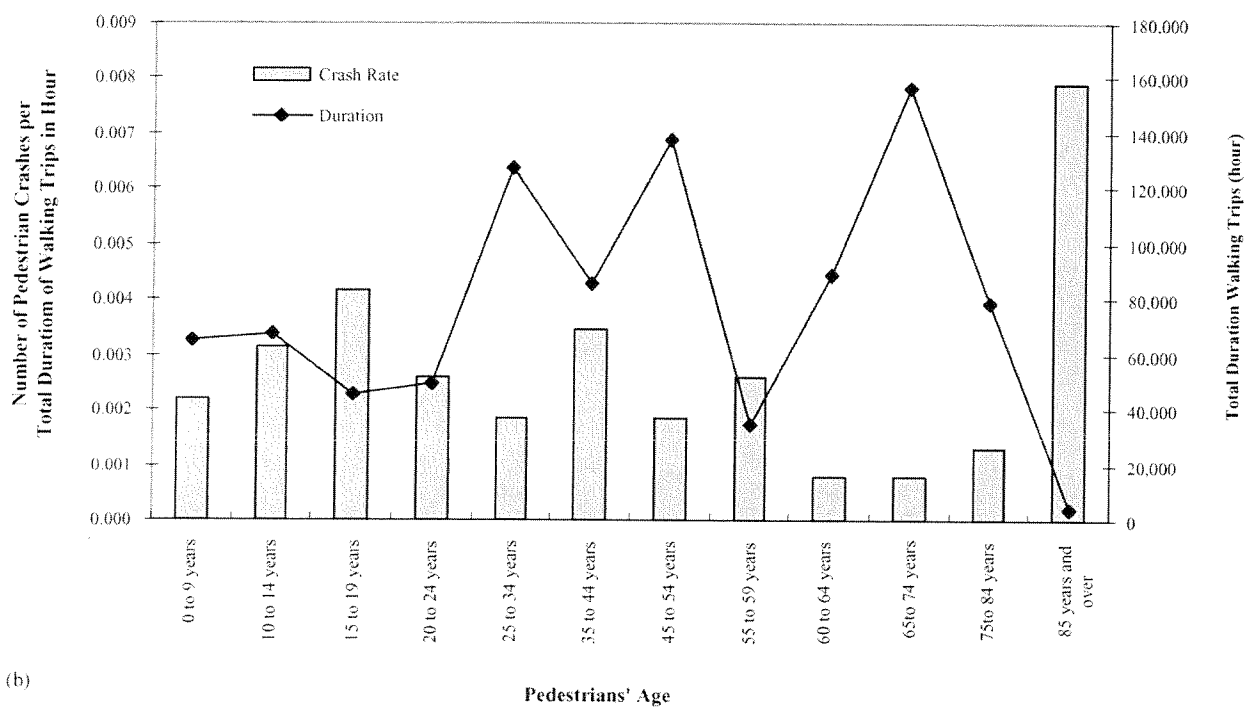


Fig. 2. Pedestrian crash rates by age. (a) Comparison between pedestrian crash rates and frequency of walking trips. (b) Comparison between pedestrian crash rates and duration of walking trips.

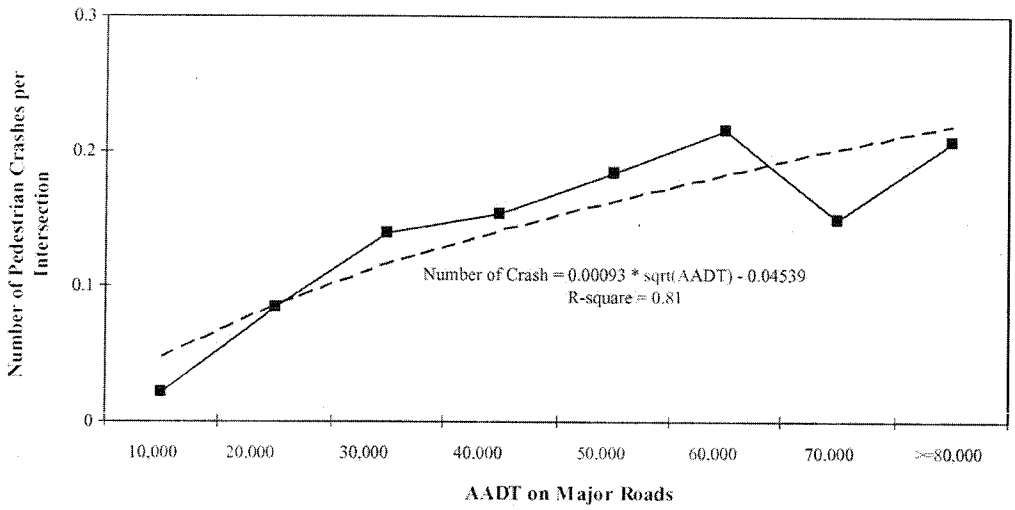


Fig. 3. Relationship between pedestrian crashes and AADT on major roads.

tained from the following six counties in Florida: Brevard, City of Orlando, Dade, Hillsborough, Orange, and Seminole. Among a total of 40,870 crashes in 3 years (1999–2001) that have occurred at these intersections, 219 crashes were pedestrian crashes. The average number of pedestrian crashes per intersection (defined as frequency) was calculated and compared to AADT on major roads.

Fig. 3 shows that the frequency of pedestrian crashes generally increases with AADT. This indicates that pedestrian crashes are more likely to occur at intersections with higher traffic volume that increases the potential conflicts between pedestrians and vehicles. However, it appears that the rate of increase gradually decreases as AADT increases. The figure illustrates that the rate of increase in the average number of pedestrian crashes per intersection increases rapidly up till an AADT value of around 30,000, then the rate of increase is milder for AADT values between 30,000 and 60,000. Above 60,000 there seems to be no apparent trend, suggesting that the rate is almost uniform. This implies that when traffic volume is very high, the traffic condition is likely to be congested (i.e. vehicles are moving slowly) and the likelihood of conflicts with pedestrians will not proportionally increase as in low-volume conditions. The relationship in Fig. 3 can be fit to the following non-linear regression model:

$$\text{number of pedestrian crashes} = 0.00093 \times (\text{AADT})^{0.5} - 0.04539 \quad (R^2 = 0.81). \quad (5)$$

This trend is consistent with the previous British and European models showing a relationship that the number of pedestrian crashes are approximately proportional to the square root of vehicle volume.

5. Conclusions and recommendations

This study analyzed vehicle-pedestrian crashes in Florida from different perspectives. First, the study identified the groups of drivers and pedestrians, and traffic and environmental characteristics that are correlated to pedestrian crashes using a log-linear models. It was found that middle-age male drivers and pedestrians were correlated to more pedestrian crashes than the other age and gender groups, the passenger cars were correlated to more crashes than trucks, vans and buses, and more crashes occurred on undivided roads with more number of lanes than divided roads with less number of lanes. It was also found that intoxicated drivers and pedestrians were correlated to more crashes at nighttime than daytime and the absence of traffic signals were correlated to more crashes than the presence of traffic signals in rural areas. Some differences were observed between crashes at driver's fault and crashes at pedestrian's fault—for example, intoxicated pedestrians were correlated to more crashes than intoxicated drivers at night and drivers were correlated to more crashes than pedestrians at the intersections with traffic control in urban areas.

Second, the study also identified factors affecting injuries and fatalities of pedestrians who are involved in crashes using an ordered probit model. It was found that when pedestrians involved in crashes are old or intoxicated, vehicles collide with pedestrians at high speed, drivers and pedestrians have reduced vision and reaction due to adverse weather and dark lighting, and vehicles involved in crashes are larger than passenger cars in size, injury severity of pedestrians is likely to be higher.

Third, the study developed a logical expression of pedestrian exposure to crash risk using the individual walking trip data collected from the household travel survey.

The proposed exposure (total duration of walking trips) reflects different walking patterns by different age groups of pedestrians. The results of the analysis suggest that the number of pedestrian crashes per total duration of walking trips (in hours) by age captures the high crash risk of very old pedestrians that was underestimated in the number of pedestrian crashes per capita.

Finally, the study investigated the effects of average traffic volume at intersections (that is not readily available in crash reports) on pedestrian crashes. It appears that higher average traffic volume at intersections increases the number of pedestrian crashes per intersection due to increased chances of conflicts between pedestrians and vehicles; however, the rate of increase is steeper at lower AADT values.

Based on these findings, several countermeasures of pedestrian crashes are recommended. For example, more intensive driver education and restrictive traffic regulation (e.g. higher penalty on speed limit violation, drinking and driving, etc.) should be targeted for middle-age male drivers. As the analysis suggested, intoxicated pedestrians were also involved in many nighttime crashes and thus the public should be more aware of the problems with drinking and walking at night. In terms of traffic facilities, more traffic signals should be installed in particularly rural areas to reduce pedestrian crashes. Street lighting also needs to be improved to aid drivers' and pedestrians' reduced vision in adverse weather and dark lighting.

In future work, to investigate the effectiveness of these countermeasures in reducing pedestrian crashes, more refined measures of pedestrian crash risk considering exposure of pedestrian walking should be developed. To accurately estimate exposure with the limited samples of personal trip data, the data should be collected from a number of representative groups of pedestrians based on proportions of age, gender, race, education, etc. in the total population. Also, it is recommended that additional factors such as intersection characteristics be considered to examine their potential effect on pedestrian crashes at intersections.

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THE EFFECTS OF ADVANCE STOP LINES AND SIGN PROMPTS ON PEDESTRIAN SAFETY IN A CROSSWALK ON A MULTILANE HIGHWAY

RON VAN HOUTEN

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The effects of specific signs and stop line bars designed to influence motorists to stop further back from the crosswalk when yielding right of way to pedestrians were evaluated using a reversal design. The introduction of the prompt and stop line reduced motor vehicle–pedestrian conflicts (near collisions) by almost 80%. This finding was replicated in a second experiment the following year on two streets using a multiple baseline design. The use of the advance stop line is now being incorporated by the Provincial Department of Transportation for marking crosswalks on multilane streets.

DESCRIPTORS: pedestrian safety, prompts, safety, transportation safety, conflicts

Each year in the United States, approximately 400,000 pedestrians are struck by vehicles resulting in about 10,000 deaths and many serious injuries (Fruin, 1973; Snyder, 1972). In Canada, pedestrians account for about 15% of traffic deaths (Wolfe & O'Day, 1981). Children are particularly vulnerable to this type of collision (Ross & Seefeldt, 1978). One type of motor vehicle–pedestrian collision, termed a multiple threat, accounts for at least 12,000 pedestrian injuries and 300 deaths in the United States per year (Snyder, 1972). It involves a pedestrian being struck in a crosswalk on a multilane highway by a vehicle after another vehicle has yielded to the pedestrian, thereby blocking the vision of the motorist approaching in the outside lane.

Although actual data on injuries and deaths are essential in traffic safety research, such data must be collected over extended periods. Therefore, in the evaluation of pilot programs more sensitive and immediately available measures are necessary. This is certainly true of the multiple-threat situation. One way to circumvent this problem is to collect data at the location where road users are in conflict. Research has demonstrated that conflicts or near collisions correlate very highly with known long-term accident data (Baker, 1972; Older & Spicer, 1976).

Accordingly, the purpose of this experiment was to reduce the occurrence of multiple-threat conflicts in a six-lane crosswalk through the use of prompts designed to encourage motorists to yield right of way at a point further back from the crosswalk, thereby giving motorists approaching in other lanes a better view of the pedestrian in the crosswalk.

EXPERIMENT 1

Method

Subjects and setting. Subjects were motorists and pedestrians using a marked crosswalk on Wyse Road in Dartmouth, Nova Scotia, during daylight hours on weekdays. The crosswalk traversed a six-lane urban street connecting two shopping malls. The speed limit on the street was 50 km per hour. There were no traffic control devices at the crosswalk. The crosswalk lines and advance markings were painted approximately 1 month before the start of the experiment. Advance markings indicating a crosswalk ahead (consisting of an "X") were painted 50 m on each side of the crosswalk. All data were collected before the first snowstorm of the season.

Apparatus. Two signs were constructed to prompt motorists to stop at a specific location for

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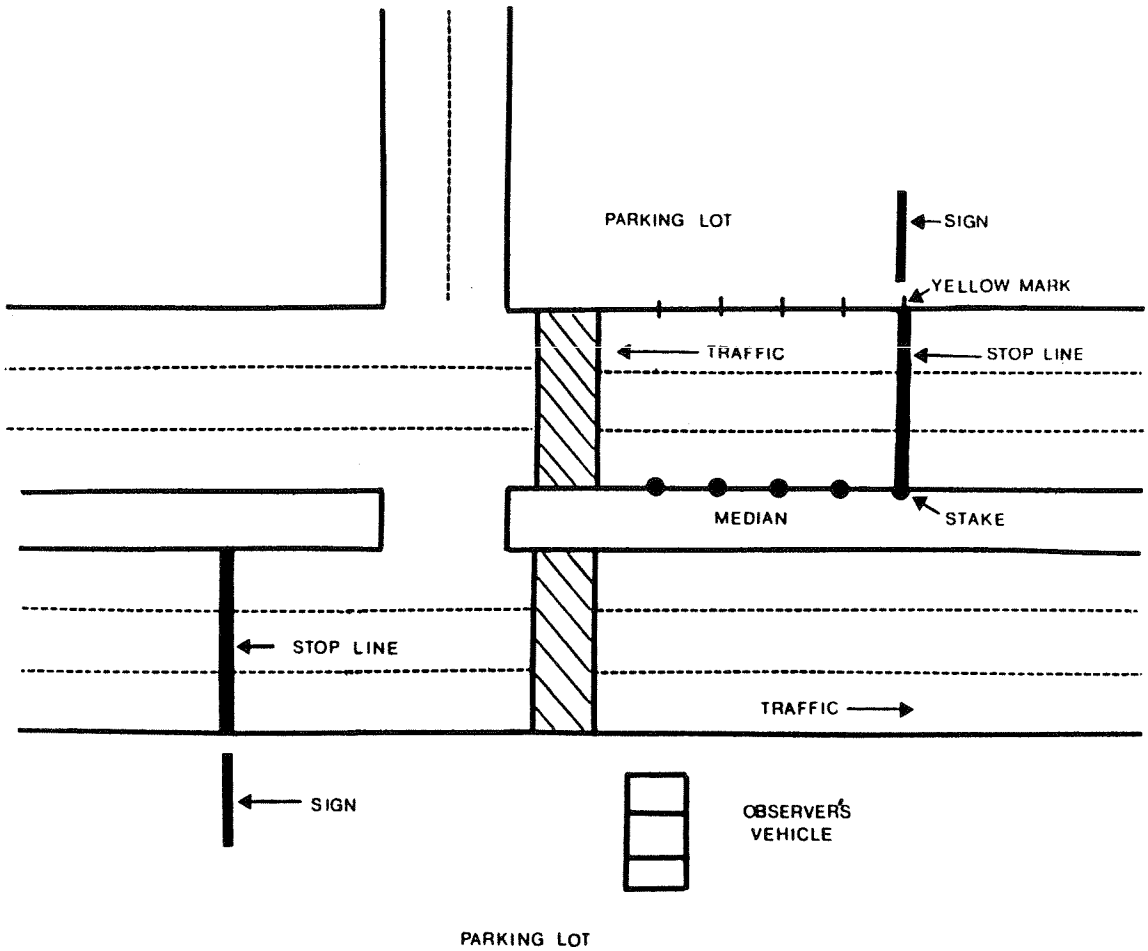

Figure 1. A diagram of the street showing the position of the sign, stop lines, and observer relative to the crosswalk.

pedestrians. These signs read "STOP HERE FOR PEDESTRIANS" and had an arrow pointing down toward the road at an angle of 45° below the horizontal. These signs were constructed from plywood covered with white scotchlite reflective material using 4 in. (10.1 cm) high black lettering. The signs were 1.1 m wide by 0.61 m high and were erected 0.5 m from the side of the highway at a height of 2 m above the street. A 20.3-cm-wide line constructed from two strips of 10.15-cm-wide removable line markings (3M Company) placed side by side was extended across the three lanes beginning at the side of each sign. The purpose of the signs and lines was to prompt motorists to yield further back from the crosswalk to allow overtaking vehicles a better view of pedestrians crossing the street. The arrangement of the signs and the line is illustrated in Figure 1.

Measures. Two trained observers scored the behavior of motorists and pedestrians each weekday. Data were not collected on days with inclement weather (such as heavy rain) that would reduce pedestrian traffic. Data were collected for the first 30 pedestrians crossing the street beginning at 9:00 a.m. each day. It usually took from 1.5 to 2 hr to score data for 30 pedestrians.

The observers sat in a car parked in a parking lot with a clear view of the crosswalk. When a pedestrian approached a crosswalk and was positioned within approximately 30 cm of the curb facing the crosswalk, the observers scored the behavior of the motorists. Motorist behavior contin-

ued to be scored until the pedestrian had cleared the crosswalk.

Three types of motor vehicle–pedestrian conflicts were scored by the observers. A Type 1 conflict was scored whenever a motorist had to engage in abrupt audible braking, had to change lanes abruptly to avoid striking a pedestrian, or a pedestrian had to jump to avoid being struck by a vehicle. A Type 2 conflict was scored whenever a motorist who failed to yield to a pedestrian passed within less than one lane's distance from the pedestrian but did not qualify as a Type 3 conflict. A Type 3 conflict was scored whenever a vehicle passed in the immediately adjacent lane to the left of a vehicle that had yielded to a pedestrian who was crossing the street.

Motorists were scored as yielding to pedestrian(s) if they stopped before the crosswalk or slowed after passing the advanced markings allowing the pedestrian to cross. They were recorded as not yielding to pedestrians if they proceeded through the crosswalk, provided they had not passed the advance marking (an "X" painted on the road 50 m before the crosswalk) before the pedestrian was positioned within 30 cm of the curb facing the crosswalk. Because the Nova Scotia Motor Vehicle Act requires drivers in all lanes facing pedestrians to yield right of way, motorists traveling in both directions were scored as yielding or not yielding to pedestrians.

Observers also noted the distance motorists stopped behind the crosswalk during three baseline and three intervention conditions. Yellow marks were painted on the curb every 10 ft and stakes were placed in the grass in the median at these intervals opposite the lines to facilitate scoring by the observers. Stopping distance was scored only on the side of the street opposite the observers, because there was less of a problem with parallax on this side of the street. The observers scored whether motorists stopped less than 10 ft from the crosswalk, between 10 to 20 ft, 20 to 30 ft, 30 to 40 ft, 40 to 50 ft, or more than 50 ft from the crosswalk. The percentage of motorists stopping more than 10, 20, 30, 40, or 50 ft from the crosswalk was then calculated by dividing the number of motorists that stopped more than each of the abovementioned distances by the total number of cars that stopped.

Measures of interobserver agreement were obtained during at least two sessions during each condition by a second independent observer seated in a car parked beside that of the primary observer. An agreement was scored for a conflict if both observers scored a conflict for a particular pedestrian exactly the same way (i.e., Type 1, 2, or 3). An agreement was scored for yielding whenever both observers scored the same vehicle as yielding. An agreement was scored for stopping distance only if both observers recorded the same distance category. Interobserver agreements for conflicts, yielding behaviors, and distance stopped behind the crosswalk were computed by dividing agreements by agreements plus disagreements. Interobserver agreement averaged 100% on the occurrence of conflicts, 93% (range, 89% to 98%) on yielding, and 93% (range, 89% to 98%) on distance stopped.

Experimental design. A reversal design was used. After baseline data were collected, the "STOP HERE FOR PEDESTRIANS" sign plus advance stop line condition was introduced, removed, and reintroduced. Next, this condition was removed and reintroduced for the third time.

Baseline 1. During the baseline condition, the "STOP HERE FOR PEDESTRIANS" signs and stop lines were absent.

Sign plus stop line 1. During this condition the "STOP HERE FOR PEDESTRIANS" signs were each erected 50 ft before the crosswalk. In addition, the advance stop line was laid down across the three lanes adjacent to each sign, even with the sign.

Baseline 2. During this condition the signs and the lines were removed.

Sign plus stop line 2. This condition was carried out in the same manner as the preceding sign plus stop line condition.

Baseline 3. This condition was carried out in the same manner as Baselines 1 and 2.

Sign plus stop line 3. This condition was carried out in the same manner as the preceding sign plus stop line conditions.

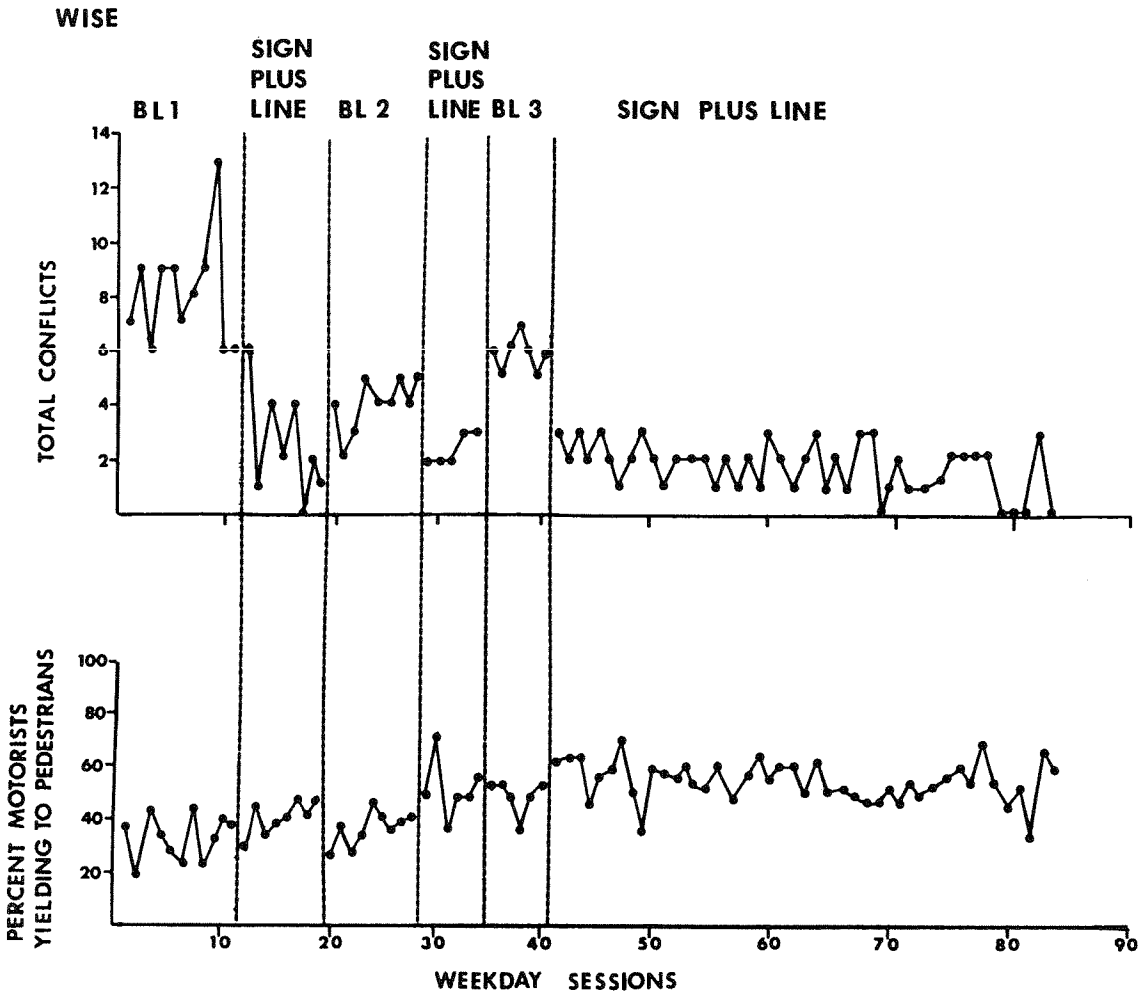

Figure 2. The total number of motor vehicle–pedestrian conflicts and the percentage of motorists yielding right of way to pedestrians during each condition of the experiment.

Results and Discussion

Motorist–pedestrian conflicts. The total number of motorist–pedestrian conflicts recorded during each condition of the experiment is presented in the upper panel of Figure 2. During Baseline 1, the total number of conflicts averaged 8.1 per day. The introduction of the first sign plus stop line condition reduced the number of conflicts to an average of 2.5. This represented a reduction of 69% in the number of conflicts per 30 pedestrian crossings. The removal, reintroduction, second removal, and second reintroduction of the sign plus stop line condition led to 4, 2.5, 5.8, and 1.7 conflicts per 30 crossings, respectively. Original baseline levels did not completely recover during the Baseline 2 and Baseline 3 conditions.

The data for each of the three types of conflicts followed the same trend as the total conflict data. During the Baseline 1 condition, Type 1, 2, and 3 conflicts averaged 0.5, 6.0, and 1.6, respectively, per 30 pedestrian crossings. During the first sign plus stop line condition these frequencies declined to 0.25, 2.0, and 0.25. During the Baseline 2 condition they remained about the same for Type 1 conflicts (0.22) and increased for Type 2 and 3 conflicts to 3.1 and 0.67, respectively. During the

second sign plus stop line condition the percentage of all three conflicts declined to 0.17, 1.83, and 0.5. Type 1 conflicts remained the same during the Baseline 3 condition, whereas the percentage of Type 2 and 3 conflicts increased to 4.33 and 1.33. During the final sign plus stop line condition the number of all three conflicts declined to 0.05, 1.1, and 0.44.

Yielding right of way to pedestrians. The percentage of motorists yielding right of way to pedestrians during each condition of the experiment is presented in the lower panel of Figure 2. Although the introduction of the sign plus stop line conditions was associated with increased yielding, the increases were small.

The data collected on those motorists who did stop behind the line is presented in Figure 3. During the baseline conditions motorists tended to stop close to the crosswalk. The introduction of the sign plus stop line condition resulted in a large increase in the percentage of motorists stopping at least 10 ft from the crosswalk (from 50% to 95%). Although the data indicate that the intervention was effective, the generality of the findings are somewhat limited because the treatment was applied on only one street. The purpose of the second experiment was to extend the generality of these findings through replication.

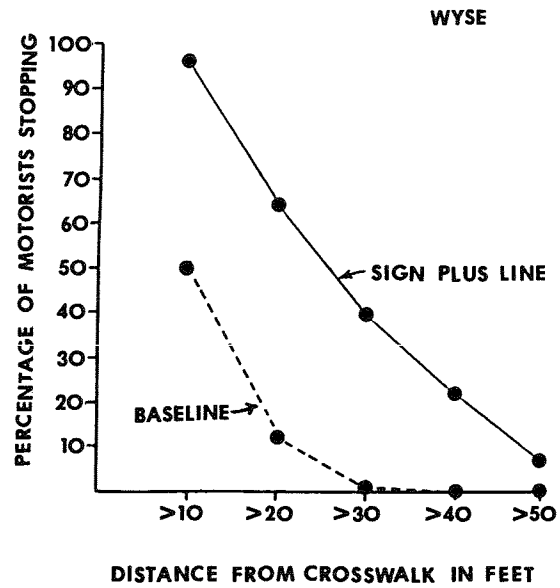

Figure 3. The percentage of motorists stopping more than 10, 20, 30, 40, or 50 ft from the crosswalk during baseline and the sign plus stop line condition of Experiment 1.

EXPERIMENT 2

Method

Subjects and setting. This experiment was carried out approximately 1 year after the first experiment and involved two crosswalks. The first was the same one reported in the first experiment and had been in the baseline condition (i.e., no signs or special lines on the road) for 6 months prior to the start of this experiment. A second crosswalk on Portland Street traversed a five-lane street connecting a bus stop with a residential area. Advance markers indicating a crosswalk ahead were painted 50 m on each side of the crosswalk. All data were collected during the spring and summer months after the last snowfall.

Apparatus. The signs and removable line markings used in this experiment were of the same type reported in the previous experiment.

Measures. Data were collected in the same manner as reported in the previous study. Measures of interobserver agreement were obtained three times on each street during each condition of the experiment. Interobserver agreement averaged 99% (range, 95% to 100%) on the occurrence of conflicts, 94% (range, 88% to 100%) on distance stopped, and 95% (range, 91% to 100%) on yielding.

Experimental design. A multiple baseline across settings (crosswalks) design was used in this experiment. The baseline condition as well as the sign plus stop line intervention were carried out in the same manner as reported in the previous experiment.

Results and Discussion

The total number of motorist–pedestrian conflicts recorded on each street during each condition

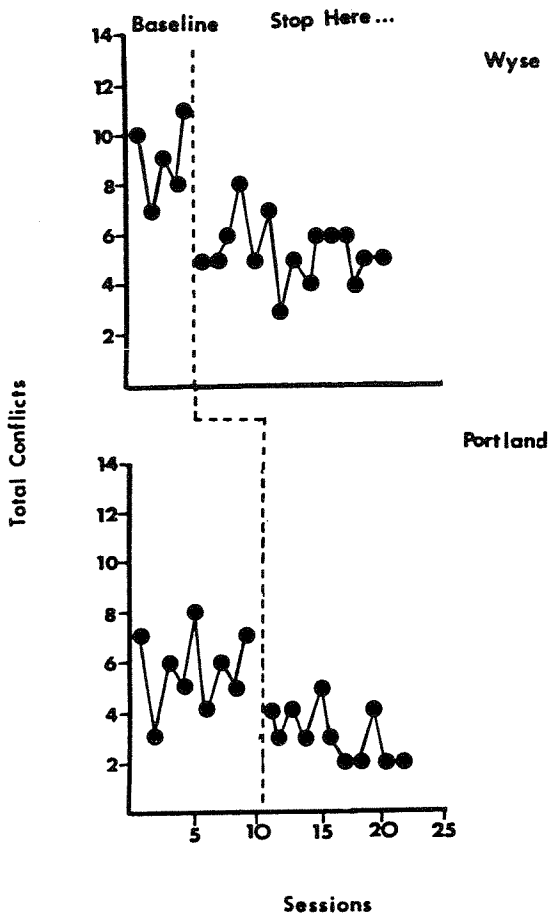

Figure 4. The total number of motor vehicle–pedestrian conflicts on Wyse Road and Portland Street during each condition of the experiment.

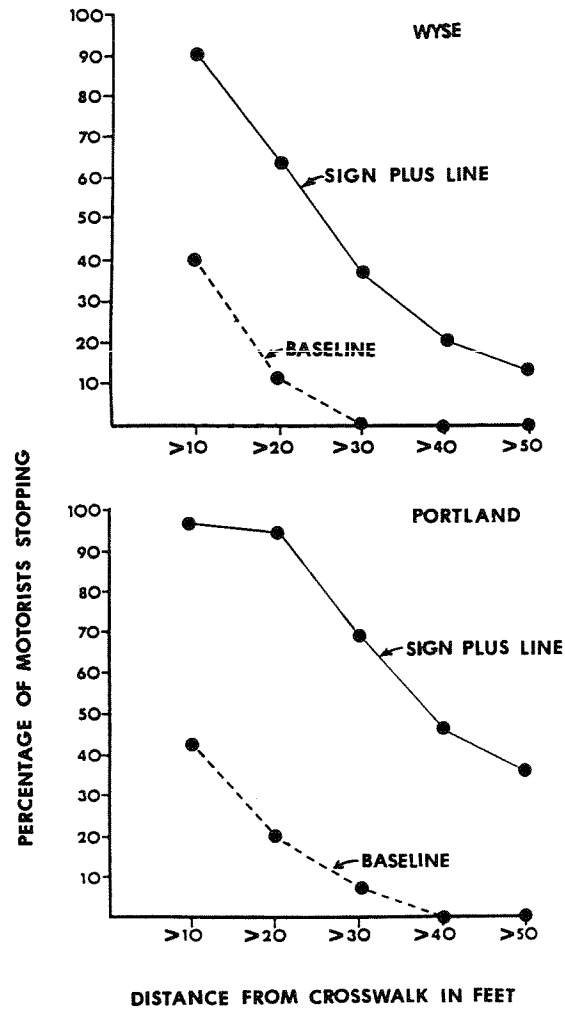

Figure 5. The percentage of motorists stopping more than 10, 20, 30, 40, or 50 ft from the crosswalk during the baseline and sign plus stop line condition on Wyse Road and Portland Street during Experiment 2.

is presented in Figure 4. The introduction of the sign plus stop line condition reduced the mean number of conflicts on Wyse Road from a baseline level of 9.0 per session to a posttreatment level of 5.3 per session and reduced the mean number of conflicts on Portland Street from a baseline level of 5.67 per session to a posttreatment level of 3.3 per session. The percentage of motorists yielding right of way to pedestrians increased slightly on Wyse Road from a baseline level of 32% to a treatment level of 39%. On Portland Street the percentage of motorists yielding right of way to pedestrians increased from 20% to 30%.

Data collected on motorists stopping behind the line are presented in Figure 5. The introduction of the sign plus stop line condition resulted in a large increase in the percentage of motorists stopping more than 10 ft from the crosswalk on both streets.

GENERAL DISCUSSION

Results of these experiments demonstrate that a simple inexpensive prompting intervention can re-

duce conflicts between motorists and pedestrians. Although the treatment procedure did not produce a large increase in the percentage of motorists yielding to pedestrians, those who did yield tended to do so further back from the crosswalk.

Because crosswalks must be repainted annually, the cost of painting the advance stop lines on all crosswalks traversing multilane roads should be minimal. The cost of a pair of signs for each road in Nova Scotia is approximately $100. However, once the signs have been in place at a large enough number of sites, it is quite possible that motorists will learn to respond to the presence of the stop lines alone.

This research was carried out with the cooperation of the Nova Scotia Department of Transportation and the Traffic Co-ordinator for the City of Dartmouth. After becoming aware of the results of this research, the Nova Scotia Department of Transportation began incorporating the use of advance stop lines for marking crosswalks on multilane streets. At present the national body regulating highway standards is considering whether to adopt these markings on a nationwide basis.

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ORIGINAL ARTICLE

Safety in numbers: more walkers and bicyclists, safer walking and bicycling

P L Jacobsen

Injury Prevention 2003;9:205–209

Objective: To examine the relationship between the numbers of people walking or bicycling and the frequency of collisions between motorists and walkers or bicyclists. The common wisdom holds that the number of collisions varies directly with the amount of walking and bicycling. However, three published analyses of collision rates at specific intersections found a non-linear relationship, such that collisions rates declined with increases in the numbers of people walking or bicycling.
Data: This paper uses five additional data sets (three population level and two time series) to compare the amount of walking or bicycling and the injuries incurring in collisions with motor vehicles.
Results: The likelihood that a given person walking or bicycling will be struck by a motorist varies inversely with the amount of walking or bicycling. This pattern is consistent across communities of varying size, from specific intersections to cities and countries, and across time periods.
Discussion: This result is unexpected. Since it is unlikely that the people walking and bicycling become more cautious if their numbers are larger, it indicates that the behavior of motorists controls the likelihood of collisions with people walking and bicycling. It appears that motorists adjust their behavior in the presence of people walking and bicycling. There is an urgent need for further exploration of the human factors controlling motorist behavior in the presence of people walking and bicycling.
Conclusion: A motorist is less likely to collide with a person walking and bicycling if more people walk or bicycle. Policies that increase the numbers of people walking and bicycling appear to be an effective route to improving the safety of people walking and bicycling.

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Motor vehicle collisions are a leading global cause of death and disease burden.[1 2] Worldwide, more people die in motor vehicle collisions while walking and bicycling than while driving.[3]

In examining injuries to people walking and bicycling, intuition suggests that injuries increase in locations where, and in time periods when, more people walk and bicycle.[3] However, do injuries increase linearly with the amount of walking and bicycling? Is the situation the same as with billiards—will doubling the number of balls on the table double the number of collisions? If so, it implies these collisions are random and "accidental". If not, then it implies that the numbers of people walking, bicycling, and motoring affects human behavior and hence behavior has an important role in preventing these injuries.

In less motorized countries, non-motorized users account for most of the road users killed in motor vehicle crashes, in contrast to the more motorized countries, where most deaths occur inside motorized four wheelers.[5] While information on fatalities is collected in the developing world, reliable information on the amount of walking and bicycling is unavailable, limiting this investigation to industrialized countries.

Across Europe and North America, the amount of walking and bicycling varies tremendously—from 6% of all trips (USA) to 46% (the Netherlands).[6] Yet the per capita fatal injury rate to people walking and bicycling is more or less the same in the two countries: 1.9/100 000 in the Netherlands and 2.1/100 000 in the USA.[7] This surprising result shows that the numbers of pedestrians and bicyclists fatally injured does not vary linearly with the numbers of walkers and bicyclists.

Research at specific sites has shown that collisions between a motorist and a person walking or bicycling diminish where more people walk and bicycle. Ekman examined numbers of pedestrians, bicyclists, and motorists, and serious conflicts among them at 95 intersections in Malmö, Sweden. He found that after adjusting for the number of bicyclists, the number of conflicts/bicyclist was twice as great at locations with few bicyclists compared with locations with more. In fact, the number of conflicts/bicyclist decreased abruptly with more than 50 bicyclists/hour. With pedestrians, Ekman found that although the number of conflicts/pedestrian was largely unaffected by numbers of pedestrians, the conflict rate was still affected by numbers of motorists.[8]

Leden also reported a non-linear relationship in two examinations of intersections. In a before and after study, he examined changes in numbers of bicyclists and collisions between motorists and bicyclists in response to changes in physical configuration at 45 non-signalized intersections between bicycle paths and roadways in Gothenburg, Sweden. The total number of collisions increased with the 0.4 power of the increasing use of the intersections by bicyclists.[9] He also examined police reported injuries to people walking at approximately 300 signalized intersections in Hamilton, Ontario, Canada. The number of collisions increased with the 0.32 to 0.67 power with increasing numbers of pedestrians.[10]

This paper explores this non-linear phenomenon noted above. Does it occur only at specific intersections, or also at larger scales, such as for a city or country or at different time periods with differing numbers of walkers or bicyclists? Is the relationship consistent and replicable? Is it plausible? Is there a dose-response relationship? And what are the likely causal mechanisms?[11]

METHODS

To explore the relationship between the amount of walking and bicycling and the collisions involving a motorist and a person walking or bicycling, it was necessary to identify locations and time periods with data for both injuries and the amount of walking and bicycling.

In the industrialized world, fatal motor vehicle injuries are recorded well; injury statistics less so.[12] Additionally, although

Table 1 Calculated results

Data	Injury measure	Exposure measure	Exponent for growth in injuries	95% Confidence interval
Walking in 68 California cities	Injuries/capita	Portion journey to work trips on foot	0.41	0.27 to 0.54
Bicycling in 68 California cities	Injuries/capita	Portion journey to work trips on bicycle	0.31	0.22 to 0.41
Walking in 47 Danish towns	Injuries/capita	Kilometres walked/capita/day	0.36	−0.10 to 0.82
Bicycling in 47 Danish towns	Injuries/capita	Kilometres bicycled/capita/day	0.44	0.19 to 0.69
Bicycling in 14 European countries	Fatalities/capita	Kilometres bicycled/capita/day	0.58	0.38 to 0.42
Walking in 8 European countries	Fatalities/capita	Trips on foot/capita/day	0.13	−0.71 to 0.98
Bicycling in 8 European countries	Fatalities/capita	Trips on bicycle/capita/day	0.48	0.22 to 0.75
Bicycling in the United Kingdom:	Fatalities	Billion kilometres ridden annually		
1950–73			0.41	0.35 to 0.47
1974–83			0.012	−0.25 to 0.28
1984–99			1.5	1.11 to 1.88
Bicycling in the Netherlands, 1980–98	Fatalities	Billion kilometres ridden annually	−1.9	−2.7 to −1.1

motor vehicle use is measured, few jurisdictions collect similar data for the numbers of walkers and bicyclists.[13] Most available estimates are obtained by surveys. Then again, since much walking and bicycling occurs in short trips that may not be recorded in surveys (for example, children crossing the street), survey data may be inaccurate as well.

Comparisons between jurisdictions are also complex. Laws governing motor vehicle operation, roadway design, techniques for collecting the number of injuries and numbers of people walking and bicycling, and other perhaps significant factors may vary. To minimize these complexities when comparing across jurisdictions, this analysis uses data sets collected by one entity.

This paper uses five data sets (three population level and two time series) to compare the amount of walking or bicycling and the injuries incurring in collisions with motor vehicles.

For each data set, the measure of injuries to people walking or bicycling was compared to measure of walking and bicycling to determine the relationship. Parameters were calculated using least squares analysis for the function shown in equation (1):

$$I = aE^b \quad (1)$$

where I is the injury measure, E is the measure of walking or bicycling, and a and b are the parameters to be computed.

Exponent b indicates the change in the number of injuries in the population in response to changes in walking and bicycling. With b equal to 1, the growth in injuries with increasing exposure would be linear; b less than 1 indicates the growth in injuries would be less than linear; and b less than 0 indicates that increasing the number of walkers or bicyclists would decrease the total number of injures to people walking and bicycling in a given population.

For an individual walking or bicycling, the relevant risk measure is for a unit of walking or bicycling. This risk can be estimated by dividing both sides of equation (1) by the measure of walking and bicycling, E, resulting in equation (2):

$$I/E = aE^{(b-1)} \quad (2)$$

The graphs show this latter relationship, as it is easier to understand visually.

DATA

In this analysis, three population data sets are employed to examine the relationship between numbers of walkers and bicyclists and the numbers of collisions with motorists across varying sizes of analysis areas, from cities to countries. In addition, two time series data sets are used to examine the effect of fluctuations in walking and bicycling on injuries.

Walking and bicycling in California cities

Cities within one state in the United States allow a relatively consistent comparison. California has one law governing traffic and consistent traffic control devices. However, cities may choose their own roadway design features. In practice, roadway designs vary mostly by era of urbanization.

Injury data were obtained from police collision reports as summarized by the California Highway Patrol for year 2000.[14] Injury incidence rates were calculated using the US census population estimates as adjusted by the State of California's Department of Finance for year 2000.[15] Of the 111 cities in California with a population over 60 000, the 68 cities with per capita injury rates to people walking and bicycling both greater than 30/100 000 were examined.

The US Census Bureau collects journey to work trip data for the year 2000.[16] While such trips constitute only a fraction of all person trips, this analysis assumes that mode of journey to work is in proportion to mode for other person trips and uses it as a proxy for other person trips.

Walking, bicycling, and moped riding in 47 Danish towns

The Danish Bureau of Statistics collected travel behavior for 47 towns with populations greater than 10 000 for years 1993–96.[17] (Søren U Jensen provided the travel and injury data for this analysis.)

Walking and bicycling in European countries

European countries vary as to geography, roadway designs, traffic laws, and societal mores. A European Commission sponsored report compiled bicycling distances for 14 countries and person trips by foot and bicycle for eight countries for 1998.[18] The Organization for Economic Co-operation and Development's International Road Traffic and Accident Database reports traffic fatalities and population numbers for 1998.[19 20]

Bicycling in the United Kingdom, 1950–99

The Department of Environment, Transport and the Regions in the United Kingdom measures the distance bicycled with annual surveys, and compiles fatality data, which combined allow a time series analysis.[21]

Bicycling in the Netherlands, 1980–98

The Netherlands *Centraal Bureau voor de Statistiek* measures the distance bicycled with annual surveys and compiles fatality data.[22]

RESULTS

Table 1 shows the calculated results. Parameter b indicates the exponential change in the number of injuries in the population in response to changes in walking and bicycling.

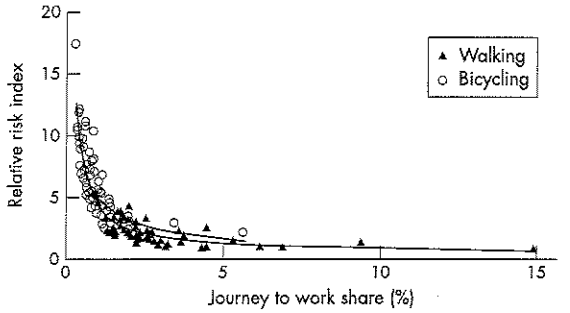

Figure 1 Walking and bicycling in 68 California cities in 2000.

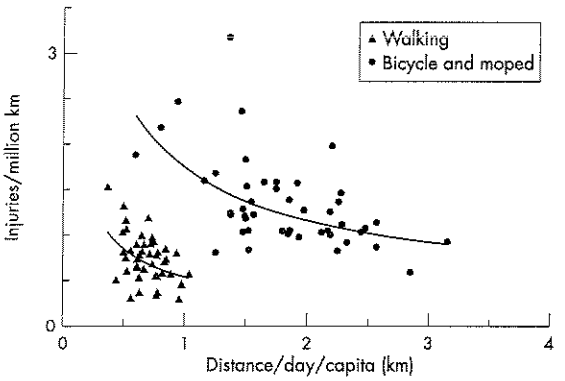

Figure 2 Walking and bicycling in 47 Danish towns in 1993–96.

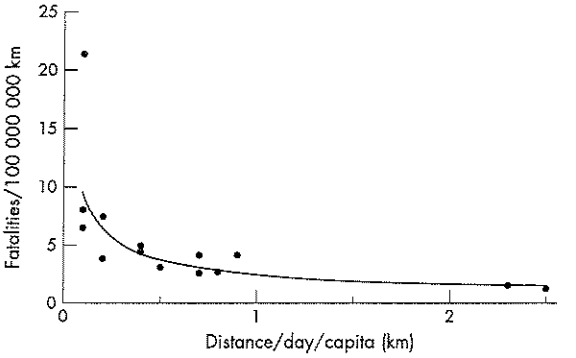

Figure 3 Bicycling in 14 European countries in 1998.

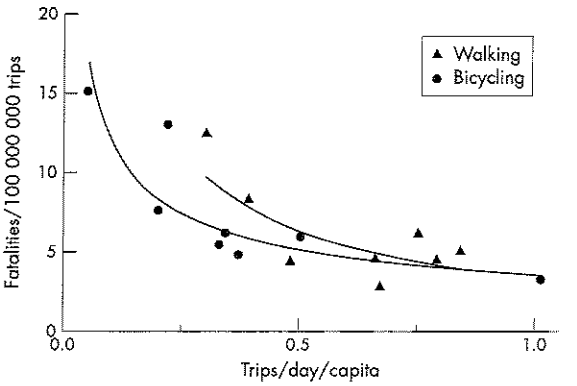

Figure 4 Walking and bicycling in eight European countries in 1998.

Walking and bicycling in California cities

Per capita injury rates to pedestrians and bicyclists vary fourfold among the 68 cities, and the portion of journey to work trips made by foot and bicycle varies more than 15-fold and 20-fold (respectively). Dividing the per capita injury numbers by the fraction of work trips on foot or bicycle results in a fivefold and eightfold range of risk for a person walking or bicycling in the 68 cities. Figure 1 shows that the likelihood of an injury is not constant but decreases as walking or bicycling increases.

Walking and bicycle and moped riding in 47 Danish towns

Per capita injury rates to pedestrians and bicyclists varied twofold, and the number trips made by foot and bicycle varied more than fourfold and threefold (respectively). Dividing the per capita injury numbers by the aggregate distance walked or bicycled indicates a fivefold range of risk for a person walking or bicycling for the 47 towns. Figure 2 shows that despite considerable scatter in the results, pedestrians are safer in towns with greater walking and bicyclists are safer in towns with more bicycling.

Walking and bicycling in European countries

In the 14 countries with data, distance bicycled per capita varied 10-fold. Across them, the number of persons killed while bicycling varied fourfold. Dividing the number of bicyclist deaths per capita by the distance bicycled per capita indicates a nearly 20-fold range of risk for a person bicycling a given distance. Figure 3 shows that the number of bicyclist fatalities/distance bicycled decreases with increasing distance bicycled per capita.

In the eight countries with person trip data, the number of bicycle trips per capita varied by more than 10-fold and the number of trips on foot varied threefold. Dividing the per capita fatality rate by the daily foot and bicycle trips per capita data indicates a nearly fivefold range of risk of death for each trip. Figure 4 shows that the risk decreases with increasing trips on foot or on bicycle.

Bicycling in the United Kingdom, 1950–99

In the United Kingdom from 1950 to 1999, distance bicycled varied sixfold and bicyclist fatalities varied fivefold. Dividing the number of bicyclist deaths per capita by distance bicycled indicates a threefold range of risk for a given distance bicycled. Figure 5 shows the complex relationship between the number of bicyclist fatalities and the distance bicycled. Separating the data into three segments using the inflection points for distance ridden allows some understanding. Until 1973, as the United Kingdom motorized, the generally decreasing distance bicycled was accompanied by an increase in bicyclist fatalities/distance bicycled. From 1973 to 1983, the small increase in distance bicycled was accompanied by a large decrease in bicyclist fatalities/distance bicycled. This resurgence in bicycling may be related to the oil embargo and resulting increase in energy costs. In stark contrast, from 1984 to 1999, the decrease in distance bicycled was matched by a decrease in bicyclist fatalities/distance bicycled, indicating an increasing risk of a bicyclist fatality. This change may be related to the seatbelt law in 1983. One review suggested that the increase in seatbelt use transferred some risk to pedestrians and bicyclists as motorists felt safer and drove more aggressively and further.[25] Average motorist speeds in built up areas in the United Kingdom increased from 45 km/h in 1981, before compulsory use of seatbelts, to 53 km/h in 1997.[25] Less bicycling is a plausible response to more aggressive and faster motorists.

Bicycling in the Netherlands, 1980–98

In the Netherlands, bicycling distances increased generally from 1980 to 1998. Annual bicyclist fatalities in the same time

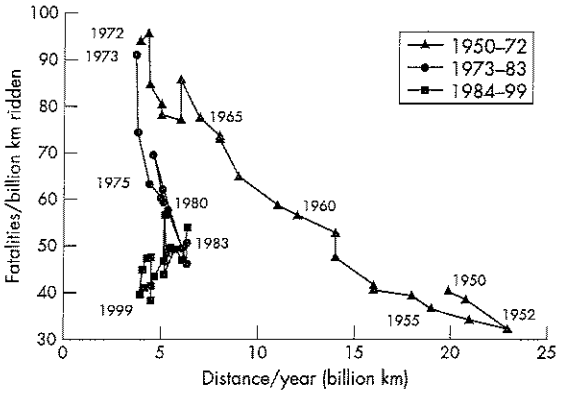

Figure 5 Bicycling in the United Kingdom from 1950–99.

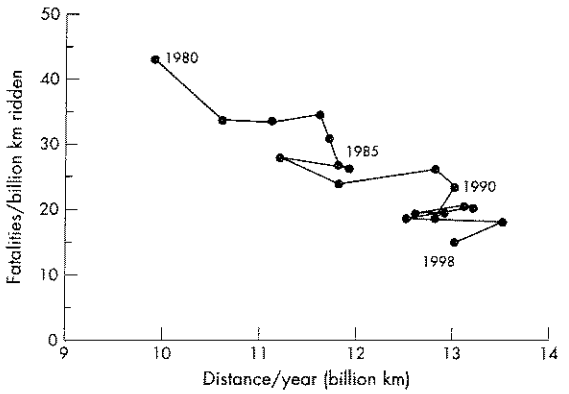

Figure 6 Bicycling in the Netherlands from 1980–98.

period decreased from 426 to 194. Dividing the number of bicyclist deaths per capita by distance bicycled indicates a nearly threefold range in risk for a given distance bicycled. Figure 6 shows that the number of bicyclist fatalities/distance traveled decreased rapidly with increasing distance bicycled.

DISCUSSION

Multiple independent data sets show that the total number of pedestrians or bicyclists struck by motorists varies with the 0.4 power of the amount of walking or bicycling (respectively). This relationship is consistent across geographic areas from specific intersections to cities and countries. Furthermore, Leden found the same relationship in a before and after study of 45 bicycle path intersections with roadways.[9] In the industrialized countries examined, this relationship holds across a wide range of walking and bicycling.

Interpreting the time series data is complicated as some changes could result from forces not measured. Improvements in post-trauma medical care complicate comparing years—indeed for the period 1989 to 1995 Roberts *et al* found a 16%/year reduction in fatalities for severely injured children in the United Kingdom.[25] Changes in the distribution of age in the population could also complicate comparisons.[26] Furthermore, while the number of fatalities are likely accurately reported, record keeping for the distance bicycled may have changed. Also, the risk of some bicycle fatalities may be unrelated to distance traveled (for example, fewer children playing in residential areas might change the fatality numbers but not distance traveled).

Nonetheless, the British time series data indicate that decreasing bicycle riding leads to increased risk, and increasing risk leads to decreasing bicycle use. In contrast, over the last two decades, the Netherlands has implemented a range of policies to encourage people to walk and bicycle and make them safer.[6] These efforts have succeeded in increasing bicycle use and decreasing risk.

The time series data also provide an understanding of cause. The possible explanations are changes in human behavior, roadway design, laws, and social mores. However, insofar as the changes seen in the time series data occurred rapidly and with both increasing and decreasing amounts of bicycling, it is improbable that the roadway design, traffic laws, or social mores, all of which change relatively slowly, could explain the relationship between exposure and injury rates. The more plausible explanation involves changes in behavior associated with changes in the amount of walking and bicycling.

Whose behavior changes, the motorist's or that of the people walking and bicycling? It seems unlikely that people walking or bicycling obey traffic laws more or defer to motorists more in societies or time periods with greater walking and bicycling. Indeed it seems less likely, and hence unable to explain the observed results. Adaptation in motorist behavior seems more plausible and other discussions support that view. Todd reported three studies showing "motorists in the United States and abroad drive more slowly when they see many pedestrians in the street and faster when they see few".[27] In addition, motorists in communities or time periods with greater walking and bicycling are themselves more likely to occasionally walk or bicycle and hence may give greater consideration to people walking and bicycling. Accordingly, the most plausible explanation for the improving safety of people walking and bicycling as their numbers increase is behavior modification by motorists when they expect or experience people walking and bicycling.

Given the apparent response of motorists, further study is needed of ways to remind motorists of the presence of people walking and bicycling. Would different roadway design help? Do specific interventions such as marking crosswalks, placing CHILDREN PLAYING signs, and designating bicycle lanes have a community-wide impact? Studies to date on these approaches have tended to examine only the immediate area and ignore community-wide effects. However, it seems reasonable that increasing motorist awareness of people walking and bicycling would provide benefits beyond just the immediate area. Such awareness techniques should be investigated for community wide health benefits.

Another question arises about laws governing the interaction between motorists and vulnerable road users. For example, in the United States, if a motorist strikes a person walking between intersections, the motorist is unlikely to face criminal charges.[27] Yet if motorist behavior largely controls the number of collisions, laws should be revised to reflect this finding.

CONCLUSIONS

A motorist is less likely to collide with a person walking and bicycling when there are more people walking or bicycling. Modeling this relationship as a power curve yields the result that at the population level, the number of motorists colliding with people walking or bicycling will increase at roughly 0.4 power of the number of people walking or bicycling. For example, a community doubling its walking can expect a 32% increase in injuries ($2^{0.4} = 1.32$). Taking into account the amount of walking and bicycling, the probability that a motorist will strike an individual person walking or bicycling declines with the roughly −0.6 power of the number of persons walking or bicycling. An individual's risk while walking in a community with twice as much walking will reduce to 66% ($2^{0.4}/2 = 2^{-0.6} = 0.66$). Accordingly, policies that increase the numbers of people walking and bicycling appear to be an effective route to improving the safety of people walking and bicycling.

Key points

- Where, or when, more people walk or bicycle, the less likely any of them are to be injured by motorists. There is safety in numbers.
- Motorist behavior evidently largely controls the likelihood of collisions with people walking and bicycling.
- Comparison of pedestrian and cyclist collision frequencies between communities and over time periods need to reflect the amount of walking and bicycling.
- Efforts to enhance pedestrian and cyclist safety, including traffic engineering and legal policies, need to be examined for their ability to modify motorist behavior.
- Policies that increase walking and bicycling appear to be an effective route to improving the safety of people walking and bicycling.

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In 1998, the Pasadena, California, City Council asked whether their city was a dangerous place to bicycle, prompting this investigation into the importance of accounting for the amount of walking and bicycling. Anne Seeley of California Department of Health Services asked if the public health goal of more walking and bicycling conflicted with reducing injuries, adding impetus to understanding the role of safety in numbers. Chris Morfas, Søren Jensen, Michael Ronkin, Rick Warring, Malcolm Wardlaw, John Pucher, Lewis Dijkstra, and Petra Staats provided data to help answer these questions. Charles Komanoff, Marie Birnbaum, and three anonymous reviewers provided valuable editorial advice. Virginia Gangsei helped clarify the presentation.

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Demographic and environmental correlates of pedestrian injury collisions: a spatial analysis

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Abstract

Pedestrian injury collisions often occur when and where large numbers of pedestrians travel within complex roadway systems with high traffic flow. The pedestrian injury literature suggests a number of individual and environmental correlates of injury risks, however studies in this area have primarily focused upon demographic differences (e.g. related to age) and a few global characteristics of the roadway system (e.g. aspects of pedestrian traffic). Studies in which the geography of communities has been considered are primarily descriptive, identifying pedestrian injury 'hot spots'. The current study more extensively explores some geographic correlates of pedestrian injury collisions through a spatial analysis of data from the city of San Francisco, CA. A spatial autocorrelation corrected regression model was used to determine factors associated with pedestrian traffic injury in 1990. The study used a geographic information system to map locations of pedestrian injuries, and environmental and demographic characteristics of the city across census tract units. In addition to a number of demographic factors (gender, age, marital status, education, income and unemployment), it was proposed that several environmental features of the city would be related to injury rates (high traffic flow, complex roadway systems, greater population densities and alcohol availability). Results of the study showed that pedestrian injury rates were related to traffic flow, population density, age composition of the local population, unemployment, gender and education. Availability of alcohol through bars was directly related to pedestrian injury collisions in which the pedestrian had been drinking alcohol. © 2000 Elsevier Science Ltd. All rights reserved.

Keywords: Pedestrian; Injury; Demographics; Alcohol availability; Geostatistics

1. Introduction and literature review

Motor vehicle and traffic collisions remain the leading cause of premature death in the United States. Nationwide, pedestrians are the second largest population group to die in motor vehicle related crashes (motor vehicle occupants are the largest), accounting for about 13% of the death toll (Insurance Institute for Highway Safety, 1997). In 1996, 5412 pedestrians (mostly young children, elderly people and intoxicated people) died; an additional 82 000 were injured (National Highway Traffic Safety Administration, NHTSA, 1997). Within the state of California in 1994, 843 pedestrians were killed, representing the highest absolute number in the nation. When adjusted for population, California ranks eighth in the nation for pedestrian injury (NHTSA, 1995a). At the local level, San Francisco has one of the highest pedestrian injury rates among all major US cities. According to the National Highway Traffic Safety Administration, 28 out of the 63 persons killed in San Francisco in 1994 traffic collisions, or 44%, were pedestrians. In comparison, statewide, less than 20% of the 4226 persons killed in California traffic collisions were pedestrians (NHTSA, 1995a). Focusing on census year 1990 (the year for which data was collected for the current study), there were 1137 traffic collisions in which a pedestrian was involved in San Francisco, or 10.9% of the 10 419 total collisions that year. In these collisions, there were a total of 35 persons (30 pedestrians) killed and 1227 (1164 pedestrians) injured.

A variety of characteristics of individuals involved and the collision environment appear to be related to pedestrian injuries. Studies of adult pedestrians have found gender and age differences. For example, males

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and older persons appear more likely to be involved in pedestrian crashes. In 1994, 68% of all pedestrian fatalities in the US were male (NHTSA, 1995b) and almost 23% were 65 or older (NHTSA, 1995a). One study found differences in perceptual judgements between younger and older pedestrians (Oxley et al., 1997). The findings suggested that age-related perceptual and cognitive deficits might play a substantial role in crashes involving older pedestrians. Child pedestrian research has found several environmental factors to be associated with pedestrian injury, including traffic flow, traffic speed, the presence of curbside parking and the presence of pedestrian footpaths (Roberts et al., 1995; Stevenson et al., 1995). Other child pedestrian studies have examined geographic variations such as differences in child pedestrian death rates at the state-level (Baker et al., 1991) and identified characteristics of high frequency collision sites using a geographic information system (Braddock et al., 1994). Another recent study of adult pedestrians estimated the effects of reduced travel speeds on pedestrian fatalities (Anderson et al., 1997).

Alcohol consumption by adult pedestrians has been found to play an important role in pedestrian traffic injury. The NHTSA (1997) found that almost one-third (32.3%) of fatally injured pedestrians had blood alcohol concentrations (BAC) at or above the 0.10 g/dl in 1996, the legal limit for drivers in many states. In the same year, the Insurance Institute for Highway Safety (1997) found that of all pedestrians 16 years of age or older who were killed in night-time crashes, 55% had BACs of 0.10% or more. In contrast, the intoxication rate for drivers was 12%, less than half that for the pedestrians. From 1982 to 1992, there were 56 179 drivers involved in 61 129 pedestrian fatalities in which the pedestrian was older than 14 years of age. Only 15.5% of the drivers had BACs in excess of 0.10 g/dl, while 36.9% of the pedestrians had BACs in excess of that value. Although BACs in excess of 0.10 in these drivers has fallen from 20.0% in 1982 to 11.9% in 1992, it has fallen only from 39.4 to 36.2% among pedestrian fatalities during that time (Centers for Disease Control, 1993).

Research from emergency rooms has suggested that many pedestrians who are injured or killed were under some influence of alcohol at the time they were struck; little is known about injuries that do not require admission to emergency rooms. Profiles of injured pedestrians show many, between 19 and 65%, to have been drinking, often heavily (Bastos and Galante, 1986; Brainard et al., 1989; Middaugh, 1989; Vestrup and Reid, 1989). Pedestrians who are under the influence of alcohol also appear to have more severe injuries (Bradbury, 1991; Mittmeyer, 1991) and face higher mortality (Williams et al., 1995) than those who are not under the influence. Case-control studies have shown that intoxication increases the likelihood that a pedestrian is injured. Honkanen et al. (1976) showed that in the US relative risks of injury increased rapidly with pedestrian BACs in excess of 0.10. These earlier findings have received renewed emphasis in recent studies about the prevalence of alcohol involvement in pedestrian injuries. A study in Australia found that 38% of pedestrian fatalities and 29% of pedestrian emergency room admissions had blood alcohol concentrations at or above 0.10 (Holubowycz, 1995). Another study in Florida found that alcohol use increased by at least fourfold the risk of a pedestrian dying in a traffic collision (Miles-Doan, 1996).

As this review suggests, although the current literature on pedestrian injury includes studies of individual and global environmental characteristics related to injury rates, specific geographic components of pedestrian injury have seldom been introduced; this despite the fact that pedestrian injuries, like all traffic related injuries, have specific geographic correlates (e.g. local traffic flows and locations of pedestrian walk ways, Roberts et al., 1995; Stevenson et al., 1995) and have been shown to geographically cluster (Braddock et al., 1994). Thus, noting the substantial involvement of alcohol in pedestrian injury, it is reasonable to consider the extent to which the geography of retail alcohol availability is related to the geography of pedestrian injuries.

Several geographic studies have suggested that locations of alcohol outlets are associated with alcohol use and alcohol-related crashes (Gruenewald et al., 1993; Van Oers and Garretsen, 1993; Scribner et al., 1994). Gruenewald et al. (1993) suggests that alcohol-related traffic collisions exhibit geographically measurable relationships with the density of and distance from alcohol outlets. Gruenewald et al. (1996) demonstrated that physical availability was related to rates of single vehicle night-time crashes (SVNs) between 20:00 and 04:00 h (a surrogate for alcohol-related crashes). Uniquely, this study used geostatistical modeling techniques to identify a spreading pattern of crashes radiating away from sources of alcohol.

1.1. Spatial analysis

Gruenewald et al. (1996) used geostatistical modeling techniques to study the relationships between the spatial distribution of alcohol outlets and alcohol-related traffic collisions. These statistical techniques allowed the researchers to correct for spatial autocorrelations between rates of crash events due to their relative proximity in space, while at the same time providing a means to explore the relationships between the availability of alcohol in one area and rates of crashes in adjacent areas (i.e. spatial lags). Spatial autocorrelations between adjacent geographic units introduce bias into statistical analyses due to the violation of the assumption of unit independence. Two spatial units

that are physically close together can be expected to exert some effect on each other. Therefore, these units, if taken as separate observations, are not truly independent.

One correction for spatial autocorrelation involves deriving a matrix which shows which geographic units are adjacent to each other (a binary connection matrix, **W**, an $n \times n$ matrix indicating connections between adjacent spatial units with 0 and 1) and calculating the degree of spatial autocorrelation, ρ, between adjacent units. Generalized least squares estimators are available to provide unbiased tests of regression effects in these spatial contexts (Griffith, 1987). Thus, Levine et al. (1995) used a spatial autoregressive lag model of the form:

$$Y = \rho \mathbf{WY} + \mathbf{X}b + \varepsilon \quad (1)$$

to adjust for spatial autocorrelation in traffic collision data, where Y is an $n \times 1$ vector of dependent variables observed across n units, and ρ is the coefficient of the spatial lag term. The scalar multiplication ρ by **WY** provides an estimate of the weighted effects of the dependent variable measured on adjacent units upon each target unit, **X** is an $n \times k$ matrix of k exogenous measures, b the $n \times 1$ coefficients for each measure, and ε an $n \times 1$ vector of error terms. Although correcting for one form of spatial autocorrelation, this model is consistent with arguments that collision rates in one location are directly related to those in adjacent areas. If such direct effects are not to be expected, use of this model results in biased estimates of the statistical significance of observed effects. Only in the very rare instance where a collision in one location might set off subsequent collisions in another location, such as a large traffic 'pile-up', would this be the case.

An alternative model used by Gruenewald et al. (1996) makes a somewhat different assumption in which, using similar notation, errors in estimation between geographic units are spatially autocorrelated:

$$Y = \mathbf{X}b + (\mathbf{I} - \rho \mathbf{W})^{-1}\varepsilon \quad (2)$$

where **I** is an $n \times n$ identity matrix. This model suggests that other unmeasured factors related to the clustering of pedestrian injuries (e.g. common patterns of pedestrian traffic between units) cause the rates of pedestrian collisions to exhibit spatial autocorrelation (in the form of spatially correlated measurement error). Should these factors be included in the model, it is expected that the degree of spatial autocorrelation, ρ, would go to 0. In the current study these kinds of factors would cause pedestrian injuries to cluster together and this model is used to correct for any resulting spatial autocorrelation.

As a technical point, the consequence of this argument is that the error variance–covariance matrix used to test statistical effects in the current study is consistent with a model that, quite reasonably, implies the absence of any direct relationship between rates of pedestrian injury collisions across areas. Tests of effects using the error variance–covariance matrix implied by model (1), quite unreasonably, implies the existence of some direct relationship between rates of pedestrian injury collisions across these same areas. It should not surprise the reader that the results of the misapplication of these different statistical models, each consistent with a different set of assumed relationships between measured outcomes, results in biased statistical tests of effects.

1.2. Study goal

The goal of the current study was to elucidate the relationships between observed rates of pedestrian injury traffic collisions and measures of environmental and demographic characteristics of the City and County of San Francisco. It was expected that rates of pedestrian injury would be greatest in those areas of the city that provided greatest access to alcohol via restaurants, bars and retail outlets. It was also expected that this relationship would be strongest among pedestrians who had been drinking. Additional demographic and environmental measures of roadway complexity, traffic flow and population density were included to control for known effects of these variables in geographic studies of traffic related outcomes (Gruenewald et al., 1996).

2. Methods

The study examined rates of pedestrian injuries across 149 census tracts in the city of San Francisco. Over a single annual period, 1990, numbers of motor vehicle collisions in which a pedestrian was injured or killed were aggregated within these geographic units. The traffic injury data were obtained from the California Highway Patrol's Statewide Integrated Traffic Record System (SWITRS) for San Francisco County in 1990. This dataset includes all traffic collisions reported to the California Highway Patrol, and consists of both highway and city street collisions[1]. All crashes in which a pedestrian was listed as a party involved in the incident were included. In 1990, there were 1137 such incidents in which 1227 persons were injured. Of these 1137 collisions, 1113 (97.9%) were successfully geocoded. These incidents were used to derive two

[1] Collisions could be reported by the San Francisco Police Department, the Sheriff's Office, or the California Highway Patrol. The design of SWITRS is such that only one reporting agency reports on any collision.

dependent measures: total injuries in pedestrian collsions ($n = 1227$) and injuries in pedestrian collisions in which the pedestrian was determined to have been drinking by police at the scene ($n = 102$, 8.3%). The sample size of the latter measure was constrained by the one year of available data, but did not pose a significant problem in the analysis (see below). The sample size of the latter measure, however, did constrain the selection of geographic units. Smaller units of analysis (e.g. census blocks) would have obviated application of current methods for the assessment of spatial autocorrelation.

Alcohol outlet data for 1990 were obtained from state licensing records provided by California Alcohol Beverage Control. Alcohol outlets were mapped by premise address and categorized by type of license into bars (license types 40, 42, and 48; $n = 505$, 88.7% of which were successfully geocoded), restaurants that serve alcohol (license types 41 and 47; $n = 1986$, 82.9% of which were successfully geocoded), and establishments licensed to sell alcohol that is carried off the premise ('off-premise outlets', license types 20 and 21; $n = 1246$, 89.4% of which were successfully geocoded.

Traffic flow data were obtained from a dataset used by the San Francisco Department of Public Works (DPW) to monitor street use (average daily traffic flow, ADT) and mapped by nearest street intersection ($n =$ 12 710, 78.6% of which were successfully geocoded). These data were created using computerized traffic count apparatus that counted the number of vehicles traveling through the street in a 24-h period at many intersections throughout the city. These measurements were limited to weekday measurements, and therefore may not reflect weekend traffic patterns and may result in some over-estimation of the b-value relating traffic flow to crash rates. Streets were categorized by DPW according to street type (arterial, residential) and according to whether there was a bus route. ADT values for all city intersections for which there was no direct measurement were then calculated using the average of actual ADT measurements for that street type. There were several weaknesses to the use of this dataset. First, extrapolation from measured traffic flows to approximating 'average' traffic flows for each type of street is problematic, overstating traffic flow for low flow streets and understating traffic flow for high flow streets. Second, intersections at which traffic flows are known are not randomly distributed geographically, leaving some areas of San Francisco unmeasured. Traffic flow measurements are performed as deemed necessary by the Department of Parking and Traffic (DPT), usually because the intersections are considered either high volume or otherwise problematic (e.g. a location at which many motor vehicle collisions occur). The dataset is, nonetheless, viewed to be the best and most complete available, providing representative averages across some 85 intersections per census tract.

Population data were obtained from the 1990 Census (US Department of Commerce, 1992) for each of the 149 census tracts. Cross-street density was calculated using a Map-Basic subroutine that counts all the street intersections within a census tract (based on America.dbf Digital MapFiles, MapInfo, 1994). The census data files contained numbers of Blacks, Hispanics, Asians, and non-Hispanic whites, in addition to the populations of various age cohorts, number of males, marital status, and education by census tract. These values were converted into proportions using the total population of the census tract as the denominator. In addition, a median income variable was used, which was calculated by the Census Bureau for each census tract. Persons in three age cohorts were also counted (0–15, 16–29 years, and 55 years or older) and proportions were calculated using the total population in the census tract. Ethnic group variables were examined in preliminary analyses, found to be unrelated to rates of pedestrian injury, and so excluded from the final analyses.

The dependent measures were transformed to provide estimates of the densities of pedestrian injuries within the geographic units of the city. Each variable was transformed by dividing the length of the roadway in each census tract (e.g. numbers of pedestrian injury collisions per kilometer of roadway). Since pedestrian collisions occur exclusively on or near streets, traffic flow takes place upon these streets, and community populations use these routes to move from place-to-place within the community, this was assumed to be a natural metric for the examination of rates of these events. The same metric was also applied to the alcohol availability measures and two other environmental variables (i.e. numbers of cross-streets and population). This procedure provided estimates of the numbers of bars, restaurants and off-premise establishments per kilometer of roadway, the number of cross-streets per kilometer of roadway and total population per kilometer of roadway. Thus, it was assumed that for a given aggregate rate of traffic flow, greater availability of alcohol per unit roadway length, greater road network complexity per unit roadway length, and greater population per unit roadway length would be related to greater pedestrian collisions per unit roadway length. The roadway system itself is assumed to be the link between traffic flow, alcohol availability, and exposure to the risks of pedestrian injury collisions. Reasonably, if there are few or no roads in an area, there will be few or no pedestrian injury collisions, regardless of resident population. In rural areas, more wide ranging roadway systems and small populations imply a low pedestrian injury rate per unit roadway length. As suggested by Gruenewald et al. (1996), the use of roadway length as the denominator for these measures reflects the obvious fact that exposure to possible pedestrian injury, access

to alcohol, and the packing of roadways and people within urban areas take place along the roadway system[2]. A final logarithmic transformation of the dependent measures:

$$\ln[1 + (\text{pedestrian injuries})/(\text{roadway length})] \quad (3)$$

provided conditional normal distributions for analysis. This log-normal transform is appropriate for analyses of non-negative positively skewed rates and has been widely applied in geostatistical analyses of such outcome data (e.g. Scribner et al., 1994).

San Francisco County consists of 152 census tracts. Two census tracts are assigned to individual locations (prisons), and were removed from analysis because they had no roads. Another census tract is assigned to San Francisco Bay, which although it has a population, has no roads. During preliminary analyses two census tracts, those representing the Presidio and Golden Gate Park, were found to have extremely high leverage (i.e. observations taken on those units strongly skewed effects estimates from the models, Cooks distances exceeding 1.00, Cook and Weisberg, 1982; see also Gruenewald et al., 1996). The original observations for these areas were smoothed by averaging with observations from all adjacent census tracts. Prior to smoothing, these census tracts exhibited rather extreme characteristics. Each had a high traffic volume but very low population and roadway length (in 1990, the Presidio was a US Naval base with high vehicle traffic volume directly to and from the Golden Gate Bridge; Golden Gate Park is a large park with very low residential population, but very high vehicle and pedestrian traffic). An analysis of the Cook's distances of the residuals from preliminary analyses also revealed one other census tract as a high leverage observation, the Civic Center and performing arts area of the city. Here population densities were very small, but roadway length very large. In the final analyses, including those for the small sample of pedestrian injuries in which the police determined the pedestrian to have been drinking, no significant outliers or highly leveraged cases were detected.

Datasets were managed using Microsoft Excel and SPSS for Windows software packages. Data were aggregated by census tract using MapInfo GIS software. Pedestrian injuries were geocoded to the nearest street intersections, as reported in SWITRS data, and alcohol outlets were geocoded according to street address. MapInfo was used to calculate variables such as number of cross-streets and length of roadway. It was also used to create a connection matrix indicating the spatial relationships between census tracts, considering as adjacent only those census tracts connected by some portion of the roadway system.

All geostatistical analyses were performed using proprietary Spatial Statistical System software developed at Prevention Research Center (Ponicki and Gruenewald, 1998). The analysis procedure consisted of, first, an examination of the correlation matrix among all variables and, second, a spatial regression analysis relating the dependent to the independent variables. Examination of the correlation matrix for all models revealed little collinearity among the independent measures (Pearson's $r \leq 0.30$). The spatial analysis model is actually a regression model that has been corrected for the error associated with spatial autocorrelation (Eq. (2) above). For each model, an ordinary least squares (OLS) regression analysis was conducted to obtain starting values for a generalized least squares (GLS) procedure that estimated the effects of the independent measures with a simultaneous statistical correction for autocorrelated error (ρ). For both dependent measures (all pedestrian injuries and alcohol-related pedestrian injuries), the performance of each group of variables was first measured (alcohol availability, environment, demographics without age, and age), then the results from the full model reported. The coefficients from the models are interpretable in a similar way as linear regression coefficients; coefficients that are significantly different from zero are said to be linearly associated with the dependent measure.

3. Results

Stepped into the model one at a time, Table 1 presents the performance of each group of variables in predicting pedestrian injuries in the City of San Francisco. Columns one and two present the name of each group of variables and their contribution to the model (Rao's likelihood ratio Chi-Square, ΔG^2). Using the spatial analysis (GLS) procedure discussed above, columns three, four and five, present the effects estimates for the environmental measures of bar, restaurant and off-premise alcohol outlet densities (effects indicated by 'b (bars)', 'b (rest's)', and 'b (off-premise)'). Column 6 presents the estimate from each model of the degree of spatial autocorrelation using the GLS estimator ('GLS ρ'). Column 7 presents a similar diagnostic based upon residuals from the OLS analysis without correction for spatial autocorrelation ('OLS Moran coefficient'). As shown, the spatial autocorrela

[2] This approach to analyzing pedestrian injury rates is intended to reflect the process by which individuals come to be involved in these events. Thus, the greater packing of people about the roadway system is assumed to increase the exposure of people to traffic related mishaps. The greater availability of alcohol along the roadway system is assumed to increase the numbers of drinking pedestrians and drivers at risk of involvement in pedestrian injury collisions.

tions observed in every analysis were positive and quite substantial. Without correction, this failure of unit independence would have led to considerable Type I errors. That is, many of the observed statistical relationships would have been identified as 'significantly different from 0' when, in truth, no such 'significant' relationships existed.

With regard to all pedestrian injuries, each class of variable (availability, environment, demographics and age) provides a significantly better fit to these data. This indicates that each group of variables, each taken as a whole, helps predict pedestrian injury rates. In addition, two types of alcohol availability, bars and off-premise outlets, when considered alone, are associated with pedestrian injuries. However, the addition of the environmental variables reduces these apparent effects, and subsequent addition of demographic variables and age further diminishes these associations.

Table 2 shows the coefficients of the full model relating each of the independent measures to the dependent variable, all pedestrian injuries. The table presents the name of each variable group, the specific measure tested, its coefficient, the asymptotic t-statistic testing its association to the dependent measure, and the P-value for each test. Six variables had significant associations with pedestrian injuries. Population density and the proportion of males both had significantly positive associations; higher population density and a predominance of males within geographic units were associated with higher rates of pedestrian injuries. Persons aged 0–15 and higher education had significantly negative associations; greater proportions of children and better educated populations were associated with lower rates of pedestrian injuries. Average daily traffic flow had a positive association with rates of injury; greater traffic flow was related to greater pedestrian injury rates. Unemployment had a positive association with injury density; greater unemployment was related to greater pedestrian injury rates.

The analysis presented in Table 2 was repeated for the dependent measure: all injuries in pedestrian collisions in which the pedestrian was reported to have been drinking. These collisions included any pedestrian who had been drinking, regardless of whether the police reported an extent of impairment. This analysis was conducted to uncover specific relationships between alcohol availability and alcohol involvement in pedestrian injury collisions. Table 3 shows a significant relationship between bars per kilometer of roadway and had been drinking pedestrian collisions. This observation supports the expectation that increased outlet densities would be specifically related to increased alcohol-related pedestrian injuries.

4. Discussion

The results of this study demonstrate significant geographically based relationships between specific environmental and demographic characteristics of the City and County of San Francisco and pedestrian injuries. Injuries in pedestrian-involved collisions were most likely to occur in areas of the city with greater population density, with greater proportions of males, with lower proportions of children 0–15 years of age as residents, proportionately greater unemployment, and lower proportions of well educated residents (high school degree or better). In addition, injuries in pedestrian collisions were greater in areas of the city with greatest traffic flow and, in the case of injuries in which alcohol use by the pedestrian was implicated, where densities of bars were greatest. Specifically, the presence of a greater number of bars in a neighborhood was related to a greater rate of 'had been drinking' pedestrian injuries, regardless of whether the police reported an extent of obvious impairment.

The results of this study clearly demonstrate that geographically based studies may have significant problems with spatial autocorrelation. In this paper, an OLS regression model was initially used to estimate parameters and test the significance of relationships between variables. Then a Moran coefficient was used to test for the significance of spatial autocorrelated errors in the analyses and found to be significant in each case. The positive Moran coefficients in Table 1 indicate that Type I errors were more likely to result. For this reason, each analysis was again performed using a

Table 1
Geographic analysis results for pedestrian injuries in San Francisco by census tracts ($N = 149$)

Model	ΔG^2	b (bars)	b (rest's)	b (off-premise)	GLS ρ	OLS Moran coefficient
Constant	–	–	–	–	0.763[a]	0.519[a]
+Alcohol availability	41.323[a]	0.290[a]	0.062	0.268[a]	0.578[a]	0.230[a]
+Environment	11.463[a]	0.197	0.073	0.141	0.416[a]	0.143[a]
+Demographics without age	11.749[a]	0.133	0.076	0.097	0.448[a]	0.150[a]
+Age	9.752[a]	0.083	0.977	0.064	0.408[a]	0.135[a]

[a] P-value < 0.05.

Table 2
b Coefficients for full model in analysis of all injuries in pedestrian collisions

Type of variable	Variable	*b* coefficient	*t*-statistic	*P*-value
Alcohol availability	Bars per kilometer roadway	0.083	0.634	0.263
	Restaurants per kilometer roadway	0.077	1.555	0.060
	Off-premise outlets per kilometer roadway	0.064	0.525	0.300
Environment	Cross-streets per kilometer roadway	0.103	1.429	0.077
	Average daily traffic flow × 1000	0.042	1.691	0.045[a]
	Population per kilometer roadway × 1000	0.826	2.543	0.006[a]
Demographics: age	Persons age 0–15 (proportion)	−3.935	−2.056	0.020[a]
	Persons age 16–29 (proportion)	0.931	1.003	0.158
	Persons age 55 and up (proportion)	−0.880	−0.887	0.188
Demographics: other	Persons unemployed (proportion)	2.945	1.643	0.050[a]
	Never married persons (proportion)	−1.122	−1.141	0.127
	Median income × 10 000	−0.022	−0.317	0.376
	Males (proportion)	2.432	2.208	0.014[a]0
	High school graduate or higher (proportion)	−1.614	−2.262	0.012[a]

[a] $P \leq 0.05$.

regression model that provided a statistical correction for spatial autocorrelation. As shown in Table 1, with this correction, each additional set of explanatory variables improved the fit of the model. The positive Moran coefficient coupled with the systematic improvement in the fit of the model provides strong support for models that go beyond an examination of alcohol availability and injuries alone.

The interpretation of the individual and demographic effects observed in the study, as well as the suggestion of mechanisms by which certain population groups may experience higher rather than lower rates of pedestrian injuries, must proceed with caution. For example, lower education may be associated with work that takes place outside in the community, including a variety of occupations that require physical labor, thus exposing workers to more roadway hazards. Likewise, the positive relationship between unemployment and rates of pedestrian injury may be associated with a greater level of outdoor activity and exposure to traffic risks by individuals who are unemployed. While this kind of reasoning may be appealing, especially in a highly urbanized setting such as San Francisco, it is purely speculative. Support for such arguments must be based upon clearly articulated theory, explicit measurement of the postulated variables and appropriate causal analyses.

The interpretation of the expected environmental effects observed in the study is more intuitively compelling. For example, the positive relationships of population density and traffic flow to pedestrian injury rates suggests that a greater focus on regulating both pedestrian activities and other roadway use in areas of

Table 3
b Coefficients for full model in analysis of all injuries in pedestrian collisions in which pedestrian had been drinking

Type of variable	Variable	*b* coefficient	*t*-statistic	*P*-value
Alcohol availability	Bars per kilometer roadway	0.399	1.910	0.028[a]
	Restaurants per kilometer roadway	0.001	0.005	0.499
	Off-premise outlets per kilometer roadway	−0.049	−0.242	0.405
Environment	Cross-streets per kilometer roadway	0.151	1.412	0.079
	Average daily traffic flow × 1000	0.002	0.055	0.478
	Population per kilometer roadway × 1000	0.626	1.261	0.104
Demographics: age	Persons age 0–15 (proportion)	−3.822	−1.219	0.112
	Persons age 16–29 (proportion)	−0.106	−0.070	0.472
	Persons age 55 and up (proportion)	−1.000	−0.597	0.276
Demographics: other	Persons unemployed (proportion)	10.954	3.681	<0.001[a]
	Never married persons (proportion)	−0.103	−0.064	0.475
	Median income × 10 000	−0.131	−1.155	0.124
	Males (proportion)	1.102	0.630	0.189
	High school graduate or higher (proportion)	1.035	0.882	0.189

[a] $P \leq 0.05$.

the city where population and traffic flow are greatest may lead to a reduction in injuries. Similarly, the positive relationship of bar densities to pedestrian injury in 'had been drinking' collisions suggests that regulation of the availability of alcohol through neighborhood bars could have beneficial effects for the community at large. While it is feasible that investigating officers may be more likely to check the 'had been drinking box' when a bar is located near the collision site, the association of pedestrian injuries with bars suggests that pedestrians who had been drinking may be struck leaving or while spending time outside and around these establishments. It also suggests that pedestrian intoxication or impairment is a factor in causing these collisions. In both these cases, future research should elucidate in more detail the precise relationships between outlets and pedestrian collisions (e.g. estimating the proximity of one to the other). In any case, the results of the current research suggest that education and environmental prevention efforts intended to reduce rates of pedestrian injury should focus on aspects of traffic flow, neighborhood alcohol availability and raising community awareness about the risks associated with pedestrian alcohol impairment.

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Pedestrian risk decrease with pedestrian flow. A case study based on data from signalized intersections in Hamilton, Ontario

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Abstract

A unique database provided information on pedestrian accidents, intersection geometry and estimates of pedestrian and vehicle flows for the years 1983–1986 for approximately 300 signalized intersections in Hamilton, Ont., Canada. Pedestrian safety at semi-protected schemes, where left-turning vehicles face no opposing traffic but have potential conflicts with pedestrians, were compared with pedestrian safety at normal non-channelized signalized approaches, where right-turning vehicles have potential conflicts with pedestrians. Four different ways of estimating hourly flows for left- and right-turning vehicles were explored. Hourly flows were estimated for periods of 15 min, hours, two periods a day (a.m. and p.m.) and the 'daily' period (7 h). Parameter estimates were somewhat affected by the time period used for flow estimation. However, parameter estimates seem to be affected far more by the traffic pattern (left- or right-turning traffic), even though approaches were selected such that the situation for left- and right-turning turning traffic was similar (no opposing traffic, no advanced green or other separate phases and no channelization). Left-turning vehicles caused higher risks for pedestrians than right-turning vehicles. At low vehicular flows right turns and semi-protected left turns seemed to be equally safe for pedestrians. When risks for pedestrians were calculated as the expected number of reported pedestrian accidents per pedestrian, risk decreased with increasing pedestrian flows and increased with increasing vehicle flow. As risk decreases with increasing pedestrian flows, promoting walking will have a positive effect on pedestrian risk at signalized intersections. © 2002 Elsevier Science Ltd. All rights reserved.

Keywords: Model; Safety; Pedestrian

1. Background and purpose

The scope of this study was twofold: (a) to explore how safety for pedestrians at conflict with left- and right-turning vehicles is influenced by pedestrian and vehicle flows and (b) to explore how the models are influenced by the choice of different time period for estimating pedestrians and vehicle flows.

The same data base was also used to analyze how typical schemes for accommodating left-turning vehicles influence safety for pedestrians (Quaye et al., 1993).

2. The data

The data gathering part of the project was started by Almuina (1989). His work focused on pedestrian accidents and left-turning vehicles at signalized intersections. As part of his work he prepared an Accident Database and an Intersection Geometry Database for the approximately 300 signalized intersections in the Regional Municipality of Hamilton–Wentworth (Region) in south central Ontario. The majority of the intersections are located in the city of Hamilton in a typical North American grid network with many one-way streets.

To enhance the chances of success of finding a 'pure' relation between pedestrian accidents and pedestrian and vehicle flows, a set of signalized approaches similar in most respects except for traffic flows and accident history were selected. For accidents involving *right-*

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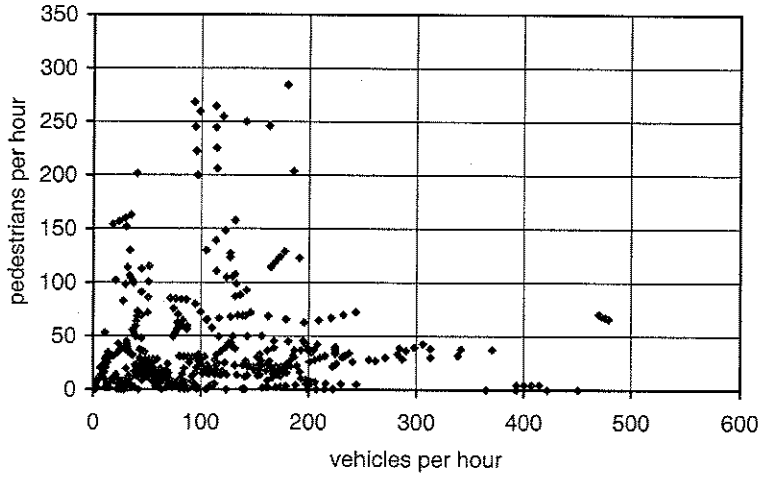

Fig. 1. Pair of flow estimates for the daily model for pedestrians and conflicting left-turning vehicles.

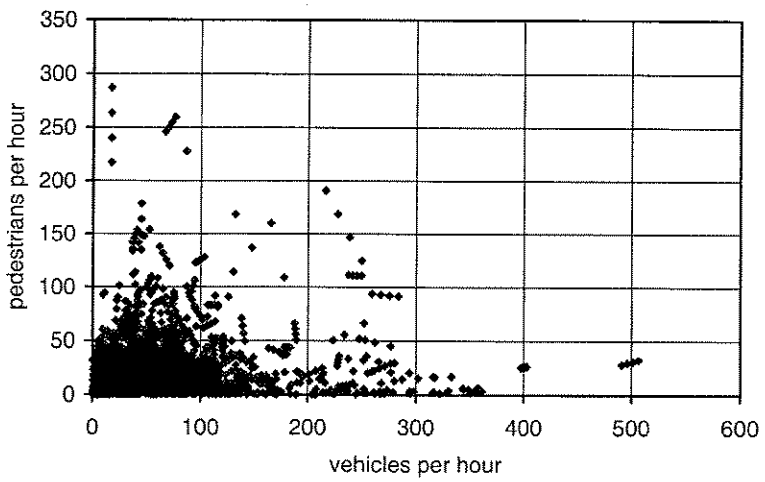

Fig. 2. Pair of flow estimates for the daily model for pedestrians and conflicting right-turning vehicles.

turning vehicles, data were collected for approaches which were not channelized, i.e. where there was no extra island to exclude right-turning traffic from signal control and allow them to yield to pedestrians. Altogether 749 approaches met the criteria for right-turning traffic.

For accidents involving *left-turning* vehicles, the criteria for selecting approaches were: no opposing traffic (so-called *semi-protected scheme*) and no advanced green or other separate phase for left-turning traffic.

Lack of opposing traffic in the approach could be due either to the missing leg in a three-way intersection, or to one-way traffic in the opposite approach leading away from the approach. Altogether 126 approaches met the criteria for left-turning traffic.

The decision as to which approaches fulfilled the criteria was based on information provided in the intersection geometry database and in the microfiches of the intersection layouts. Information about advanced green or other separate phases for left-turning traffic was obtained by interviewing the engineer in charge of the city of Hamilton (Hart Solomon).

The city of Hamilton provided stream counts of vehicles and pedestrians for 15-min periods for 1983–1986. Typically there was one or two counts per year at each intersection. Counts were conducted from 7 to 10 a.m. and from 2 to 6 p.m. Monday–Friday and reported in 15-min periods. From these counts hourly flows were estimated for each 15-min period for all Mondays–Fridays during the study period (Quaye et al., 1993). These estimates were used as a basis for calculating average hourly flows for 15-min, hourly, a.m./p.m. and daily periods of 7 h. Fig. 1 shows pairs of estimates for the daily model of pedestrian flows and conflicting left-turning vehicles (on the cross-walk). Fig. 2 shows pairs of estimates of pedestrian flows and conflicting right-turning vehicles.

As the available accident data were for 1977–1986, flow estimates had to be extrapolated for the years 1977–1982 to correspond to the accident data. However, as these extrapolated estimates did not appear reliable, only the analysis of data from 1983 to 1986 is described here. To correspond to the available traffic count information, accidents should occur between 7 and 10 a.m. and between 2 and 6 p.m. Monday–Friday, and involve left-turning or right-turning vehicles and a pedestrian. Thus 63 accidents from 1977 to 1982 and 66 accidents from 1983 to 1986 remained for the analysis. As noted above, the analysis was restricted to data from 1983 to 1986, leaving a total of 66 accidents, 27 of them between left-turning vehicles and pedestrians and 39 between right-turning vehicles and pedestrians.

3. Method

For models with left-turning vehicles, accidents between pedestrians on the conflicting cross-walk and left-turning vehicles were related to corresponding vehicle and pedestrian flows. For models with right-turning vehicles, accidents between pedestrians on the conflicting cross-walk and right-turning vehicles were also related to corresponding vehicle and pedestrian flows.

1. Average daily flow for each year, *daily model*;
2. Average hourly flows during a.m. and p.m. periods for each year, i.e. 7–10 a.m. and 2–6 p.m. for 1983, 1984 etc., *a.m./p.m. model*;
3. Average hourly flows for each hour and year, i.e. 7–8, 1983, 8–9, 1983, etc., *hourly model* and
4. Average hourly flows for each 15-min period and year, i.e. 7–7:15, 1983, 7:15–7:30, 1983, etc., *15-min model*.

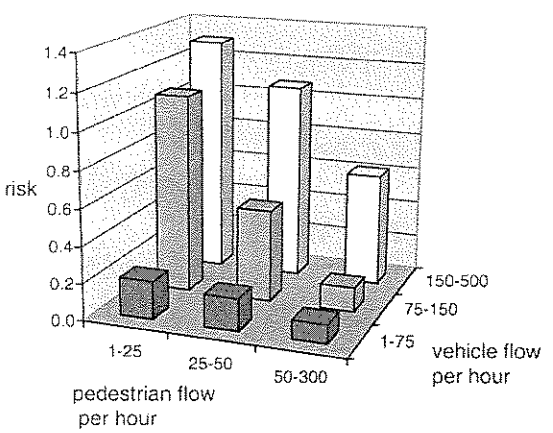

Fig. 3. Pedestrian risks estimated as police-reported accidents per hundred thousand pedestrians for various pedestrian and vehicle flows.

Estimates of average hourly flows were used for a minimum period of 15 min. Flow fluctuates between and within each cycle of a traffic signal system. Flows are systematically higher at the start of the green period. However, the time of the accident related to the start of the green period was not known, therefore it was not possible to study how this influences the safety of a pedestrian.

On the basis of exploratory analysis, one can suggest functional forms for expressions that fit the observations. Experience gained from previous work (Hauer et al., 1989) suggested that it could be reasonable to use the following form of the model:

$$x_i = b_0 F_1^{b_1} F_2^{b_2} + e_i = \hat{E}\{m\} + e_i \quad (1)$$

where for each case i, x_i is the observed number of accidents per unit of time; $\hat{E}\{m\}$ is the estimated number of accidents per unit of time for an 'average' intersection with flow F_1 and F_2; F_1 is the vehicle flow per hour (right-turning or left-turning); F_2 is the pedestrian flow per hour and e_i is the 'error' variable, the residual.

To reduce the effect of random variation the exploratory data analysis was done combining (adding) data for left- and right-turning traffic and calculating pedestrian risks as police reported accidents per hundred thousand pedestrians for various pedestrian and vehicle flows. Fig. 3 suggests that risks are high for pedestrian flows below 25 pedestrians per hour, unless vehicle flows are below 75 vehicles per hour.

The usual approach to the analysis is by multiple regression. To estimate parameters the functions in Eq. (1) were transformed with logarithmic values. The model, expressed in traditional form, can then be written:

$$y_i = \ln x_i = b_0 + b_1 \ln F_1 + b_2 \ln F_2 + e_i = m_i + e_i \quad (2)$$

Coefficients were estimated using the Generalized Linear Interactive Modeling (GLIM) software package (Aitkin et al., 1986) with which it is possible to choose an appropriate error distribution. In order to make the right choice it is necessary to understand the conceptual framework, which is discussed below.

Let the safety of a specific intersection be denoted m_i. Imagine a population of intersections that all have the *same traffic flows*. In this imaginary population, the m_is would still vary from intersection to intersection because, although flows are identical, they involve different drivers in different cities, and so forth. Thus one can speak of the expected value or mean of the ms ($E\{m\}$) in this imaginary population of intersections with *identical* traffic flows. This mean of the ms is what describes the safety of a representative or an 'average' intersection for this imaginary population of intersections with a specific traffic flow. Similarly, one can speak of the variance of the ms.

A model was fitted to accident data, $E\{m\}$ as a function of traffic flow. This describes the m for some 'average' or representative intersection and how it varies with traffic flow. However, the data used for estimation were not for average intersections. Each accident count was for one specific intersection from the imaginary population of intersections with the same flows. It follows that the accident count must be considered as a Poisson random variable originating from a site with $E\{m_i\}$ as its expected value and that this m, in turn, is one of a distribution of ms characterized by $E\{m\}$ and $\mathrm{Var}\{m\}$.

Thus, the distribution of accident counts around the $E\{m\}$ is one family of 'compound Poisson distributions.' In the special case where the distribution of ms in these imaginary populations can be described by a gamma probability density function, the distribution of accident counts around the $E\{m\}$ must be taken as a negative binomial, or in other words the error distribution e_i is a negative binomial (e.g. Leden, 1993).

The variance of accident counts s^2 is given by $\mathrm{Var}\{m\} + E\{m\}$ or

$$\hat{\mathrm{Var}}\{m\} = s^2 - x \tag{3}$$

Note that the relationships are not affected by transformation to a logarithmic scale according to Eq. (2). In principle, these relationships can be used to estimate $\mathrm{Var}\{m\}$ for different subsets of the data with almost the same value of $\hat{E}\{m\}$. ($\hat{\mathrm{Var}}\{y_i\}$ can be estimated as $\Sigma e_i^2/n$.) As there was not enough data for this, results from work already done were used (Hauer et al. (1991)). Hauer and Persaud (1987) found that there is often a relationship between $E\{m\}$ and $\mathrm{Var}\{m\}$ and that it can usually be adequately represented by:

$$\mathrm{Var}\{m\} = (E\{m\})^2/k \tag{4}$$

where k is the first parameter of the negative binomial distribution.

This means that the same relationship is valid for subsets of data as for data for the whole Gamma distribution. From Eq. (4) we get for the whole distribution:

$$\mathrm{Var}\{m\} = k/\lambda^2 = k^2/(\lambda^2 k) = (E\{m\})^2/k$$

Hauer et al. (1991) confirmed the validity of this empirical finding for many groups of their database using Eq. (3).

Two methods can be used to estimate k: the method of moments and the maximum likelihood method. The latter was used. However, some examples calculated by both methods indicate that the two methods give similar results.

Maycock and Maher (1988) and Maher (1989) suggest the method of moments to estimate k. As in Eq. (2), e_i is the residual $(y_i - m_i)$, then

$$E\{e^2\} = m_i + m_i^2/k$$

and an estimate of k is given by:

$$k = \sum \hat{m}_i^2 / \sum (e^2 - \hat{m}_i) \tag{5}$$

Hauer et al. (1991) describe the maximum likelihood method of estimating k. The iterative process of estimating $\hat{\mathrm{Var}}\{m\}$ begins by estimating provisional model parameters on the assumption that $\hat{\mathrm{Var}}\{m\} = 0$ or from some other starting guess. Once we had provisional parameter estimates, a value of k that maximizes the likelihood (L) of the data was estimated as follows: As shown above, the accident counts can be assumed to be distributed as a negative binomial; the parameter a for the negative binomial model can be expressed as a function of k and $E\{m_i\}$ using $E\{m_i\} = b/a$ and $\mathrm{Var}\{m_i\} = b/a^2 = (E\{m_i\})^2/k$. Thus the probability of an accident count x_i for case number i can be written:

$$p(x_i) = [a/(a+1)]^k \; [k(k+1)\ldots(k+x_i-1)/x_i!] \times [(a+1)^{x_i}] =$$

$$[k/E\{m_i\}]^k \; [k(k+1)\ldots(k+x_i-1)] \times /[x_i! \; (k/E\{m_i\}+1)^{x_i+k}]$$

The likelihood function L describes the probability of having the actual outcome of accident counts $x_1,\ldots, x_i,\ldots x_n$. If events are independent this probability can be calculated as $\Pi p(x_i)$. To facilitate calculation, $\ln L$ is calculated instead of L, thus:

$$\begin{aligned} \ln L &= \ln \Pi p(x_i) \\ &= k[\Sigma \ln (k/E\{m_i\})] \\ &\quad + \Sigma[\ln (k) + \ln (k+1) + \ldots + \ln (k+x_i-1)] \\ &\quad - \Sigma(x_i + k) \ln(1 + k/E\{m_i\}) + \text{constant}^1 \end{aligned} \tag{6}$$

Since estimates for $E\{m_i\}$ were provided, it was easy to find the value of k which maximizes $\ln L$ (and L) by calculating $\ln L$ for different values of k. This value of k was then used to calculate $\hat{\mathrm{Var}}\{m\}$ from Eq. (4). The provisional error structure was revised, and model parameters were estimated anew. The process converges in two or three iterations.

As the number of accidents was small, the estimates of k were very uncertain, and in some cases it was not even possible to calculate an estimate of k which maximizes the likelihood. However, the estimates of the model parameters were not very sensitive to changes in k.

Four different ways of estimating hourly pedestrian and conflicting vehicle flows on each cross-walk were explored.

[1] Not dependent on k.

Table 1
Parameters for estimating expected number of police-reported accidents per day between left-turning vehicles and pedestrians

Flow period	$\hat{b}_0$	$\hat{b}_1$	$\hat{b}_2$	$\hat{k}$
1. Day	2.62×10^{-7}	1.19	0.331	2.2
2. a.m./p.m.	$2\times4.85\times10^{-8}$	1.37	0.346	*
3. Hour	$7\times1.82\times10^{-8}$	1.32	0.338	0.4
4. 15 min	$28\times3.61\times10^{-9}$	1.35	0.368	*

* Insufficient data to estimate k.

Table 2
Parameters for estimating expected number of police-reported accidents per day between right-turning vehicles and pedestrians

Flow period	$\hat{b}_0$	$\hat{b}_1$	$\hat{b}_2$	$\hat{k}$
1. Day	4.19×10^{-7}	0.864	0.475	*
3. a.m./p.m.	$2\times1.19\times10^{-7}$	0.919	0.570	*
4. Hour	$7\times4.08\times10^{-8}$	0.913	0.514	*
5. 15 min	$28\times2.43\times10^{-8}$	0.864	0.321	*

* Insufficient data to estimate k.

4. Results

In all the models estimated, the traffic flows were expressed as vehicles or pedestrians per hour. The dependent variable in each model was based on the number of police-reported accidents occurring in the corresponding time periods[2] (e.g. for the daily model the number of police-reported accidents per day during study hours 7–10 a.m. and 2–6 p.m. was used, etc.). The parameter estimates obtained after fitting the eight models using Eq. (7) and the Generalized Linear Interactive Modeling (GLIM) software package are given in Tables 1 and 2.

$$\hat{E}\{m\} = b_0 F_1^{b_1} F_2^{b_2} \tag{7}$$

where m is the expected number of accidents per unit of time at a certain intersection with an hourly right- or left-turning vehicular flow F_1 and hourly pedestrian flow F_2, $\hat{E}\{m\}$ is the estimated number of accidents per unit of time at a certain intersection and b_0, b_1 and b_2 are parameters to be estimated.

In Fig. 4, the expected number of police-reported pedestrian accidents per day is estimated for a pedestrian flow F_2 of 50 pedestrians per hour for various vehicle flows. Due to the small number of accidents the standard deviation, estimated by the formula $E\{m\}/k^{1/2}$, is relatively great. However it is likely that the expected number of pedestrian accidents per day ($E\{m\}$) is higher for left-turning than for right-turning vehicles (for the specified pedestrian flow).

[2] Each flow estimate corresponds to 5×52 periods (one for each weekday of a year).

It should be noted that the estimate from the daily model pertains to information aggregated over two a.m. or p.m. periods, 7 h of the day (specifically: 7–10 a.m. and 2–6 p.m.), or 28 15-min periods. Ideally, one would expect that multiplying the 15-min estimate of $E\{m\}$ by 28, the hourly estimate by seven or the a.m./p.m. estimate by two should yield the daily estimate.

In Figs. 4–7, the curves labeled 1 give the estimates of $E\{m\}$ based on the daily model, for various values of left- or right-turning vehicular flow F_1, while curves 2, 3 and 4 are daily estimates obtained from the a.m./p.m., hourly and 15-min models, respectively, for the same traffic flow combinations.

If risks for pedestrians are calculated as the expected number of reported pedestrian accidents per pedestrian, i.e. Eq. (7) is divided by $7F_2$ (daily pedestrian flow[3]), the risks decrease with increasing pedestrian flow. Fig. 5 shows estimates for $F_1 = 50$ vehicles per hour and Fig. 6 for 500 vehicles per hour. For small vehicle flows ($F_1 = 50$ vehicles per hour), risk differences vanish between left- and right-turning models.

If risks for pedestrians are calculated as the expected number of reported pedestrian accidents per pedestrian, the risks increase with increasing vehicle flow, as seen in Fig. 7.

It is evident from Figs. 4–7 that estimates from the four different models give similar results. Quaye et al. (1993) conclude in their study concerning the effect of semi-protected (where left-turning vehicles face no opposing traffic but conflict with pedestrians) versus permissive schemes (where left-turning vehicles have to find suitable gaps in the opposing traffic) on the safety of pedestrians that it is not statistically incorrect to use any of the three models: 15-min, hourly or daily model, to explore the safety of an intersection over a time period other than that used in its estimation.

5. Summary and discussion

A unique database provided pedestrian accidents and estimates of pedestrian and vehicle flows for the years 1983–1986 for approximately 300 signalized intersections in Hamilton, Ont., Canada. Pedestrian safety at semi-protected schemes, where left-turning vehicles face no opposing traffic but have potential conflicts with pedestrians, were compared with pedestrian safety at normal non-channelized signalized approaches, where right-turning vehicles have potential conflicts with pedestrians.

Four different ways of estimating hourly flows for left- and right-turning vehicles by fitting daily, a.m./

[3] Seven study hours per day.

p.m., hourly and 15-min models to the data were explored. Parameter estimates were affected by the time period used for flow estimation. However, parameter estimates seem to be affected much more by the traffic pattern (left- or right-turning traffic), even though approaches were selected such that the situation for left- and right-turning traffic was similar (no opposing traffic, no advanced green or other separate phases and no channelization). At low vehicular flows, right turns and semi-protected left turns tend to be equally safe for pedestrians, but right turns are safer for pedestrians than semi-protected left turns (where left turning vehicles have to find suitable gaps in the opposing traffic) at high vehicular flows.

If risks for pedestrians are calculated as the expected number of reported pedestrian accidents per pedestrian, the risk decreases with increasing pedestrian flows. One explanation could be increased driver alertness with increasing pedestrian flow. As the risk decreases with increasing pedestrian flows, promoting walking will

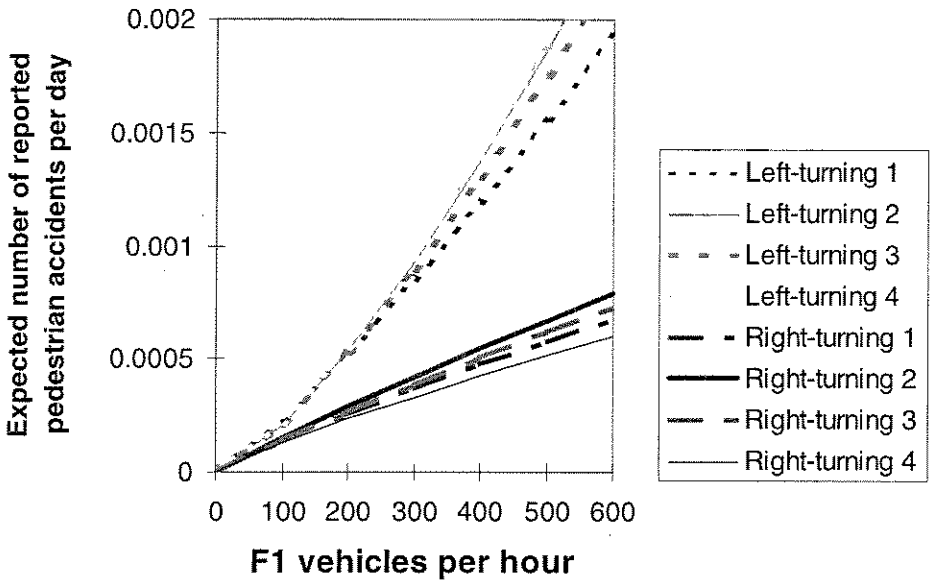

Fig. 4. Estimates of $E\{m\}$ for $F_2 = 50$ pedestrians per hour from the daily (1), a.m./p.m. (2), hourly (3) and 15-min (4) models for left- and right-turning vehicles.

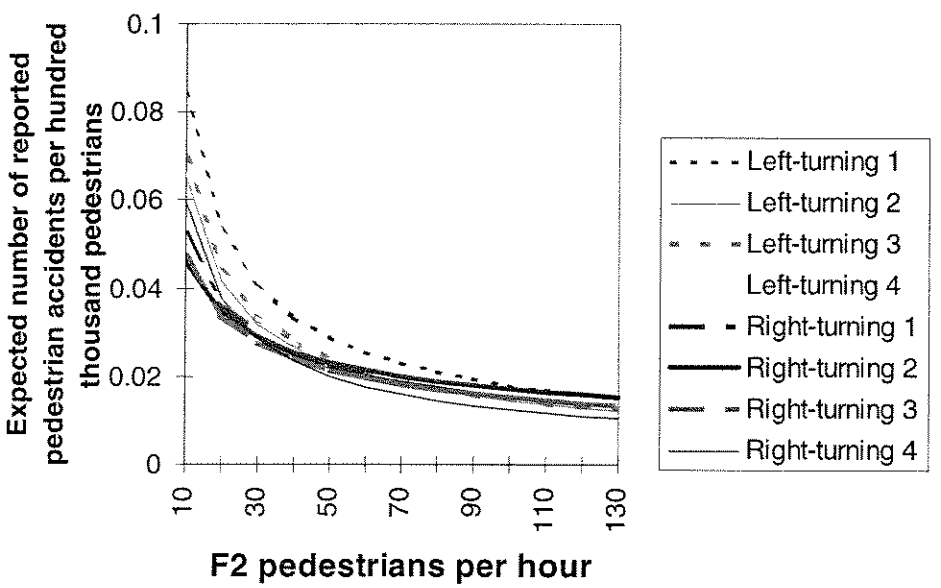

Fig. 5. Estimates of expected number of reported pedestrian accidents per day for $F_1 = 50$ vehicles per hour from daily (1), a.m./p.m. (2), hourly (3) and 15-min (4) models for left- and right-turning vehicles.

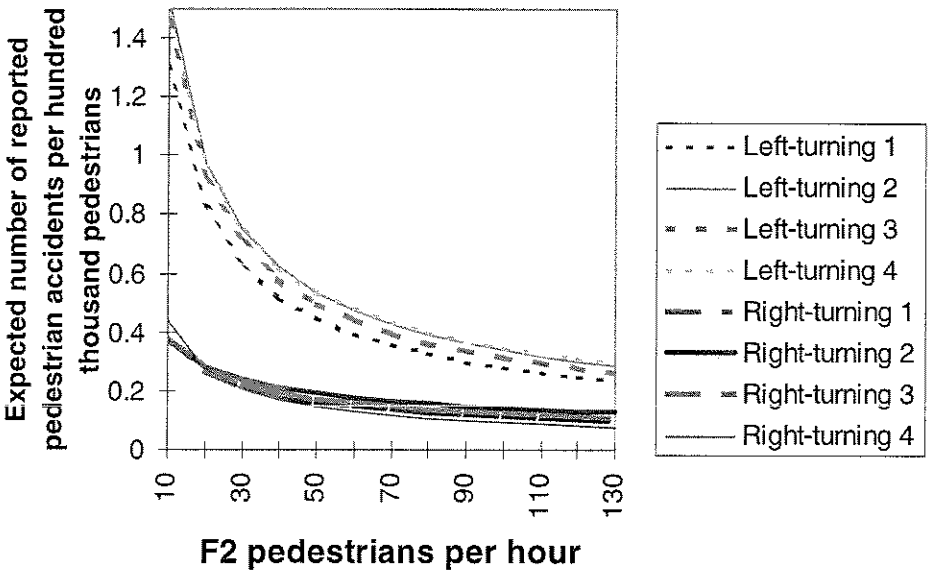

Fig. 6. Estimates of expected number of reported pedestrian accidents per pedestrian for $F_1 = 500$ vehicles per hour from the daily (1), a.m./p.m. (2), hourly (3) and 15-min (4) models for left- and right-turning vehicles.

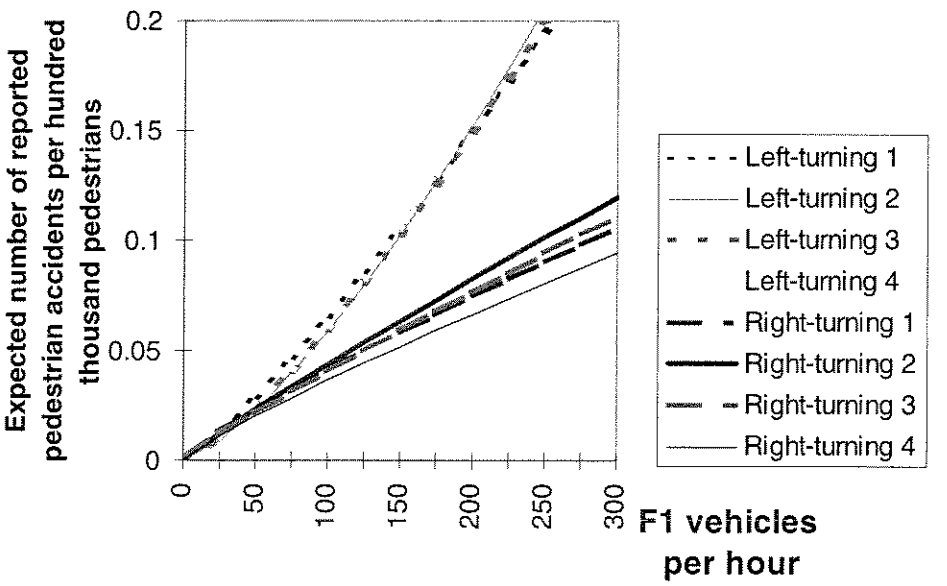

Fig. 7. Estimates of expected number of reported pedestrian accidents per pedestrian for $F_2 = 50$ pedestrians per hour from the daily (1), a.m./p.m. (2), hourly (3) and 15-min (4) models for left- and right-turning vehicles.

have a positive effect on pedestrian risk at signalized intersections. However, an increased pedestrian flow might lead to more pedestrian accidents if promotion is not accompanied by appropriate safety measures, such as speed-reducing devices and increased surveillance of red light running and walking.

Ekman (1996) found for 95 non-signalized intersections in Malmö and Lund in Sweden that the rate of pedestrian conflicts per pedestrian was not influenced by pedestrian flow. According to Ekman this could be interpreted as follows: "The individual pedestrian does not seem to benefit from the presence of other pedestrians. Another interpretation is that the vehicle drivers do expect pedestrians (at least if the pedestrian flow exceeds 30 pedestrians per hour)." Ekman found that the rate of bicycle conflicts per bicyclist decreases with increasing bicycle flow and concluded that the level of bicycle flow is much more important for bicycle risk than the level of car exposure.

Ekman also found (for the 95 non-signalized intersections) that if risks for pedestrians are calculated as the expected number of reported pedestrian accidents or

conflicts per pedestrian, the risk increases with increased vehicle flow, i.e. the results are similar to those in Fig. 7.

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The Role of the Physical and Traffic Environment in Child Pedestrian Injuries

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ABSTRACT. *Objective.* To identify environmental risk factors on residential streets for pediatric pedestrian injuries.

Method. The sample consisted of 39 Latino children 0 to 14 years of age injured as pedestrians on a street in the same block as their home and 62 randomly selected neighborhood control subjects matched to the case by city, age or year of birth, ethnicity, and gender. The cases were identified from a population-based hospital and coroner's office surveillance system established in north-central Orange County, CA. Neighborhood assessments were performed from 3:45 PM to 5 PM, a fairly active time for young pedestrians. The cases were compared with the controls using conditional logistic regressions; in this study design, the odds ratios were interpreted as estimates of the incidence rate ratios.

Results. Children living in a multifamily residence had an incidence of injury greater than that of children living in single-family residence on a single lot (odds ratio [OR] 3.1, 95% confidence interval [CI] 1.3–7.6). The ORs in the highest category were several times those in the lowest category for both parked vehicles (OR 9.6, 95% CI 2.6–36) and total number of pedestrians observed (OR 4.7, 95% CI 1.4–16). Vehicle parking, total pedestrians, vehicular traffic volume, and speed were examined in a multivariate model. The association of vehicles parked on the street with pedestrian injury risk remained significant. Unlike the crude results, progressively greater vehicular speed was associated with a marked increase in risk. Progressively higher vehicular traffic volume was associated with a progressively lower adjusted OR.

Conclusion. The results of this analysis would indicate that residential streets with a high proportion of multifamily residences, over 50% of the curb occupied with parked vehicles, and a large number of pedestrians observed in unenclosed areas should receive high priority for intervention programs to reduce pediatric pedestrian injuries. The analysis suggests that on these streets, measures to reduce the amount of street parking (thus increasing visibility) and reductions in vehicular speed should be considered to decrease pedestrian injuries.

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Pedestrian injuries are a leading cause of traumatic death for children younger than 10 years old in the United States. Pedestrian injuries, which are more severe and have a higher case-fatality rate than other types of motor vehicle-related injuries, resulted in 1102 deaths to children in 1990.[1–3] Police reports have been used to produce a national estimate of approximately 51 000 nonfatal injuries annually.[1] However, this may be an underestimate, due to underreporting by police of those events that occur in nontraffic locations, eg, driveways and on private property.[4,5] Although marked decreases in motor vehicle-related injuries and deaths have been realized in the last decade, the identification of risk factors and the development of effective measures for reduction of pedestrian injuries remain an area requiring further investigation.

Certain populations have been found to be at high risk for pedestrian injury. Pedestrian injury death rates for non-white children are 1.5 times the rates for white children.[1] In New Mexico, Native American children had a death rate 2.5 times that of other ethnic/racial groups.[6] Several studies using police data have found the highest rates of pedestrian injury to be in low-income minority residential areas.[7,8] In southern California, a population-based surveillance study of hospitalized and fatally injured children found the rate of pedestrian injury for Latino children to be 2.05 times that of non-Hispanic white children when controlled by census block group.[9]

Most of the pedestrian motor vehicle collisions involving children occur on residential streets at midblock locations.[10–13] Rivara and Barber[7] found that more than half of the pedestrian injuries were not at intersections. A large proportion of these injuries occur within a short distance of the child's residence, frequently when the child darts into the street during play.[12–18]

Several environmental factors have been identified as risk factors for pediatric pedestrian injuries in a number of studies, using different methodologies, eg, police reports, surveillance systems, and controlled studies of cases as well as sites. Vehicle volume and number of parked vehicles on the streets are associated with an increase in the risk of pedestrian events.[12,14,19] Mueller et al[14] found an increased risk of pedestrian injury with higher posted speeds.

However, Roberts et al[12] found that the middle range of vehicle speed (40–49 km/h) had the highest risk, probably because of less exposure of children to streets with high speeds, ie, less crossing.[12] In the same report, a steady increase in odds ratio was associated with increasing traffic volume. Mueller et al[14] reported an increased risk with more than two travel lanes on the road. Both the number of parked vehicles and the proportion of the curb with parked vehicles have consistently been found to be risk factors for pedestrian injury and are frequently cited as factors in descriptions of child pedestrian injury.[12,15,19]

Population density of children (children/acre), household crowding, housing density, and multifamily dwellings have also been identified as risk factors for pediatric pedestrian injuries.[7,8,14,17] Absence of play areas for children has been identified as a risk factor; but, absence of a fence around the home was not associated with increased risk of pedestrian injury.[14]

The purpose of this study was to identify environmental risk factors on residential neighborhood streets for pediatric pedestrian injuries, using a case-control study of Latino children in southern California. The focus of this study was the street environment in front of children's homes, a common location for childhood pedestrian injuries. The sidewalk, parkway, and street in front of children's homes can serve as an extension of a family's living space and the child's play area. Characteristics of this environment that are associated with childhood pedestrian injuries may be useful both to identify streets for intervention and to suggest environmental modifications that may reduce the risk of childhood pedestrian injuries.

METHODS

Cases were identified from a population-based hospital and coroner's office surveillance system established in north-central Orange County, CA to identify children younger than 15 years old who sustained injuries resulting in hospitalization or death. The study area consisted of seven contiguous cities (Santa Ana, Anaheim, Fountain Valley, Garden Grove, Orange, Villa Park, and Tustin), and one census designed place (Tustin Foothills). Adjacent unincorporated areas with mail service from post offices in the seven cities were included.

Pedestrian cases were defined as children 0 to 14 years old, hospitalized as a result of an injury caused by conflict with a motor vehicle from July 1, 1991 through June 30, 1993. Children using a pedestrian conveyance (such as roller skates or a skateboard) or a tricycle (but not a bicycle) were included. A parent or guardian of the injured child was contacted and informed consent was sought for assessments of the injury location and the injured child's neighborhood. In addition, an interview, approximately 1 hour in length, was conducted with the parent or guardian in the hospital or patient's home. (The interview data were not used in this analysis).

Because the pedestrian injury rate for Latino children was over twice that of non-Latino white children (controlled by census block group), the case-control study of pedestrian injuries was designed to only include Latino children.[9] Latino children were defined as children with one or two parents who identified themselves as Hispanic or Latino.

One control was obtained for each Latino case. A second control was obtained if an appropriate child could be identified within 1 month of the injury event. Controls were required to have one or two Latino parents, and were matched to the case by city, year of age or year of birth, and gender. From the city where the case resided, a census tract was randomly selected using a list of census tracts weighted by the number of Latino residents. City blocks were randomly selected and a starting residence was randomly selected for each block. A bilingual field worker began at the designated residence on the first block and proceeded clockwise around the block until a control of the correct age or birth year and gender was obtained. The field worker returned to residences where there was no answer, or no responsible adult present. If necessary, additional blocks were canvassed. If no control was found after 95 residences were canvassed, another census tract was selected. If an appropriate control was found, informed consent was sought for an assessment of the neighborhood and an interview, which was conducted with the parent or guardian.

For this analysis, Latino children were selected if they were injured as pedestrians in the street in the same block as their homes. Data on environmental factors were compared with data obtained on the neighborhood environments of matched control subjects. Seven non-Latino children injured as pedestrians detected in the surveillance study met the selection criteria for the sample for this study, but could not be included in the analysis because no appropriate controls were obtained. However, they were not significantly different from the Latino cases for any of the variables examined in this analysis.

Environmental Assessment

For both pedestrian cases and controls, neighborhood environmental assessments were conducted Monday through Thursday between 3:45 and 5:00 PM. These days and hours were chosen to represent overall conditions in the neighborhood, and to provide safe, daylight conditions for the field workers. Environmental assessments were conducted a median of 6 days after the injury (97% within 30 days) for the case, and a median of 19 days after the case's injury (73% within 30 days) for controls.

During a pilot study, four field workers were trained to conduct neighborhood assessments and the methods were standardized. To improve the estimation of age, the field workers asked children their ages during the pilot study.

The field workers worked in teams of two during the data collection. The neighborhood environmental assessment characterized the child's residence, including play areas; land use; proximity to roadways and physical attributes of those roadways; vehicle volume, speed and parking; and the number of pedestrians present and their ages and movements. Multiple family residence was defined as any residence with more than one housing unit on one lot, including apartments, condominiums, duplexes, and two houses on a single lot. A play area was defined as any grassy or open area, including a courtyard.

Pedestrian and vehicular traffic, and parked vehicles were assessed on the street of the residence within 250 feet of the residence, unless the street ended in a shorter distance. Distances were measured with a 12-inch circumference measuring wheel (Measure Master 12, Rolotape Corporation, Spokane, WA). Counts of vehicular traffic, pedestrians present, specific types of pedestrians, and pedestrian behavior were made over a 15-minute period. All pedestrians that were easily visible and not within enclosed areas were counted, whether or not they entered the street. The age of pedestrians was estimated from their appearance.

Pedestrian counts and counts of parked vehicles made over distances of less than 500 feet were multiplied by the ratio of 500 to the observation distance in feet. Although all pedestrian and vehicular traffic counts and speed measurements were made between 3:45 and 5:00 PM, several variables had significant trends with time. These measurements were adjusted to remove the effect of time. The results of nonlinear regression using an exponential function of starting time were used to correct these measurements to 3:45 PM, the modal starting time for the measurements. Counts were rounded to the nearest unit after correction.

Pedestrian counts are presented in three ranges ≤14 persons per 15 minutes, 15 to 29 persons per 15 minutes, and ≥30 persons per 15 minutes, which correspond to <1, 1 to 1.9, and 2 or more persons per minute. The 15-minute counts were not converted to hourly rates because they included many individuals who were visible for an extended period of time, so that hourly counts of pedestrians could not be accurately projected from 15-minute counts.

Counts of vehicular traffic were converted to counts per hour.

Vehicular traffic is presented as <50 vehicles per hour, 50 to 99 vehicles per hour, 100 to 249 vehicles per hour, and ≥250 vehicles per hour. The first three categories combined correspond to Roberts'[12] smallest category. These categories represent smaller traffic volumes than the categories used by others[12,13] because this study was limited to those events occurring in front of the child's home, which included very few streets with large traffic volumes.

The number of vehicles parked on the street was presented as 0 to 11 vehicles per 500 feet, 12 to 17 vehicles per 500 feet, and ≥18 vehicles per 500 feet. These categories correspond approximately to 0% to 49%, 50% to 74%, and 75% to 100% of the available curb occupied by parked vehicles.

Vehicle travel times over a fixed distance were used to calculate speed. A distance of 200 feet was used if possible. If the vehicle stream stopped within 200 feet of the residence, vehicles were timed from the point where the vehicles stopped to a point in front of the residence. If there were multiple vehicle paths, vehicles were timed over the common vehicle path. If the common vehicle path was less than 50 feet, vehicles were timed over the most frequent vehicle path. If there was no vehicle path of at least 50 feet without a stop, vehicles were not timed in that direction. Six lead or lone vehicles in each direction were timed with a stop watch, unless that number could not be obtained by 6 PM. Vehicle speed was calculated from the measured distance and time. The mean speed for each direction was weighted by the traffic in that direction to obtain a final estimate of speed.

Vehicle speed is presented in three ranges; <25 miles per hour, 25 to 29.9 miles per hour, and ≥30 miles per hour. These are the same ranges used by Mueller and colleagues,[14] and are very similar to the metric system ranges used by Roberts et al.[12] If there was no vehicle path of at least 50 feet in either direction, it was assumed that the vehicles were moving slowly, and the vehicle speed was assigned to <25 miles per hour.

Width of roadway was categorized as two lanes <38 feet, two lanes ≥38 feet, and three or more lanes. Currently, new local residential streets must be 36 feet wide, and new residential collector streets, which also carry traffic from adjacent residential areas, must be 40 feet wide. These two widths were the widths most frequently observed in our assessments. Thus, two lane streets were divided into those less than 38 feet in width and those 38 feet or wider. Streets with three or more lanes comprised a third category.

To determine how well neighborhood environmental measurements represented the conditions at the time and location of injury, they were compared with measurements made at the location of the injury on the same day of the week and the same time as the injury, 1 week after the injury. These comparisons were restricted to injuries that occurred on the street, rather than a driveway, alley, or parking lot. Pearson correlation coefficients were calculated. These coefficients reflect any differences between the street in front of the home and the injury location, as well as difference in traffic conditions between weekday afternoons and the day of week and time of the injury.

Analysis

The effects of the various environmental factors on the risk of pedestrian injury were estimated using conditional logistic regression in the Egret interactive modeling package (Statistics and Epidemiology Research Corporation, Seattle, WA). Because incident cases were used and the controls were identified contemporaneously, the odds ratios may be interpreted as estimates of the incidence rate ratios.[20]

Odds ratios and confidence intervals were calculated comparing each range of each continuous variable to the lowest range. P values for each variable were obtained by comparing the deviance score for the statistical model that includes that variable to the deviance score without that variable.

RESULTS

A total of 112 Latino children were injured as pedestrians; 5 were fatally injured. Neighborhood environmental assessments were obtained for 104 (97%) of the 107 nonfatally injured children. Seventy-four of these injuries occurred on the street, and 30 occurred in a driveway, alley, or parking lot.

Neighborhood environmental measurements were compared with measurements made at the scene of the injury for the 74 children who were injured in a street (Table 1). Only for injuries occurring in the same block (and on the same street) as the child's home were the two sets of measurements significantly correlated. For injuries occurring at a greater distance, the correlation coefficients were neither significant nor consistently positive. Thirteen of 14 injuries reported as occurring in the next block from home occurred on a different street from the residence, which may explain the low correlation coefficients for this group of injuries.

The analysis was restricted to the 39 pedestrian injuries occurring in the same block as the child's home because only these measurements were closely related to the injury site measurements. The environmental assessments for the homes of these children were compared with environmental assessments obtained in front of the homes of 62 matched control subjects.

The characteristics of the cases are shown in Table 2. Twenty-two (56%) of the children were 1 to 4 years old and 14 (41%) were 5 to 9 years old. The only child in the age category of 10 to 14 was 10 years old. Twenty-eight (72%) of the children were boys. Twenty-six (66%) of the injuries occurred from 3:00 to 8:59 PM, and 19 (49%) occurred on a Friday or Saturday. All of the injuries occurred midblock.

Residence and play area variables are shown in Table 3. Children living in a multiple family residence had an incidence of injury more than three times that of children living in single family residence on a single lot. (Forty [78%] of the multifamily residences were apartments with three or more units.) The lack of a play area, the lack of an enclosed play area, and the lack of a closed barrier between the front door and the street were not associated with the risk of child pedestrian injury. However, almost all the residences had some type of play area, including courtyards.

The primary land use was very similar to the residence of the child. Ninety-six percent of cases and controls in single family homes on a single lot and 71% of cases and controls in multiple family residences lived in neighborhoods where their type of residence was the primary land use. Two cases and one control lived in neighborhoods that were not primarily residential.

TABLE 1. Correlation Coefficients Between Neighborhood Environmental Measurements and Measurements at the Scene of the Injury, by Distance From Home, for Those Cases Occurring on the Street

	Same Block as Home	Next Block	<1/2 Mile to 1 Mile	1 Mile or More
n	39	14	10	11
Width of roadway	1.00*	−0.35	−0.08	−0.42
Vehicular traffic	0.85*	−0.25	−0.28	−0.18
Vehicular speed	0.74*†	−0.10	0.20	0.00
Parked vehicles	0.59*	0.04	−0.05	−0.04
Total pedestrians observed	0.78*	0.19	0.30	−0.09

* $P < 0.01$.

TABLE 2. Characteristics of Latino Children Injured as Pedestrians in the Street in the Same Block as Their Home (n = 39)

Variable	Value	No. of Cases	%
Age	<1 y	0	0
	1–4 y	22	56
	5–9 y	16	41
	10–14 y	1	3
Gender	Male	28	72
	Female	11	28
Time of injury	6–8:59 AM	1	3
	9–11:59 AM	6	15
	noon–2:59 PM	5	13
	3–5:59 PM	13	33
	6–8:59 PM	13	33
	9–11:59 PM	1	3
Day of wk	Sunday	3	8
	Monday	4	10
	Tuesday	1	3
	Wednesday	7	18
	Thursday	5	13
	Friday	8	21
	Saturday	11	28
Total		39	100

The odds ratios for variables describing the street and vehicular and pedestrian traffic are shown in Table 4. The odds ratios was greater for wide two lane streets than for narrow two lane streets or streets with three or more lanes. Neither vehicular traffic volume nor speed was significantly associated with childhood pedestrian injuries. (The speed limit was more than 25 miles per hour for only 12 (12%) of 101 case and control environmental assessments). The rate of pedestrian injury increased with greater numbers of parked vehicles and with each category of the total number of pedestrians observed. For both parked vehicles and total number of pedestrians observed, the odds ratio in the highest category was several times that in the lowest category.

Table 5 shows the odds ratios associated with counts of pedestrians by four age categories. These pedestrians included all persons outside and easily visible from the street, and were not restricted to persons entering or crossing the street. The numbers of pedestrians age 15 or older were larger than the numbers in the other age categories, and the counts of these pedestrians were grouped into larger ranges. For each age category, a larger number of pedestrians was associated with a higher odds ratio. This association was significant for counts of pedestrians age 9 to 14 and pedestrians age 15 or older.

The association of specific observed pedestrian behaviors on the risk of childhood pedestrian injury are shown in Table 6. Streets where pedestrians were observed crossing at intersections or crosswalks were at lower risk. However, observed midblock crossings and the presence of vendors were not found to be associated with childhood pedestrian injury risk. The number of pedestrians entering or leaving a vehicle parked on the street was associated with an increased risk of child pedestrian injury. However, this association was no longer significant when adjusted by the number of vehicles parked on the street and total number of pedestrians observed (not shown).

Four variables that are directly related to the movements of pedestrians and vehicles were examined in a multivariate model. Two of these variables, vehicles parked on the street and total pedestrians, were significantly associated with childhood pedestrian injury in our data and two variables, vehicular traffic and vehicular speed, have been associated with childhood pedestrian injury in other reports. Multiple family residence and width of roadway were significantly related to childhood pedestrian injury in our data, but were not included because they were closely related to other variables in the multivariate analysis. (Multifamily residence is significantly related to vehicles parked on the street and to total pedestrians observed; width of roadway is significantly related to vehicular traffic and vehicles parked on the streets).

As shown in Table 7, the association of vehicles parked on the street with pedestrian injury risk remained significant, and the adjusted odds ratios were similar to the crude odds ratios shown in Table 4. Unlike the crude results, progressively greater vehicular speed was associated with a marked increase in risk. Progressively greater vehicular traffic volume was associated with a progressively lower adjusted odds ratio. Although the adjusted odds ratios for total pedestrians observed are only slightly lower than the crude odds ratios shown in Table 4, the variable is not significant in the multivariate model.

DISCUSSION

Frequently, children, especially young children, are struck by motor vehicles while walking or playing in or near the street where they live.[12–16,18] This study was designed to identify environmental risk factors for pediatric pedestrian injuries in residential neighborhoods. This report differs from previous case-control studies of child pedestrian injuries and injury sites in that the study was limited to those cases occurring on the street in front of the child's residence; and, measures of neighborhood levels of pedestrian volume and pedestrian behaviors were included.[12,14] In contrast to previous studies, a majority of the injured children were younger, 1 to 4 years old.[12,14,18,19]

Environmental Risk Factors for Pediatric Pedestrian Injury

Roadway Factors

The number of parked vehicles on the street was the strongest risk factor for pedestrian injury occurring on residential streets. This finding is consistent with previous research that found that larger numbers of parked vehicles are associated with a higher rate of childhood pedestrian injury.[12,14] It is widely recognized that parked vehicles obscure the vision of both drivers and pedestrians, which contributes to the frequently cited "dart-out" or "sudden appearance pedestrian injury."[10,15]

Higher vehicular speeds, in the univariate analysis, were not associated with child pedestrian injury indicating that residential streets that had vehicles traveling at higher speeds were not at

TABLE 3. Number (%) of Cases and of Controls, Crude Odds Ratio, 95% Confidence Intervals, and *P* Values for Variables Describing the Residence and Play Area

Variable	No. (%) of Cases	No. (%) of Controls	Crude Odds Ratio	95% Confidence Interval	*P*
Multiple family residence	26 (67)	25 (40)	3.1	1.3–7.6	.009
No play area	3 (8)	2 (3)	2.6	0.4–16	.29
No enclosed play area	11 (28)	20 (32)	0.8	0.3–2.1	.71
No closed barrier between front door and street	30 (79)*	42 (68)	1.5	0.6–3.9	.42

* This variable was missing for one case.

TABLE 4. No. (%) of Cases and of Controls, Crude Odds Ratio, 95% Confidence Intervals (CI), and *P* Values for Variables Describing the Street, Vehicles, and Pedestrians

Variable	Range	No. (%) of Cases	No. (%) of Controls	Crude Odds Ratio	95% CI	*P*
Width of roadway	2 lanes, <38 ft	20 (51)	38 (61)	1.0		.02
	2 lanes, ≥38 ft	18 (46)	14 (23)	2.5	0.9–6.7	
	3 or more lanes	1 (3)	10 (16)	0.2	0.03–2.0	
Vehicular traffic	<50 vehicles/h	9 (23)	17 (27)	1.0		.07
	50–99 vehicles/h	15 (39)	15 (24)	2.1	0.7–5.8	
	100–249 vehicles/h	12 (31)	13 (21)	1.9	0.6–5.9	
	≥250 vehicles/h	3 (8)	17 (27)	0.4	0.1–1.8	
Vehicular speed	<25 miles/h	15 (39)	30 (48)	1.0		.18
	25–29.9 miles/h	18 (46)	17 (27)	2.2	0.81–5.7	
	≥30 miles/h	6 (15)	15 (24)	0.9	0.3–2.9	
Vehicles parked on the street	0–11 vehicles/500 ft	7 (18)	39 (63)	1.0		<.001
	12–17 vehicles/500 ft	14 (36)	12 (19)	8.6	2.1–35	
	≥18 vehicles/500 ft	18 (46)	11 (18)	9.6	2.6–36	
Total pedestrians observed	≤14 persons/15 min	5 (13)	19 (31)	1.0		.02
	15–29 persons/15 min	12 (31)	24 (39)	1.6	0.4–6.0	
	≥30 persons/15 min	22 (56)	19 (31)	4.7	1.4–16	

TABLE 5. No. (%) of Cases and of Controls, Crude Odds Ratio, 95% Confidence Intervals (CI), and *P* Values for Pedestrian Counts

Variable	Range	No. (%) of Observations Case Neighborhoods	No. (%) of Observations Control Neighborhoods	Crude Odds Ratio	95% CI	*P*
Pedestrians age 0–4 y*	0	11 (29)	27 (44)	1.0		.42
	1–2	14 (37)	21 (34)	1.5	0.6–4.1	
	≥3	13 (34)	14 (23)	2.0	0.7–5.7	
Pedestrians age 5–8 y	0	5 (13)	15 (24)	1.0		.21
	1–2	11 (28)	20 (32)	1.7	0.5–6.1	
	≥3	23 (59)	27 (44)	2.8	0.8–9.6	
Pedestrians age 9–14 y	0	1 (3)	15 (24)	1.0		.01
	1–2	15 (39)	18 (29)	9.1	1.1–74	
	≥3	23 (59)	29 (47)	10.1	1.2–82	
Pedestrians age ≥15 y	0–9	6 (15)	15 (24)	1.0		.008
	10–19	10 (26)	28 (45)	0.9	0.3–2.7	
	≥20	23 (59)	19 (31)	3.8	1.1–12	

* This variable was missing for one case.

increased risk in the absence of other environmental risk factors. However, speed became a significant risk factor when controlling for vehicular volume, number of parked vehicles, and number of pedestrians. Roberts and colleagues[12] found an increased risk with the middle category of vehicular speed, which corresponds quite closely with the middle category of speed used here. The crude odds ratios reported here were similar to theirs, but the confidence intervals reported here were broader. However, in our multivariate model, the odds ratio increased steeply with increasing speed on these residential streets. In contrast to Roberts, our study included only those cases that occurred on residential streets where speeds tend to be lower than on busier streets.

Increased traffic volume was not associated with a greater risk of child pedestrian injury, and in the multivariate analysis there was a lower odds ratios with increasing traffic volume. However, previous studies found that vehicular traffic volume has been associated with an increased rate of child pedestrian injury indicating that more traffic does create more opportunities for a child pedestrian to be injured.[12,14] Thus, the lack of a positive association in our study with vehicular volume suggests that parents and caregivers may respond appropriately to increased traffic in front of their homes. Young children may be better supervised under conditions of heavier traffic. The effect of traffic volume on the risk of injury to older children crossing major streets may be quite different.

TABLE 6. No. (%) of Cases and of Controls, Crude Odds Ratio, 95% Confidence Intervals (CI), and *P* Values for Pedestrian Behaviors

Variable	Range	No. (%) of Observations Case Neighborhoods	No. (%) of Observations Control Neighborhoods	Crude Odds Ratio	95% CI	*P*
Crossing at intersections or crosswalks	0	28 (72)	29 (47)	1.0		.04
	1–4	4 (10)	11 (18)	0.4	0.1–1.5	
	≥5	7 (18)	22 (36)	0.3	0.08–0.9	
Crossing midblock or walking in street	0	3 (8)	9 (15)	1.0		.13
	1–4	7 (18)	20 (32)	1.1	0.2–4.8	
	≥5	29 (74)	33 (53)	2.5	0.6–10	
Entering or leaving a vehicle parked in street	0	3 (8)	13 (21)	1.0		.02
	1–4	10 (26)	26 (42)	2.1	0.4–11	
	≥5	26 (67)	23 (37)	5.0	1.0–26	
Vendors	Absent	24 (62)	44 (71)	1.0		.25
	Present	15 (39)	18 (29)	1.8	0.7–4.9	

TABLE 7. Adjusted Odds Ratios, 95% Confidence Interval (CI), and *P* Values for Selected Variables

Variable	Range	Adjusted Odds Ratio	95% CI	*P*
Vehicular traffic	<50 vehicles/h	1.0		.03
	50–99 vehicles/h	0.7	0.2–3.1	
	100–249 vehicles/h	0.5	0.08–3.0	
	≥250 vehicles/h	0.02	0.0007–0.6	
Vehicular speed	<25 miles/h	1.0		.02
	25–29 miles/h	3.9	0.9–17	
	≥30 miles/h	39	2.0–752	
Vehicles parked on the street	0–11 vehicles/500 ft	1.0		.002
	12–17 vehicles/500 ft	12	1.6–98	
	≥18 vehicles/500 ft	15	2.1–105	
Total pedestrians observed	≤14 persons/15 min	1.0		.11
	15–29 persons/15 min	0.9	0.1–6.5	
	≥30 persons/15 min	4.6	0.6–37	

Housing/Play Areas

Similar to Mueller,[14] we found that living in multiple family housing was associated with an increase of more than three times in the risk of child pedestrian injury. For more than three fourths of the children, the child's type of housing reflected the norms for the neighborhood for land usage. Multiple family housing was not included in the multivariate model because it is so closely related to total pedestrians observed, and the data were not sufficient to distinguish the separate effects of these two closely related variables.

Almost all of the case and control homes had some sort of play area, and the lack of a play area was not significantly associated with a higher risk. In a previous report the lack of a play area was a risk factor for pedestrian injury.[14] A minimum size or other characteristics of an appropriate play area were not defined. Thus, some play areas in this study may not have been appropriate to the needs of the children who used them.

Pedestrian Volume and Behaviors

Previous reports have not examined the effect of the total number of pedestrians present. This study found that the number of observed pedestrians of all ages was associated with increased risk for child pedestrian injury. This result is not simply an effect of exposure to traffic, because the number of pedestrians age 15 and older was associated with a higher risk of pedestrian injury to children 0 to 14 years old. This association could not be explained by errors in estimating age, because almost all the injured children were 1 to 9 years old, and would not be confused with pedestrians 15 years and older. The association may be due to the confusion and distraction of child pedestrians and their supervisors in busy environments.

Streets that had older pedestrians crossing at intersections or crosswalks were at lower risk for injury to child pedestrians. This would suggest that modeling of safe pedestrian behavior by adults and older children may actually be protective.[21] However, streets that had pedestrians crossing at midblock were not found to be at increased risk for child pedestrian injuries. In this community, vendors of produce, meat, and ethnic foods, as well as ice cream trucks and pushcarts, are commonplace, but no risk was associated with their presence.

Implications for Prevention of Childhood Pedestrian Injuries

Results from the crude odds ratios are useful to identify residential streets with a high risk of childhood pedestrian injury. Streets with multiple family residences, with 12 or more parked vehicles parked on the street in 500 feet (or more than 50% of the available curb occupied by parked vehicles), or with 30 or more pedestrians observed in unenclosed areas in 15 minutes should receive high priority for pediatric pedestrian intervention programs.

The multivariate model provides insight into potential environmental changes that should reduce pedestrian injuries on the high risk streets. The large adjusted odds ratios for vehicles parked on the street suggest that decreasing such parking may prevent childhood pedestrian injuries. However, traffic engineering experts suggest that removing such parking provides a wider area for vehicle travel and may increase vehicle speeds.[22] Thus, changes in on street parking should be accompanied by traffic calming measures to reduce vehicle speed.[23]

Controlling speed on high-risk residential streets is important in controlling pedestrian injuries, both because of the association between speed and child pedestrian injury in the multivariate model and the well-known association between vehicle speed and the severity of pedestrian injuries.[11] However, speed alone did not identify neighborhoods at high risk for injury.

The results of this study indicate that educational programs in the high-risk areas should also be considered. Parents and caregivers must be alerted to the fact that children are at risk even when the volume of traffic is light: children were at lower risk with higher traffic volume indicating that parents may accurately perceive traffic as hazardous but are less cautious with their children on a quieter street.[24] Because the risk was also lower on streets where more pedestrians crossed at intersections and crosswalks, modeling proper pedestrian behavior on the part of adults and older children should be addressed.

Limitations

This study was restricted to child pedestrians injured in the same block as their homes. We believe that this restriction was useful to clarify the relationship between variables in the neighborhood street environment and injury. The same variables may have a different effect in pedestrian environments that are not primarily residential.

These results are based on observations made at a standard time on a weekday afternoon, which may differ from conditions at the moment the injury occurred. We selected our observations to represent overall conditions in the neighborhood, rather than conditions at the time of injury. The neighborhood environmental measurements and measurements made at the scene of the injury were, however, significantly correlated.

The use of standardized observations, rather than questionnaires, minimizes misclassification of the pedestrian environment.[25] Observers were not blinded to the case-control status of the neighborhoods observed. However, the variables were based on physical measurements or discrete categories to minimize observer bias.

Another limitation of this study is that multiple family housing may increase the risk of pedestrian injury by mechanisms that are unrelated to the total pedestrians observed. For example, multiple family housing often has less open space between buildings than single family housing, and individual families have less control over this space.

This study was carried out in a population of Latinos in the southwestern United States. It included a larger proportion of children 0 to 4 years old than other reports of child pedestrian injuries.[12,14,18,19] Some of the environmental risk factors studied may vary with age. Thus, these results may not apply to other ethnic or racial groups or in populations in which more older children are injured.

CONCLUSIONS

Environmental risk factors for pediatric pedestrian injuries in this southern California study are similar to those found in other areas of the country and in other populations. The number of parked vehicles on the streets, which was the strongest risk factor, and multifamily dwellings were both associated with childhood pedestrian injury. This study also found the number of pedestrians observed, particularly older children and adults, was strongly associated with the risk of pedestrian injury to young children on residential streets near their homes. These risk factors can be used to identify streets to be targeted for childhood pedestrian injury prevention programs. Once the high risk streets are identified, the multivariate model would suggest implementation of measures to reduce the amount of street parking (thus increasing visibility) and reductions in vehicular speed to decrease pedestrian injuries. By targeting high risk areas, a multidisciplinary yet focused approach involving individual and community education, as well as environmental changes, can be developed to prevent childhood pedestrian injuries.

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WHICH COUNTS MORE: ABILITY OR CLASS?

There is plenty of evidence about social mobility in Britain. The best is the National Child Development Survey, which has analyzed all the children born in a single week in 1958 at various points in their lives. In "Two Nations? The Inheritance of Poverty and Affluence," the Institute for Fiscal Studies, an independent research group, analyzed this data. It found that by 1991, 34% of those in the highest income quintile had fathers who were also in the top income group; 11%, however, had fathers in the poorest quintile. In a society with full equality of opportunity, and ability distributed equally across the population, 20% of the richest quintile would have had fathers from the richest quintile, and 20% from the poorest. This suggests that opportunity is dispersed in Britain, but not fully equalized.

But what if ability is not in fact distributed equally amongst the population? This question is explored, using the same data as the Institute for Fiscal Studies, in "Unequal but Fair?", a pamphlet by Peters Saunders, a sociologist at Sussex University, published last month by the Institute of Economic Affairs. He concludes that ability is greater at the top of the class/income pile than at the bottom, and that individual ability plays a crucial part in deciding where an individual will end up. Ability alone is well over twice as important as their class origins, three times more powerful than the degree of interest their parents showed in their schooling, and five times more powerful than their parents' level of education or the aspirations which their parents harbored for them while they were growing up.

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Noted by J.F.L.

Analysis of Pedestrian Conflicts with Left-Turning Traffic

DOMINIQUE LORD

The interaction between pedestrians and left-turning vehicles at signalized intersections are examined using the traffic conflict technique. Paramount was a comparison of the safety of left turns at two types intersections: T-intersections and X-intersections (cross-intersections). Previous research has indicated that T-intersections are more dangerous to pedestrians. In preparation for the comparison several traffic conflict definitions and their applications to pedestrians were evaluated. Use of a laptop computer for data collection was tested. Eight sites taken from intersections in Hamilton, Ontario, Canada, were selected. A conflict recording methodology was developed for T-intersections and X-intersections that consisted of recording data at various times along the paths of pedestrians and left-turning vehicles, and recording traffic conflicts. Two computer programs were written for the data collection process: one for vehicles and one for pedestrians. Several statistical tests to relate traffic conflicts and the expected number of accidents were performed. These tests indicate that a positive correlation between traffic conflicts and expected number of accidents exists; they also suggest that T-intersections have a higher traffic conflict rate than X-intersections.

The primary objectives of the described study are (a) to examine the interaction of left-turning vehicles and pedestrians at two types of signalized intersections using traffic conflicts; (b) to compare several traffic conflict techniques; and (c) to test the use of a laptop computer to record the traffic conflicts.

Four sections describe the study. The first section reviews the literature on pedestrian accidents and traffic conflicts, concentrating on accidents between left-turning vehicles and pedestrians, various traffic conflict definitions, and the validity of the traffic conflict technique. The second section describes the methodology developed to record traffic conflicts according to the different definitions and the data collection process. Results of the study are presented in the third section, which also examines the conclusions of Quaye et al. (*1*) and the relationship between conflicts and the expected number of accidents. The fourth section concludes with a discussion of the questions the study sought to answer.

LITERATURE REVIEW

A driver making a left turn at an intersection often has to keep track of several traffic elements simultaneously, including opposing traffic flow, traffic lights, and pedestrians crossing. According to various studies left-turning traffic generally constitutes about 20 percent of the approach traffic in urban areas; however, the proportion of accidents involving pedestrians and left-turning vehicles at intersections is slightly higher (20 to 30 percent of all pedestrian accidents in intersections), as shown in Table 1.

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One-way intersections reduce the complexity of turning left by removing the opposing traffic flow, thus allowing drivers to concentrate on the pedestrians in the crosswalk and the traffic lights. Two studies, one each conducted by Habib (*2*) and Fruin (*3*), have examined pedestrian accidents at signalized intersections on a one-way grid system (Manhattan, New York). They discovered that vehicle left turns were approximately four times more dangerous to pedestrians than through movements.

In a more recent study, Almuina (*4*) examined accidents involving left-turning vehicles and pedestrians at signalized intersections in Hamilton, Ontario, Canada, between 1983 and 1986. He found that about 32 percent of the pedestrian accidents involved left-turning vehicles. Almuina further analyzed pedestrian accidents by dividing intersections into three types: one-way–one-way, one-way–two-way, and two-way–two-way. He demonstrated that, with the exception of pedestrian accidents with straight-through vehicles, accidents involving left-turning vehicles had the highest proportion of accidents for all intersection types.

Previous research has indicated that the most important factors in increasing the likelihood of pedestrian accidents are pedestrian and vehicle flows (*5,6*). Accordingly, numerous relationships between accident frequencies and traffic flows have been examined over the years. The most recent studies, such as Hauer et al. (*7*), assess the safety of intersections by using the product of vehicular traffic flows raised to a power. They suggest that other circumstances such as highway-rail grade crossings and accidents on two-lane highways support the "product-of-flows-to-power" relationship. Studies by Zegeer et al. (*8*), Hauer and Persaud (*9*), and Mengert (*10*) have reached similar conclusions.

Quaye et al. (*1*) specifically examined the safety of pedestrians by using the product of pedestrian and vehicular flows raised to a power. Their research relied on accident and flow counts during 15-min periods from Monday to Friday for the years 1983 to 1986 in Hamilton. The multivariate accident prediction model was given as follows:

$$\hat{E}\{m\} = b_0 \times F_1^{b_1} \times F_2^{b_2} \quad (1)$$

where

F_1, F_2 = vehicle and pedestrian flows, respectively;
b_0, b_1, b_2 = parameters to be estimated;
m = entity (signalized intersection);
$E\{m\}$ = mean of such m's for different intersections with flows F_1 and F_2; and
^ = estimate of $E\{m\}$.

Because the safety of pedestrians at an intersection is influenced by its geometry, Quaye et al. separated fixed-cycle signalized intersections as well as the models into two categories.

TABLE 1 Pedestrian Accidents and Left-Turning Traffic (*4*)

Study:	Fruin	Habib	Zegeer et al.	Robertson & Carter	Israel	Almuina
Proportion of left-turning accidents	31%	25%	22%	17%	13%	32%
Number of signalized intersections	32	45	1297	62*	520	306

* Only 54 intersections were signalized

Left-Turns at T-Intersections (Category 1)

Approaches with left-turning vehicles that face no opposing vehicle traffic were selected for Category 1. The purpose of this category is that left-turning vehicles, when turning, face no opposing vehicle traffic. As a result the left-turning maneuver is not complicated by conflicting vehicles. Three-legged intersections or one-way streets on the opposing approach are examples of such intersections. The model and expected number of accidents per day are given for this category by Equation 2:

$$\hat{E}\{m\}_T = (2.61 \times 10^{-7}) \times F_1^{1.19} \times F_2^{0.331} \quad (2)$$

Left-Turns at X-Intersections (Category 2)

All approaches with left-turning vehicles that face opposing vehicle traffic were selected for Category 2. At X-intersections (cross-intersections) left-turning vehicles must yield to conflicting vehicles coming from the opposite approach during the entire or part of the green phase. The model and expected number of accidents per day are given by Equation 3:

$$\hat{E}\{m\}_X = (7.34 \times 10^{-7}) \times F_1^{0.410} \times F_2^{0.867} \quad (3)$$

Quaye et al. evaluated the relative safety of pedestrians crossing at T- and X-intersections. For the same vehicle and pedestrian flows on a hypothetical intersection, X-intersections were generally found to be safer than T-intersections for a vehicle flow above 100 vehicles per hour.

TRAFFIC CONFLICTS

Accident data are often used to analyze the safety of intersections. However, evaluations of safety based only on accidents have many drawbacks. For example, reliable estimates of safety require a large number of accidents. Furthermore, not all accidents are reportable, and the ones that are reportable are not always reported. Pedestrian collisions that result in injuries would most likely be reported.

Such drawbacks have led to the development of a surrogate safety measure known as traffic conflicts. In general, a traffic conflict is an event in which two road users (pedestrians, vehicles, and bicycles) would have collided had their paths, speeds, or both remained unchanged on an element of a transportation system (intersection, road section, ramp, and so forth). In the described study a total of four traffic conflict definitions were employed to analyze the safety of pedestrians at signalized intersections. The first one is known as the U.S. traffic conflict technique. This technique originates from a study conducted by Perkins and Harris (*11*) that consisted of examining evasive actions or sudden braking. Glauz and Migletz (*12*) further developed the U.S. definition by stating that the action of the first user is atypical in that it is not an action that every road user would perform under the same circumstances, although it need not necessarily be an infrequent or extreme action. The second definition is called classification by severity (CS). This definition classifies conflicts according to the severity of the evasive actions such as in the German (*13*) and French (*14*) definitions. The conflicts are judged subjectively by the recorder according to a predetermined severity scale. For example, the German severity scale (*13*) classifies traffic conflicts into three categories: light, moderate, and serious. The third definition, called the post-encroachment time (PET) is the only one not based on evasive maneuvers. Cooper (*15*) defined PET as the time difference between the moment an offending vehicle passes out of the area of potential collision and the moment of arrival at the potential collision by the conflicting vehicle possessing the right of way. The fourth definition is called time-to-collision (TTC). The Swedish traffic conflict technique (*16*) is one of the techniques that is based on this definition. TTC uses the speed and the distance between the two road users at the time of evasive action. A TTC is then computed by dividing the distance by the speed. According to Hyden (*16*), conflicts under this definition could be considered dangerous by two means: a fixed TTC below 1.5 sec or a speed-dependent TTC.

Several studies have examined correlations between accidents and conflicts and, in many cases, results have been diverse and contradictory (*17*). This is partly due to the difference in conflict definitions, location, road user behavior, and so on. The lack of consensus on the relationship between accidents and conflicts has surprisingly fostered only few complementary analyses of pedestrian-vehicle conflicts. From these, some included only conflicting situations with through vehicles (*18,12*), whereas others described the interaction of pedestrians and left-turning vehicles (*19–21*). In general, the studies of the correlation between conflicts and accidents arrive at divergent conclusions or are often inconclusive because of data problems.

METHODOLOGY AND DATA COLLECTION

The study population included all fixed-cycle intersections drawn from the Hamilton data base. The approaches of each intersection were examined to determine whether left-turning vehicles had their maneuvers obstructed by oncoming vehicles. Accordingly, all approaches or sites were divided into two categories: left-turns at T-intersections and left-turns at X-intersections. Then the expected number of accidents involving left-turning vehicles and pedestrians was computed for each site according the category. Equations 2 and 3, developed by Quaye et al., were employed to calculate the expected number of accidents. A sample of eight sites were selected, four from each category. Each approach categorized as an X-intersection was matched with an approach categorized as a T-intersection according to level of exposure. The matched sets were separated into four groups:

Group 1: high vehicle and low pedestrian flows,
Group 2: high vehicle and moderate pedestrian flows,
Group 3: low vehicle and low pedestrian flows, and
Group 4: moderate vehicle and high pedestrian flows.

Table 2 shows the expected number of accidents for each of the eight sites.

The relative safety of sites included in the T-intersection and X-intersection categories can be calculated using Equation 4 (*1*):

$$R = 0.075 \times \frac{F_1^{1.046}}{F_2^{0.415}} \quad (4)$$

Relative safety is defined as the number of times a site in the X-intersection category is safer than a site in the T-intersection category with the same level of exposure; the R-value represents the relative risk. Therefore, for any combination of pedestrian and vehicles flows a relative risk can be computed. Equation 4 leads to the series of curves shown in Figure 1. This figure shows the four groups according to the respective pedestrian and vehicular flows, as well as the curves for five relative risks. It should be noted that Group 2 is located between the curves $R = 4$ and $R = 3$, whereas Group 3 is located close to the curve $R = 0.5$. In other words, a site in the X-intersection category for Group 2 is expected to be three to four times safer than a site in the T-intersection category. On the other hand, a site in the X-intersection category for Group 3 is expected to be more or less twice as dangerous as a site in the T-intersection category.

A site survey of all selected intersections was undertaken to verify that each intersection shared similar characteristics, such as the correct pedestrian and vehicular flows in the same group and the intersection geometry, and that each intersection had pedestrian traffic lights (Walk and Don't Walk) and painted crossing delineation.

Every method of conflict identification primarily seeks to identify what happens when pedestrians and vehicles approach each other in space and time. In the described study the primary observational task was to record the time at different points along the path of a left-turning vehicle and along the path of a walking pedestrian. The path of the vehicles and pedestrians was not fixed, but was observed on site. The observational procedure was divided into two recording strategies depending on the geometry of the intersection. The first recording strategy was for T-intersections, and the second was for X-intersections. A conflict area was identified according to the PET conflict definition, to simplify the work with the analysis. The conflict area boundaries consisted of the painted lines of the crosswalk and the path of the left-turning vehicle (i.e., width of a vehicle). An example of the second recording strategy is presented in Figure 2. The location of the conflict area was not fixed and was dependent on the path of the left-turning vehicle. In short, for each evasive maneuver or sudden braking the approximate location and the time of the event would be recorded.

To carry out the data collection with the methodology described above two computer programs were written, for the pedestrian and left-turning movements, respectively. Both programs are based on

TABLE 2 Selected Sites by Category

	T-intersection category		X-intersection category	
	Site #	$E\{m\} \times 10^{-4}$ accidents/day	Site #	$E\{m\} \times 10^{-4}$ accidents/day
Group 1	Site 1	26.2	Site 5	1.6
Group 2	Site 2	23.0	Site 6	4.5
Group 3	Site 3	4.4	Site 7	5.2
Group 4	Site 4	32.7	Site 8	16.4

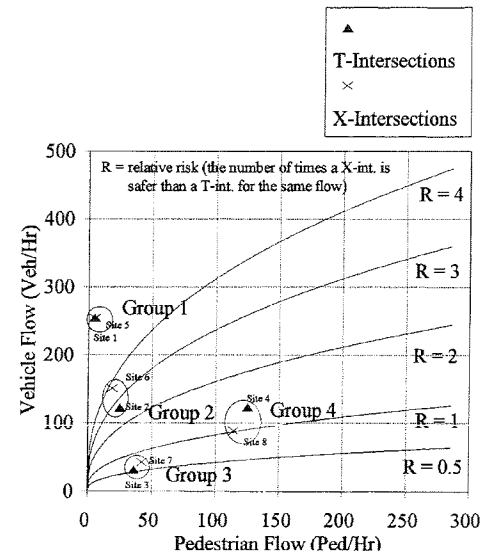

FIGURE 1 Relative safety of pedestrians and selected sites.

a program developed by Jones (*22,23*). The computer programs allowed for the automatic recording of traffic phases without connection to the intersection controller, as well as the recording of the various times along the path of a pedestrian and a vehicle and the recording of traffic conflicts.

The equipment used to gather data included two laptop computers, a measuring tape, a string, chalk, spray paint, a pen, and a notebook. Paint marks were placed inside the intersection to help indicate the time when each road-user passed certain points. Each site was recorded for two days, from 2:00 pm to 6:00 pm. A trained assistant collaborated with the researcher during the data collection process. The laptop computers were used to record the events. Because the computers' internal clocks ran at different speeds the laptops were synchronized at the beginning of the recording so that the data from each could be time-adjusted for further analysis.

Data collection included all elements needed for four different conflict study methods: U.S., TTC, CS, and PET. The TTC definition was divided into two components according to type of TTC employed. The first TTC definition (TTC1) is characterized by the use of a fixed TTC, whereas the second (TTC2) is characterized by use of a speed-dependent TTC. A conflict was recorded at the instant when a vehicle had to brake or perform an evasive maneuver (pedestrian evasive actions were also included) because of pedestrian activity on the crosswalk. Each conflict was recorded as a U.S. conflict (because that definition is the least restrictive) and was then analyzed to examine whether it also fell under another conflict definition. A PET conflict was added to the count for each instance of a vehicle entering the conflict area less than 3 sec after a pedestrian.

RESULTS AND ANALYSIS

Table 3 reveals that the number of conflicts for sites in the X-intersection category is about half that of sites in the T-intersection category according to the U.S. and the TTC1 definitions. Low speeds at the instant of the evasive action account for the lack of conflicts falling under TTC2. Indeed, the speed of left-turning vehicles seldom surpassed 30 km/hr. Likewise, no conflicts were

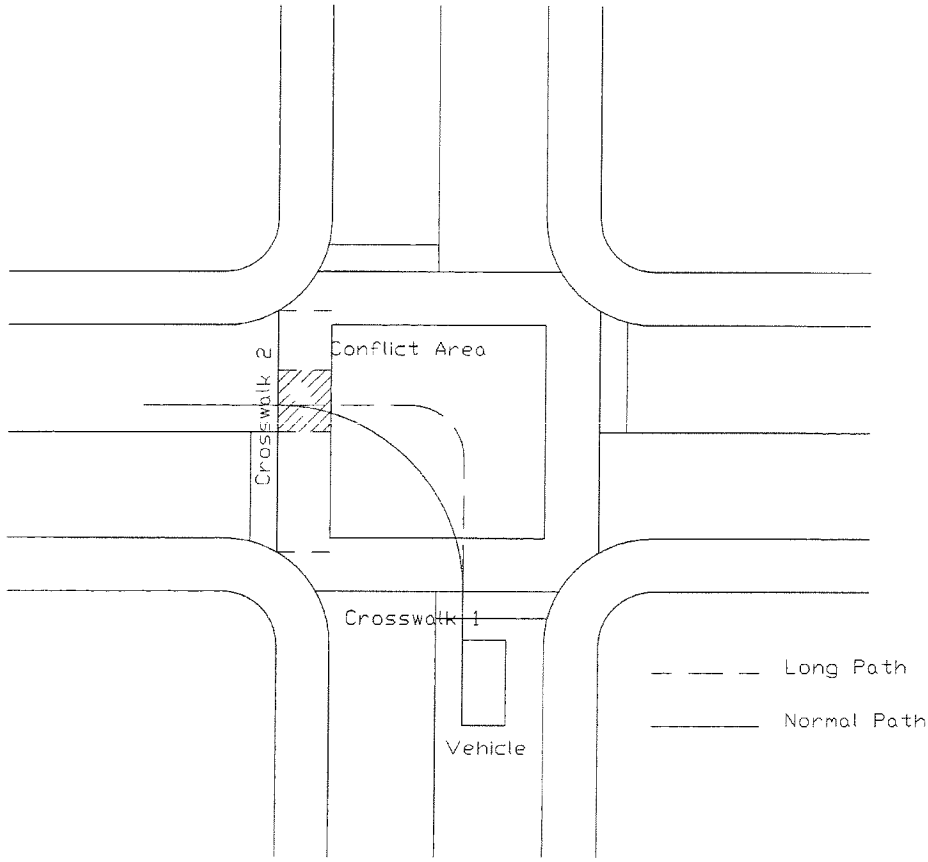

FIGURE 2 Recording strategy for X-intersections.

TABLE 3 Conflict Counts (2 Days) by Definition

T-intersection Category	U.S.	TTC1[1]	TTC2[2]	CS[3] Sl[4]	Mo[5]	Sr[6]	PET[7]
Site 1 (Group 1)	6*	n/a	n/a	n/a	n/a	n/a	9 (n/a)
Site 2 (Group 2)	8	5	0	5	2	0	22 (3)
Site 3 (Group 3)	0	0	0	0	0	0	21 (0)
Site 4 (Group 4)	12	5	0	11	1	0	18 (2)
Total	26	n/a	n/a	n/a	n/a	n/a	70 (n/a)
X-intersection Category							
Site 5 (Group 1)	0	0	0	0	0	0	1 (0)
Site 6 (Group 2)	1*	n/a	n/a	n/a	n/a	n/a	2 (n/a)
Site 7 (Group 3)	6	3	0	1	4	0	12 (2)
Site 8 (Group 4)	6	3	0	4	1	0	18 (1)
Total	13	n/a	n/a	n/a	n/a	n/a	33 (n/a)

1 First Time-to-Collision definition - TTC fixed (1.50 sec.)
2 Second Time-to-Collision definition - TTC speed dependent
3 Classification by Severity definition
4 Slight
5 Moderate
6 Serious
7 Post Encroachment Time definition (The number in parentheses indicates the number of conflicts entering both this definition and the U.S. definition.)
* Decided subjectively by the author

categorized as serious according to the CS definition, as none of the vehicles left skid marks or made its tires squeal. Conflicts could not be recorded accurately enough for further analysis of Sites 1 and 6. Therefore, only conflicts categorized in the U.S. definition are used for further analysis, because that definition encompasses all conflicts categorized in the other definitions and also includes all eight sites. The number in parentheses in the PET column in Table 3 indicates the number of conflicts that can be categorized under both this definition and the U.S. definition.

To determine at what time during the green phase (for vehicle traffic) conflicts occurred, the phase was divided into segments and is represented graphically in Figures 3 and 4. These figures also show the times at which pedestrians left the curb. For the T-intersection category close to 71 percent of conflicts happened below 60 percent of the green phase, and about 21 percent of the conflicts occurred during the last 10 percent of the green phase. On the other hand, close to 85 percent of the conflicts for the X-intersection category occurred during the second half of the green phase. The time-of-departure histograms in Figure 3 show that a higher proportion of pedestrians in the T-intersection category start crossing at the end of the red phase (0 percent column). This figure underscores the conclusion that the earlier a pedestrian starts crossing at an approach categorized as a T-intersection, the greater chance there is of a conflict. In contrast, there is a greater risk of conflict for a pedestrian crossing at a site categorized as an X-intersection if that person waits to cross.

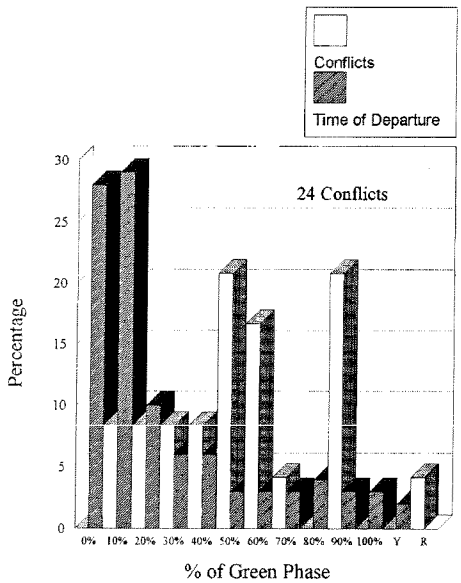

FIGURE 3 Time of departure from the curb and time of conflicts during the green phase for the T-intersection category.

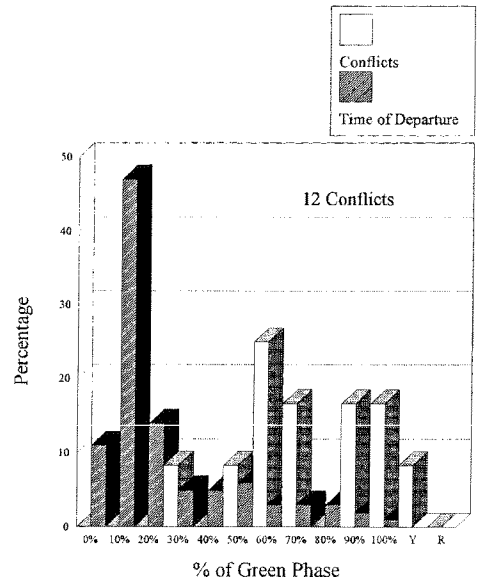

FIGURE 4 Time of departure from the curb and time of conflicts during the green phase for the X-intersection category.

The relative safety of sites in the two intersection categories was examined in conflict counts as presented in Table 4. As has been mentioned, the site in the X-intersection category for Group 2 was found to be between three to four times safer than its matched site, whereas for Group 3 the T-intersection was expected to be about twice as safe. Table 4 reveals that, for Group 2 the X-intersection site has an R-value varying from 5 to 8, depending on the definition. TTC1 was the closest to the theoretical values of $R = 4$ or $R = 3$. On the other hand, for Group 3 no result could be demonstrated because in all cases $R = 0$. However, the site in the X-intersection category used for Group 3 was more dangerous than the site in the T-intersection category because it had a higher conflict count, which is confirmed by the theoretical value below unity ($R = 0.5$).

One purpose of the study was to examine whether those intersections predicted to be dangerous in the models developed by Quaye et al. are indeed dangerous. The sites are ranked from the most dangerous to the least dangerous according to the accident prediction models and the U.S. traffic conflicts alone as shown in (Table 5). The approaches in italics represent the sites in Category 2. It can be inferred from this table that the rankings of the sites for the expected number of accidents and the conflict counts are almost identical. The use of conflicts appears to support the accident prediction models.

In a verification of the findings shown in Table 5 two tests were used to correlate traffic conflict counts to the predicted number of accidents. The results of the two tests are presented in Table 6. The first test computed a weighted linear regression coefficient between traffic counts and the expected number of accidents. No regression coefficient was computed for the PET definition because the points were too scattered. The second test used was the Spearman rank correlation test, which determines the rank correlation between two sets of data.

Table 6 shows that two of the three traffic conflict definitions produced a strong positive correlation between conflicts and the expected number of accidents using the weighted linear regression analysis; the U.S. definition had the highest correlation coefficient with a value of 0.59. The PET definition had no correlation and was discarded from further study. The two remaining definitions were tested for significance because only eight or six sites, depending on the definition, were used in the analysis. Use of the F-test reflected the low number of conflict counts. The two definitions were found to be statistically significant and highly correlated for the Spearman ranking test. A correlation between conflict counts and the expected number of accidents may be inferred from this. Finally, the validation study also supports the accident prediction models.

The relationship of exposure (accident-risk), as measured by the cross product of traffic flow, and the number of conflicts was tested. Exposure was obtained by taking the square root of the product of the traffic flow of pedestrians and vehicles as shown in Table 7. Again, the approaches in italics represent the ones in Category 2.

The ranking for accident risk nearly coincides with the expected number of accidents; once more, the T-intersection approaches

TABLE 4 Comparison of the Relative Safety of Sites in the T- and X-Intersection Categories

		Approach	U.S.	TTC1
Group 2	X-int	Site 6	1	1*
(R = 4)	T-int	Site 2	8	5
		R =	8	5
Group 3	X-int	Site 7	5	3
(R = 0.5)	T-int	Site 3	0	0
		R =	0	0

* assume it enters this definition

TABLE 5 Ranked Sites by Conflicts

Rank	Predicted Accidents		Conflicts	
	$E\{m\} \times 10^{-4}$	Approach†	Count	Approach†
1	32.7	Site 4 (Gr 4)	12	Site 4 (Gr 4)
2	26.2	Site 1 (Gr 1)	8	Site 2 (Gr 2)
3	23.0	Site 2 (Gr 2)	6	Site 1 (Gr 1)
4	16.4	*Site 8 (Gr 4)*	6	*Site 8 (Gr 4)*
5	5.2	*Site 7 (Gr 3)*	5	*Site 7 (Gr 3)*
6	4.5	*Site 6 (Gr 2)*	1	*Site 6 (Gr 2)*
7	4.4	Site 3 (Gr 3)	0	Site 3 (Gr 3)
8	1.6	*Site 5 (Gr 1)*	0	*Site 5 (Gr 1)*

† The sites in italic represent the ones in the X-intersection category

TABLE 7 Ranked Sites by Accident Risk

Rank	Predicted Accidents		Accident-Risk	
	$E\{m\} \times 10^{-4}$	Approach†	Conflicts/$(V_1 x V_2)^{1/2}$	Approach†
1	32.7	Site 4 (Gr 4)	0.0239	Site 1 (Gr 1)
2	26.2	Site 1 (Gr 1)	0.0204	Site 4 (Gr 4)
3	23.0	Site 2 (Gr 2)	0.0200	Site 2 (Gr 2)
4	16.4	*Site 8 (Gr 4)*	0.0167	*Site 7 (Gr 3)*
5	5.2	*Site 7 (Gr 3)*	0.0103	*Site 8 (Gr 4)*
6	4.5	*Site 6 (Gr 2)*	0.0038	*Site 6 (Gr 2)*
7	4.4	Site 3 (Gr 3)	0.0000	Site 3 (Gr 3)
8	1.6	*Site 5 (Gr 1)*	0.0000	*Site 5 (Gr 1)*

† The sites in italic represent the ones in the X-intersection category

appear to be more dangerous than the X-intersection ones, with the exception of Site 3. The accident risk data also corroborates the data presented in Table 5. Overall, the two tests and the accident risk method appear to correlate well with the models developed by Quaye et al.

DISCUSSION AND CONCLUSION

The study involved (a) an examination of the interaction of left-turning vehicles and pedestrians at signalized intersections using traffic conflicts, (b) an exploration of the validity of the traffic conflict technique, and (c) the use of a laptop computer for data collection.

Findings concur with the accident prediction models developed by Quaye et al. The two tests used in the analysis ranked the approaches similarly to their models. The sites in the T-intersection category were determined to be more dangerous than the sites in the X-intersection for traffic flows over 100 vehicles per hour. One explanation for the lower rate of conflicts in Category 2 might be that the majority of pedestrians starts crossing at the beginning of the green phase, and that while the first left-turning vehicle is waiting to find a gap long enough to turn the majority of the pedestrians has had sufficient time to cross. As a result the number of conflicts for the approaches in the X-intersection category could also be a function of the number of the vehicles coming from the opposite approach. As can be seen in Figure 3, about 30 percent of pedestrians in the T-intersection category start crossing before the green light appears; it is possible that the first few drivers making left turns might not expect a pedestrian to be so soon in his or her pathway. Over one-half of the conflicts in this category occurred during the first half of the green phase.

TABLE 6 Traffic Conflict Definitions and Validation Study

	U.S.	TTC1	PET
Linear Regression (r^2)	0.59	0.44	--
Spearman ranking (r_s)	0.93	0.90	0.23
F-test	20.38	15.60	--
$F(v_1,v_2)$ (p=0.05)	5.14	6.94	--
Significant	yes	yes	--

Several conflict definitions were examined. Because other studies have already discussed this subject extensive critical analyses of the definitions were not made; instead their applicability to pedestrian conflicts was assessed. It can be concluded from the analysis that categorization of a conflict at the instant of the evasive maneuver appears to be the most appropriate method. Not all traffic conflicts were classified as dangerous; no conflicts were classified under TTC2 or CS. Either of the two remaining conflict definitions can be used to evaluate the safety of pedestrians at intersections; the U.S. definition has the highest correlation and Spearman coefficients. The U.S. definition may be a good candidate, because it does not require extensive data collection (such as the use of a camera, for example). However, according to Brown (*24*) support of the TTC definition appears to be gaining more general acceptance in the research community.

A laptop computer proved to be sufficiently accurate for recording all other information, such as the times of travel along both the path of a pedestrian and a vehicle. One positive aspect of the use of the computer was the huge amount of information that could be entered directly and analyzed on a spreadsheet. The programs could be used in the following ways: individually to measure pedestrian counts; to examine when pedestrians start their crossing actions; and to estimate the walking speeds of pedestrians. They may also be used for similar information on left-turning vehicles.

The use of a laptop computer to record traffic conflicts proved to be laborious and difficult. Because traffic conflicts are usually sudden or unpredictable events it was not possible to record conflicts accurately in many cases. A wrong key would often be pressed due to the suddenness of the event, thus disrupting recording. On many occasions it was necessary to predict a potential conflict by looking at the paths of the pedestrian and the vehicle. Sometimes a conflict would occur with a second vehicle following the first; because the first vehicle was being recorded the second could not be. As a result the exact location of the conflict and the vehicle speed had to be estimated from notes taken on site.

The study was the first to attempt correlating traffic conflict rates with the expected number of accidents; all previous studies relied on accident counts alone. One major problem was the rarity of pedestrian accidents, a total of three pedestrian accidents with left-turning

vehicles for the eight approaches observed occurred between 1983 and 1986. As a result validation would be inconclusive. Finally, even though a high correlation existed between the number of conflicts and the expected number of accidents, further studies using the expected number of accidents in other circumstances and with more conflict counts should be attempted.

Recommendations for further research include the analysis of traffic conflicts between vehicles and a validation study with the expected number of accidents. Moreover, a validation study with the technique developed by Hauer and Gårder (*25*) could be attempted. A laptop computer could still be used to record the events, but it should be combined with a video camera. Finally, a higher number of intersections for the analysis of the traffic conflicts is suggested.

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Pedestrian Countdown Signals: Experience with an Extensive Pilot Installation

SAN FRANCISCO, CA, USA'S PILOT PEDESTRIAN COUNTDOWN SIGNALS WERE ASSOCIATED WITH A DECREASE IN PEDESTRIAN INJURIES AND FEWER PEDESTRIANS FINISHING CROSSING ON RED. THIS FEATURE DISCUSSES THE IMPACTS OF THE POPULAR DEVICES ON COLLISIONS, PEDESTRIAN BEHAVIOR AND ATTITUDES, MOTORIST BEHAVIOR AND SIGNAL MAINTENANCE NEEDS.

BY FRANK MARKOWITZ, STANLEY SCIORTINO, PH.D., JACK LUCERO FLECK, P.E. AND BOND M. YEE, P.E.

INTRODUCTION

At a street corner in San Francisco, CA, USA, one senior citizen said to another, "I'm a '15.' What are you?" They were discussing how long it takes them to cross the street, no longer a mystery with pedestrian countdown signals installed at about 700 of San Francisco's 1,100 signalized intersections.

More than a conversation piece, however, San Francisco's countdown signals have been associated with a 52-percent reduction in pedestrian injury collisions at pilot locations. Figure 1 shows the numeric display. Pedestrian countdown signals attempt to improve safety by displaying the time left to cross. The San Francisco Department of Parking and Traffic equipped 14 intersections in a pilot program beginning in March 2001.

Pedestrian noncompliance with signs and signals is a significant factor in pedestrian injury collisions nationally and in San Francisco, partly reflecting the frequent misunderstanding of conventional pedestrian signals. Countdown signals attempt to improve this situation by providing information on how much time is left to cross safely.

These devices have been used nationwide with generally favorable results.[1] Evaluations in Minneapolis–St. Paul, MN, USA and Montgomery County, MD, USA, each assessed five pilot locations. The Minnesota study found a reduction in pedestrians finishing crossing after conflicting traffic received the green indication and 79 percent of interviewees preferring the countdown to the conventional signal. The Montgomery County study found a reduction in pedestrian/vehicle conflicts.

In San Jose, CA, the percentage of pedestrians finishing crossing on red also was lower with countdown signals, although the study authors noted that pedestrians more often interpreted the countdown signal as allowing the start of crossing during the pedestrian clearance interval. This early experience led to the adoption of countdown signals in 2002 as a standard device in the *Manual on Uniform Traffic Control Devices* (MUTCD) *Millennium Edition*, Revision 2.

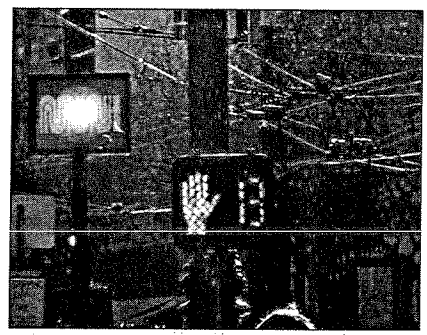

Figure 1. Pedestrian countdown signal.

Beginning in March 2001, San Francisco equipped 14 intersections in one of the early pilot testing programs in California. The period covered was sufficient that any "novelty" impacts ("the Hawthorne effect") were minimized.

(The Hawthorne effect refers to the phenomenon identified by researchers at the Western Electric Hawthorne plant, who found that virtually any reasonable change in the workplace environment had a positive impact on productivity, which they hypothesized was due to improved morale attributable to the attention paid to workers by researchers, rather than the changes themselves.)[2]

The pilot intersections were selected based on a range of factors, including pedestrian injury collision record; pedestrian volumes; crossing distance; public complaints about perceived safety; and diversity of physical and social environments. Although a press conference was held with San Francisco's mayor to introduce the new signals and the California State Automobile Association developed a flyer, the basic meaning of the countdown was intuitive to virtually all pedestrians.

Because the countdown starts (per MUTCD) at the beginning of the flashing red hand (the pedestrian clearance interval)—when pedestrians are not to start crossing—the flyer suggested that the countdown should not be used to determine when to start crossing. As discussed later, for many pedestrians who walk faster than the average rate, however, starting at the beginning of the countdown actually is quite safe.

Provided with the opportunity to replace conventional pedestrian signals with light-emitting diode (LED) signals and encouraged by the preliminary results described in this feature, San Francisco decided to convert virtually all pedestrian signals citywide to the countdown version. San Francisco has installed countdown signals at about 700 intersections and intends to install them at all 1,100 signalized intersections in the city.

STUDY PURPOSE AND OBJECTIVES

The first stage of the evaluation (the preliminary evaluation) assessed behavioral impacts and attitudes toward the new devices. The second stage included crash analysis and maintenance history. The evaluation attempted to answer the following questions:

- Do countdown signals reduce pedestrian injuries?
- How do they change pedestrian behavior, especially when pedestrians start and finish crossing?
- How do countdown signals change driver behavior, especially red-light running?
- Do pedestrians like countdown signals and, if so, why?
- Do countdown signals imply to pedestrians that it is acceptable to leave on the flashing red hand?
- Are there any serious maintenance or installation problems?
- How effective is starting the countdown on the flashing red hand, as directed by MUTCD?

DATA COLLECTION AND ANALYSIS METHODS

Crash Analysis

The San Francisco Department of Public Health geo-coded and mapped date-collected data for every pedestrian injury event that occurred within 50 feet (15.2 meters) before and after the installation of countdown signals at the nine pilot intersections that were equipped first (March to May 2001). There has been insufficient time since the citywide installation to allow for an evaluation of the citywide impacts, but such an evaluation is planned for the near future.

The 21-month "after" treatment period began on April 2, 2001 and ended on December 31, 2002. The "before" treatment period included an equivalent amount of time (July 2, 1999 to April 1, 2001) before the pilot installation was completed.

Changes in injury counts over time may be due to overall changes in pedestrian or motor vehicle travel frequency or behavior throughout San Francisco. Also, because intersections chosen for special improvement typically are selected at least partly because they have high numbers of collisions, statistically, they would be likely to improve even if nothing were done. This is termed "regression to the mean."

To determine if there was a temporal effect, two other types of intersections were included in the analysis. The authors mapped a list of intersections that were scheduled or considered for countdown signals (that had traffic signals and, in most cases, conventional pedestrian signals) and that had at least one injury during the observation period; these were "Planned CD" intersections. The remaining intersections that had at least one injury in the observation period were "No Signals Planned" intersections. For a statistical test of the differences in injury trends, a Poisson model with the SAS statistical package was used.[3]

Because the pilot countdown locations were selected based partly on higher-than-average pedestrian injuries, the pilot countdown intersections were compared to a sub-group of signalized intersections that had a minimum of two pedestrian injury crashes in the 21-month pre-installation period. The mean number of pedestrian injury crashes in the pilot group was 3.00; the mean number in the comparison sub-group was 2.74. They were closely matched.

Pedestrian and Driver Behavior

Two sets of behavioral assessments were performed. The first involved observations of pedestrians shortly before and after the devices were installed in 2001 for:

- Signal phase when a pedestrian started and finished crossing;
- Whether a pedestrian ran or aborted crossing; and
- Whether there was a pedestrian-vehicle conflict (near miss).

In addition, a sample of vehicles was observed for:

- Signal phase when a vehicle entered intersection;
- Signal phase when a vehicle cleared intersection; and
- Whether there was a pedestrian-vehicle conflict (near miss).

This initial evaluation included observations of nearly 600 pedestrian crossings before installation and over 900 post installation.

In some cases, yellow intervals were extended and/or all-red phases were added when the countdowns were installed. Positive impacts may be due partly to this signal timing change rather than the countdown devices themselves, although the changes were made gradually to the planned countdown signals control group as well. It is not possible to separate the two effects.

The second set of pedestrian/vehicle observations was carried out in spring-summer 2003 at eight intersections. A total of 1,342 pedestrians were observed for this post-installation phase. Differences in proportions before installation versus post installation were assessed with a Z-test.

Pedestrian Attitudes and Knowledge

During the pre-installation and first post-installation phases, pedestrians at each study intersection were approached and questioned briefly about their attitudes and knowledge. Questions covered:

- Whether respondents noticed the countdowns;
- How helpful respondents found the countdowns;
- How the countdowns compared to conventional pedestrian signals;

- Whether respondents thought they were crossing differently due to the countdowns; and
- Whether respondents knew that to start crossing on the flashing red hand (flashing DON'T WALK) is a violation of the vehicle code.

Installation and Maintenance Experience

The Department of Parking and Traffic's Signal Shop maintains records of maintenance calls. These were available for assessing the reliability of countdown signals.

STUDY RESULTS

Crash Analysis

The number of pedestrian injury crashes declined by 52 percent after the introduction of the countdown signals (see Table 1 and Figure 2), a statistically significant reduction (confidence interval = 24.8 percent, 93.3 percent, p-value <= 0.03). There was a slight decline for the primary comparison intersection types during the time periods in question. These comparison intersection declines were not statistically significant, although the number of intersections and the injury counts were large.

The reduction in injury crashes in a higher injury non-countdown comparison sub-group was almost as great as the decline in the countdown treatment group, and the difference was not statistically significant. This suggests that regression to the mean may have played a major role in the decline.

However, the countdown injury decline was consistently greater than the non-countdown decline, in several different comparisons matching countdown and non-countdown intersections with similar pre-installation injury levels. Therefore, although the 52-percent reduction in collisions overstates the impact of the countdown, a real reduction did occur.

Pedestrian Behavior

The most important findings of the preliminary behavioral observations (as illustrated in Figure 3) were as follows:

- The percentage of pedestrians still in the crosswalk when the signal turned red showed a statistically significant decrease after the installation of countdown signals.
- The percentage of pedestrians leaving during the flashing red hand or solid red hand increased slightly (but not to a statistically significant degree).
- The percentage of pedestrians running or aborting their crossings showed a statistically significant decrease.
- The percentage of observed vehicle/pedestrian conflicts decreased (but not to a statistically significant degree).

Pedestrians who finished crossing on red dropped from 14 to 9 percent at eight intersections that were observed (during one pre-installation data collection period and two post-installation sets). This decrease is statistically significant (probability less than 1 percent of a difference due to random sample variation, pre-installation N = 591, post-installa-

Table 1. Pedestrian injury events before and after countdown signals were installed.

Treatment group	Number of intersections	Number of injury events	Percentage of injuries after/before
Group A: Countdown signals installed			
After	9	13	48.1[a]
Before		27	
Group B: Planned countdown intersections			
After	629	740	97.0
Before		764	
Group C: No signals planned			
After	628	423	90.0
Before		469	
Group D: Countdown signals installed with 2+ crashes pre-installation			
After	7	11	42.3[a,b]
Before		26	
Group E: Planned countdown signals with 2+ crashes for the same period			
After	185	282	55.6[a,b]
Before		507	

* Note:
[a] = Sample group crash reduction statistically significant, p-value < .05
[b] = Difference between groups D and E not statistically significant
Before = prior period (July 2, 1999 to April 1, 2001)
After = treatment period (April 2, 2001 to December 31, 2002)

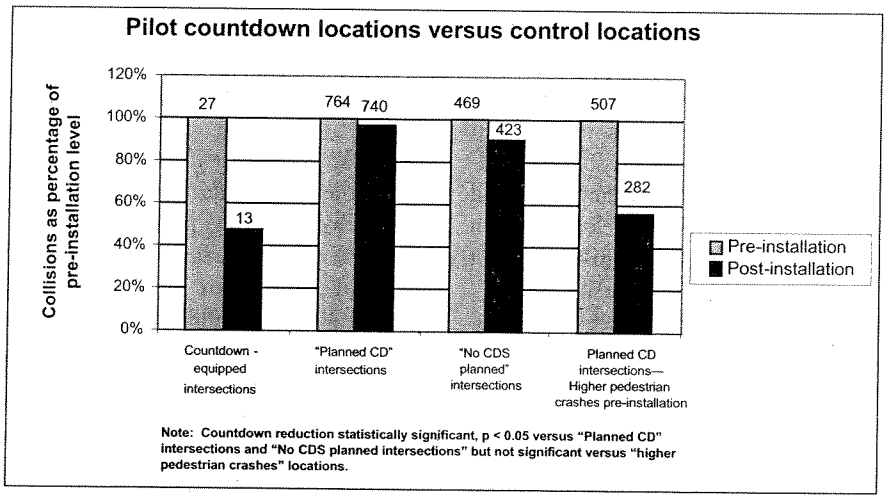

Figure 2. Pedestrian injury collision impacts of countdown signals.

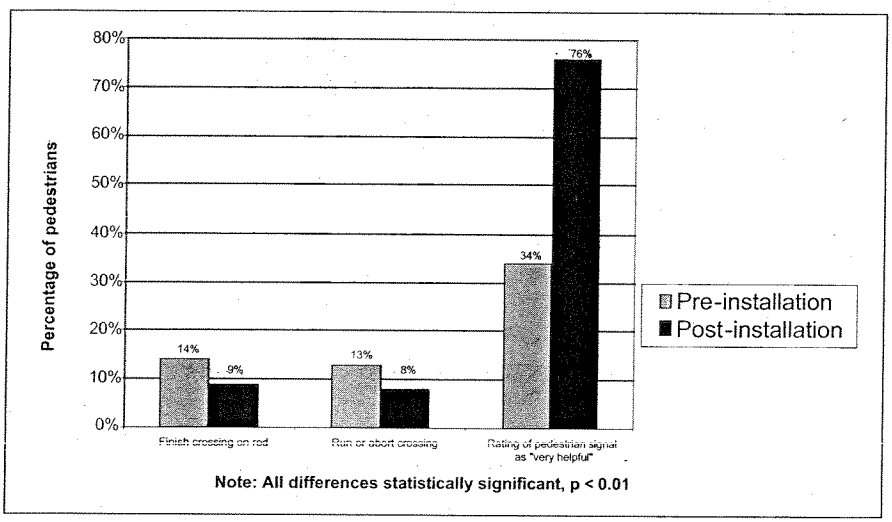

Figure 3. Pedestrian behavior impacts of countdown signals.

tion N = 916, on a two-tailed Z-test of the difference of proportions).

This result was due mostly to walkers hurrying across (more often finishing on the yellow) rather than being more compliant with pedestrian signals. The proportion of pedestrians starting crossing on the flashing or solid red hand (DON'T WALK) increased by 1 percentage point—not significant, although the impacts varied widely by location.

The proportion of pedestrians who ran or aborted their crossing dropped from 13 to 8 percent, a statistically significant result ($p < 0.01$). There was a small change in observed vehicle/pedestrian conflicts, dropping from 6 to 4 percent of pedestrians (not statistically significant).

In the second (2003) set of observations, the proportion finishing crossing on red also was 9 percent (down from 14 percent in the pre-installation observations, significant, $p < 0.01$). The proportion observed running or aborting their crossing dropped even further (from 13 to 4 percent, $p < 0.01$). Vehicle/pedestrian conflicts dropped below 1 percent (from the 6 percent initially observed, $p < 0.01$).

Driver Behavior

There was a small decrease in the reported incidence of red-light running (drivers entering the intersection on red), from 2 percent on pre-installation to 1 percent during both post-installation periods (not statistically significant).

A more rigorous study of driver behavior and human factors in Monterey, CA, found that unsafe driver behavior was not a problem, although concerns had been raised that drivers will use the countdown to decide whether to speed up on a "stale" green.[4] However, observers generally agree that most drivers seem to use the information to make sure they do not run the red light; some drivers may speed up. At many locations during peak periods, congestion makes speeding difficult or impossible.

Pedestrian Attitudes and Knowledge

In the 2001 data collection effort, interviewees finding pedestrian signals "very helpful" increased substantially with the countdown signals—only 34 percent with conventional signals but 76 percent with countdown signals. About 92 percent of post-installation interviewees explicitly said the countdown signals were "more helpful" than conventional pedestrian signals, primarily because they showed the time remaining to cross.

This is consistent with recent Federal Highway Administration (FHWA) research, which showed that a pedestrian sample strongly preferred countdown signals to actual and theoretical versions of pedestrian signals, and that the countdown version was "most easily understood."[5]

Only 6 percent said the conventional pedestrian signals were more helpful. In these few cases, the apparent reason was the clarity of the walking person/red hand symbol. In the pilot program, the countdown symbols used only the outline of the red hand/walking man, but current San Francisco specifications call for a solid density of LED pixels.

Few (17 percent) understood that it is a violation of the vehicle code to start crossing during the countdown (flashing red hand). This compares to 40 percent in the pre-installation study. This suggests that pedestrians are using the countdown signals to decide when to start to cross, which is not the official purpose in San Francisco. A substantial proportion of pedestrians do not strictly follow the "letter of the law" (the Uniform Vehicle Code/MUTCD sections on pedestrian signal compliance).

MUTCD calls for pedestrian clearance to be based on a walking speed of 4.0 feet per second or slower. In San Francisco, 77 percent of pedestrians walk faster than this rate; therefore, a large share know they can "beat the countdown" if they start walking early enough in the pedestrian clearance phase. The MUTCD prohibition on starting to cross during the flashing red hand (the pedestrian clearance) is called into question when pedestrians can judge for themselves whether they can cross safely before conflicting traffic starts.

The authors recommend that the wording "pedestrians shall not" begin crossing should be changed to "pedestrians should not" begin crossing. Pedestrians are capable of judging time and distance, as demonstrated when they cross at uncontrolled crossings with heavy traffic volumes, determining whether a gap in traffic is adequate.

Installation and Maintenance Experience

The devices manufactured by GELcore™ (Valley View, OH, USA) and Dialight™ (Farmingdale, NJ, USA) had a generally positive record. The manager of the Department of Parking and Traffic's Signal Shop believed that the reliability of the countdown signals had been close to that of conventional (incandescent) pedestrian signals.

STUDY CONCLUSIONS AND RECOMMENDATIONS

Although additional long-term studies would be useful, the initial results

from San Francisco's pilot locations provide a number of useful conclusions:

- Countdown signals appeared to reduce pedestrian injuries. Although the test group's reduction by roughly half likely was affected by regression to the mean, because the countdown reductions were consistently greater than those experienced at higher injury non-countdown locations, an improvement in safety is clearly indicated by the study. Although the trial involves a limited number of intersections, the trial period was long enough to reduce the novelty factor.
- The countdowns reduced the proportion of pedestrians finishing crossing on the red. There has not been a significant increase in the number of pedestrians starting to cross during the pedestrian clearance phase.
- The countdowns did not result in an increase in drivers running red lights.
- The devices are viewed very favorably by pedestrians for providing additional information. They are better understood than conventional pedestrian signals.
- The devices appear to imply to a substantial proportion of pedestrians that it is proper to start crossing on the flashing red hand (flashing DON'T WALK). However, the disadvantages of this effect are less important than the advantages listed above.
- The countdown signals are relatively easy to install for signal electricians. The maintenance record from two different manufacturers has been positive.
- Starting the countdown on the pedestrian clearance does not appear to reduce effectiveness substantially or trigger public complaints. Although there initially was concern among pedestrian advocates and some Department of Parking and Traffic staff that the shorter countdown would lead to complaints about allegedly insufficient time to cross and lack of usefulness, that has not been the case.
- The LED signals save energy compared to the incandescent version they replaced. The countdown uses roughly 9–10 watts and the hand/walking man uses 6–9 watts, versus about 67 watts for conventional incandescent pedestrian signals. The energy savings are a key component of San Francisco's conversion to countdown signals—the cost of installing the new countdowns was financed entirely through a loan with the state of California to be repaid out of reduced energy costs.

NEXT STEPS

Although the results are encouraging, additional analysis will be carried out when citywide results over an extended period are available. Also, within the next several years, national tests will be conducted with pedestrian countdown signals that add "animated eyes." The shifting eyes during the WALK phase remind pedestrians to check both ways. This would be funded by FHWA as part of an evaluation of several innovative technologies.

ACKNOWLEDGMENTS

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- Other San Francisco Municipal Transportation Agency/Department of Parking and Traffic staff for work on the implementation and evaluation of the countdown project (including Livable Streets section manager Bridget Smith, assistant transportation engineers Maurice Growney and Philip Louie and senior engineer Harvey Quan). ■

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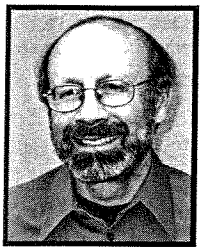

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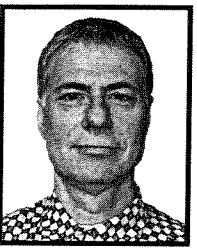

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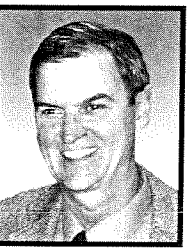

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ITE Coordinating Council Summary Report—Key Projects Completed in 2005

Council	Committee Title	Type	Committee Chair
Management & Operations/Intelligent Transportation Systems Council	Management and operations mega-issue	Informational report	Pat Noyes, 303-440-8171; pat@patnoyes.com
	Traffic signal self-assessment	Other	Les Jacobson, 206-382-5290; jacobsonl@pbworld.com
Parking Council	Rescission of Guidelines for Parking Design	Other	Randy McCourt, 503-243-3500; rsm@dksassociates.com
Pedestrian and Bicycle Council	*Site Design Review Guidelines for Promotion of Alternative Transportation Modes: Canadian Guide to Promoting Sustainable Transportation Through Site Design*	Informational report	Eugene Chartier, 905-985-7346 ext. 10; gchartier@township.scugog.on.ca
	Segway investigations	*ITE Journal* article	Luis Porrello; lporrello@hntb.com
Traffic Engineering Council	Update of *Guidelines for Prohibition of Turns on Red*	Recommended practice	Bill Savage, 517-339-3933; msusavage@aol.com
	Benefits of retiming traffic signals	Brochure	Srinivas Sunkari, 979-845-7472; s-sunkari@tamu.edu
	Preemption of Traffic Signals at or Near Railroad Grade Crossings with Active Warning Devices (Revision)	Recommended practice	Thomas Lancaster, 503-248-0313; tom@lancasterengineering.com
Transportation Consultants Council	2005 Young Professionals Scholarship Program	Other	Paul Eng-Wong, 212-695-5858; peng-wong@eng-wongtaub.com
Transportation Education Council	Knowledge expectation survey	Survey	Gary B. Thomas, 979- 458-3263; g-thomas@tamu.edu
	ASCE Policy 465	*ITE Journal* article	Martin Lipinski, 901-678-3279; mlipinski@memphis.edu

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PUBLIC HEALTH POLICY AND PRACTICE

What are the most effective ways of improving population health through transport interventions? Evidence from systematic reviews

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Study objective: To review systematic review literature that describes the effectiveness of transport interventions in improving population health.
Methods: Systematic review methodology was used to evaluate published and unpublished systematic reviews in any language that described the measured health effects of any mode of transport intervention.
Main results: 28 systematic reviews were identified. The highest quality reviews indicate that the most effective transport interventions to improve health are health promotion campaigns (to prevent childhood injuries, to increase bicycle and motorcycle helmet use, and to promote children's car seat and seatbelt use), traffic calming, and specific legislation against drink driving. Driver improvement and education courses are associated with increases in crash involvement and violations.
Conclusions: Systematic reviews are able to provide evidence about effective ways of improving health through transport related interventions and also identify well intentioned but harmful interventions. Valuable additional information may exist in primary studies and systematic reviews have a role in evaluating and synthesising their findings.

Transport has the potential to affect health in a number of ways.[1–9] Health may be promoted by enabling access to work and social activities, including exercise, or it may be damaged through accidents, air and noise pollution, and other social[1] and environmental[1] impacts. Observational and experimental evidence is available to describe some of these mechanisms, for example, the effects of physical activity on obesity,[2] type 2 diabetes mellitus,[2] hypertension,[2] cardiovascular disease,[2] osteoporosis,[10] mental health, and some cancers.[11] But whether any transport policy or programme will actually cause changes in exercise related health depends upon a chain of events occurring and just because some links in the postulated chain can be demonstrated, it does not mean that the whole chain is proved.[12] At a population level the relation between transport and health is complex and sometimes counterintuitive. For example, an increase in traffic volume in the United Kingdom has been accompanied by a fall in serious and fatal road traffic accidents.[13] Compulsory cycling helmet legislation in Victoria, Australia, was followed by a fall in the severity and frequency of head injuries,[14] which may have been partly a result of a 36% reduction in cycling and its health benefits by children and teenagers.[14] In attempting to reduce inequalities through transport policies and programmes, it is worth noting that highly efficacious clinical interventions may be implemented in ways that worsen inequalities.[15] Thus, the health effects of transport interventions need to be evaluated in field trials so that these complex impacts can be assessed.

The aim of our review was to identify high quality evidence on the effects of transport policies and programmes on health. We restricted our search to literature describing population based interventions and their measured health impacts for the reasons given above. We did not restrict our search to specific diseases or potential risk factors. We sought evidence from systematic reviews for several reasons. The first is that few practitioners, and even fewer policymakers and planners, have the time, skills and other resources to review all the available evidence. Reading a systematic review is a more reasonable proposition and there is a growing recognition that syntheses of research results rather than results of single studies are needed.[17] Systematic reviews may play an important part in identifying effective social and policy interventions, as illustrated by international initiatives such as the Cochrane Collaboration (http://www.cochrane.org/default.htm) and the Campbell Collaboration[18 19] and in the UK, the ESRC funded Evidence-based Policy and Practice Initiative (http://www.EvidenceNetwork.com/). The quality of evidence presented by rigorous systematic reviews is usually of a high standard because reviewers use methods that minimise selection, exclusion, and measurement biases.[20] And lastly,

1 Search methods stated?
2 Search for evidence comprehensive?
3 Inclusion criteria reported?
4 Selection bias avoided?
5 Criteria to assess validity of included studies reported?
6 Were validity criteria appropriate?
7 Combination of results performed using appropriate methods?
8 Combination of results appropriate to the aim of the review?
9 Were conclusions of paper supported by its findings?

Overall rating based on these?

extensive flaws	major flaws	minor flaws	minimal flaws
1 2	3 4	5 6	7

Figure 1 Criteria for evaluating overviews. Oxman and Guyatt.[21]

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Table 1 Main findings of systematic reviews on health promotion interventions to improve health through transport

Modes of intervention	Quality indices	Main results
Primary care based counselling to prevent childhood injury	4[22]	Injury prevention counselling as part of routine health supervision increased car seat and seat belt use, decreased motor vehicle occupant injuries and decreased hospital visits for traffic injuries.
	7[24]	School based and public/parent education to use bicycle helmets reduced hospital inpatient rates for bicycle injuries by up to 0.2% more than control group. Reductions in hospital admissions as a result of general injury prevention approaches showed 20% decrease in 1 study, but NS effects in other programmes.
Promotion of childhood rear car seats	6[25]	The evidence is weak that either educational campaigns or legislation to encourage front and rear seat belt use and placing children in rear seats are effective in changing behaviour. At some ages, there was a decrease in placing children in rear seats or in using rear seat belts. A number of included studies did not show statistically significant effects of the intervention
Health promotion and community based approaches to reduce unintentional injury	5[26 28]	(<15 years old): Road environment modifications reduced accidents by 7–32%; package of engineering measures reduced accidental injuries by 25%; road safety education can reduce casualties from children emerging from behind a vehicle by 20%; cycle helmets associated with 48% and 70% reduction in hospital admissions and death, plus 23% and 28% reduction in non-head injuries over 2 year study period; child restraints and seatbelts reduced injury severity.
	7[26 30]	(15–25 years old): Bicycle and motorcycle helmets reduced head and other injuries and motorcycle helmet legislation was followed by a 30% reduction in fatalities, its repeal by an increase of 25–40% (the effect of reductions in cycling and motorcycling rates in the population is unclear); raising the minimum drinking age above 18 is associated with decrease in young driver and passenger fatalities.
		No proven effect of: training in reducing motorcycle injury; enhanced driver education courses; school-based programmes, rehabilitation for drink drivers, and education on the effects of catastrophic injury.
		Programmes that unintentionally enable adolescents to drive at a younger age than they would otherwise may have a negative effect.
Driver improvement and education programmes	3[31]	24/59 included programmes resulted in statistically significant reductions in violations (4–21%) but 3/59 resulted in significant increase in violations of 9, 14 and 40%. Crash reductions of 6–32% in 10/59 included programmes but 3/59 resulted in crash increases of 20, 30 and 46%. No proven effect of individual vs group interventions, direct vs indirect approaches or targeting certain types of violation.
	7[32]	RCTs show increase in crash involvement and violations as a result of high-school aged driver education courses. Ecological studies show both increases and decreases in crash involvement after driving education programmes and increases in licensure rates in 16–17 year olds.
Road safety campaigns	3[33]	Average campaign effect for all campaigns is 7.6% improvement. Persuasive rather than educative approaches are more effective. Legislation alone is not effective but requires enforcement plus publicity. Prior qualitative research, emotional vs rational appeal, theoretical model basis vs none, and specific behaviour request, increase the effectiveness of campaigns. Prevalence of baseline knowledge is inversely related to potential for impact of campaign
	4[34]	All road safety campaigns show 7.0% reduction in accidents over and above the background temporal reduction in accident rates. Financial rewards are most effective, followed by enforcement + legislation combinations and in cities rather than rural settings.
Safety belt incentives	7[35]	Campaigns that use tangible incentives (such as money, prizes and vouchers) lead to substantial short-term increases in safety belt use (mean effect 12.0% increase above baseline) but have more modest longer term effects (mean effect 9.6% increase above baseline). Campaigns were most effective in elementary schools, where incentives were given immediately rather than delayed, and where the initial baseline use of seatbelts was low.
	6[36]	Educational campaigns: 1 found 5% increase in children in rear seats ($p<0.05$); 1 pilot programme found 30% increase in child restraint use in rear seats ($p<0.05$) in elementary schools, but other settings and placing children in rear seat were NS
		Legislation requiring restraints when children were in front car seats had effects on the use of rear seats: 1 study found 19% increase; 1 study found 9% increase in <1 year olds, 2% in 1–4 year olds and decrease of 4% in 5–9 year olds but NS effects in 10–14 year olds; 2 studies found NS effects
	7[37]	Child restraint use in rear seats: 3 studies found increases of 11–16% ($p<0.05$); 1 study found decrease in restraint use of 10% in 1–4 year olds and 3% in 5–9 year olds but increase in <1 year olds (all $p<0.05$).
		Community and clinical programmes to increase <5 year olds' car seat and seatbelt use have moderate but only short term effects. 3 RCTs showed 36% increase in car seat or seatbelt use.
Remediation of drinking and driving offenders	7[38]	RCTs of probation and rehabilitation to reduce alcohol consumption and injury-related sequelae showed improvements in motor vehicle crash risks (RR 0.76–0.90) and injuries (RR 0.47 and 0.58) but probation and rehabilitation together may increase risk of injury (RR 1.06 NS).
	3[39]	Programmes to treat drink drivers show non-alcohol related crashes were worse as a result of the intervention (mean 11% increase) but a small decrease in alcohol related crashes occurred (mean 7% reduction). More severe licence sanctions reduced crash rates by 1–7% but tighter sanctions increased crash rates by 7%.

RR, risk ratio; RCT, randomised controlled trial; NS, not significant at $p<0.05$ level

systematic reviews indicate the principal areas in which evidence exists and may indicate gaps in knowledge.

METHODS

Inclusion criteria

We included all published and unpublished reports in all languages describing systematic reviews or meta-analyses of the effects of any mode of transport or transport policy on health. Health effects included social, psychological, and physical effects that could be measured on humans.

Exclusion criteria

We excluded non-systematic literature reviews, descriptions of environmental or physical effects that did not include human responses to them, behavioural interventions without objectively measured outcomes, predicted but not empirical health impacts, and reviews that described the effects of intermediate mechanisms by which transport affects health—such as exercise, walking or cycling—without evaluating the effectiveness of policies or programmes to bring about these changes.

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Table 2 Main findings of systematic reviews on engineering interventions to improve health through transport

Modes of intervention	Quality indices	Main results
Ignition interlock devices	4[40]	Ignition interlock devices were used for convicted drink driving offenders. Re-arrest and reconviction were reduced in intervention versus control groups (RR 0.36–0.85) in a variety of study designs, including an RCT
Studded tyres	3[41]	Studded tyres may increase or decrease accident rates, depending on road conditions. 8 included studies found changes in accident rates significant at 95% level: on snow (18–72% reduction), on bare roads (increase of 151% to decrease of 68%), and on all road surfaces (16–57% reduction). Studies with higher quality (large size, surface condition of road specified, type of tyre specified, confounding variables accounted for) showed small, NS effect sizes (2–5% accident reductions). 5 studies on the effects of laws prohibiting the use of studded tyres found increases in accident rates of 3–10% (p<0.05)
Traffic calming schemes	6[42]	Traffic calming describes measures to discourage non-local traffic from using residential streets and reducing the speed of the remaining traffic. Area wide traffic calming reduces the number of accidents by a mean of 15% in the whole area affected by the measures (main roads and local roads combined). The effects are relatively constant in different countries and in different years
Daytime running lights	4[43]	Daytime running lights are associated with a reduction in multi-party accident rates of 14–18% (p<0.05 in prospective controlled studies and in uncontrolled prospective designs, NS in RCTs) All types of accident (front/side impact, rear-end collision, pedestrian, not specified) reduced by 14% (12–16%). There is no clear dose-response relation between proportion of cars using DRLs and accident rates. The effects of DRLs are greater with increasing latitude (for example, 9% reduction in accidents in Israel v 60% reduction in Finland)
Speed limit reductions	4[44]	Speed limit reductions may be effective on their own in reducing accidents but additional measures may be needed. Speed limit zones in built up areas reduce personal injuries but have no clear effect on material damage. Controlled studies show smaller reductions in personal injuries (18%, 8–26%) than uncontrolled studies (43%, 42–45%). Speed limit zones in quieter peripheral roads are effective in reducing both personal injuries (21%, 9–31%) and material damage (18%, 9–26%). A change to differential speed limits (slower in more built up areas, faster in peripheral roads) is associated with an increase in accidents in the peripheral areas (17%, 0–37%). For 30 km/h zones, accidents are reduced by 3.5% per km/h speed is reduced, independent of study design. Speed reduction by road humps shows non significant reductions in personal injuries in controlled studies (17% reduction, 95% CI 67% reduction to 19% increase). Controlled studies show non-significant increases in accidents in areas surrounding road humps. Accidents are reduced by 4.5% per km/h speed is reduced, independent of study design. Raised crossroads are associated with non-significant increases in personal and material accidents. Rumble strips approaching crossroads are associated with significant decreases in personal (33%, 25–40%) and material (25%, 5–45%) accidents

RR, risk ratio; RCT, randomised controlled trial; NS, not significant at p<0.05 level

Search methods

We searched the following electronic databases plus the world wide web using www.Google.com: Ovid Medline (1966–1/2001), EMBASE (1980–1/2001), CINAHL (1982–1/2001), DARE (1/2001), ERIC (1966–1/2001), Cochrane Database of Systematic Reviews (2000, Issue 4) and PsycINFO (formerly PSYCLIT) (1971–1/2001) using the search terms meta-analys$, metaanalys$, systematic AND review, evaluation synthesis or research synthesis, limited to human subjects, where $ denotes all suffixes. Keywords were transport, car, cars, bus, automobile$, traffic or vehic$. TRANSPORT—which comprises the three databases TRIS, ITRD and TRANSDOC—was electronically searched from its first entries in the 1960s to February 2001 for all meta-analyses and systematic reviews without any additional restrictions on the initial search because all entries should be relevant to transport. Bibliographies of selected papers were searched and experts in the field were asked to identify other relevant reviews.

Evaluation of included reviews

Two reviewers independently screened abstracts then scored papers using Oxman and Guyatt's index for quality assessment of reviews,[37] using the nine criteria given in figure 1. A quality index, based on these criteria, could range from 1 (major flaws) to 7 (minimal flaws).

We have presented brief summaries of the most important findings of each review in the Results.

RESULTS

Altogether 4183 reports were identified in the first electronic search and all abstracts read to select those that met inclusion criteria. A total of 127 candidate papers and reports were selected. All were obtained and considered for suitability. Twenty papers were agreed to meet the inclusion criteria. A further eight eligible reviews were identified through contact with experts and bibliographies giving a total of 28 systematic reviews and meta-analyses. All reviews that appeared in the same special edition of the *American Journal of Preventive Medicine* were considered with an introductory paper[38] that described the common methodology of all their searches.

We classified reviews into four categories of intervention: health promotion, engineering, environmental, and legislative. Where reviews covered more than one type of intervention, the dominant area determined its classification in our summary. A brief summary of the results of each review is given in tables 1–4. Only six reviews, all of which described health promotion interventions, had minimal flaws.

Health promotion interventions

Systematic reviews with minimal flaws identified beneficial effects of primary care based counselling to prevent childhood injury and efforts to increase bicycle and motorcycle helmets,[39 40 41] and raising the minimum drinking age above 18 years.[42 43] Programmes to increase car seat and seatbelt use by children are effective but their benefits seem to be comparatively short-lived.[44] There are mixed effects of drink driving remediation, with some interventions, such as the combination of rehabilitation and probation, being associated with a potential increase in the risk of injury.[45] Driver improvement and education courses are associated with an increase in crash involvement and violations.[46]

Reviews with more methodological flaws, in addition to providing further information on topics already covered by better quality reviews, described beneficial effects of road safety and education campaigns.[38 39 47 48]

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Table 3 Main findings of systematic reviews on environmental interventions to improve health through transport

Modes of intervention	Quality indices	Main results
Public lighting	4[49 50]	Night time accidents were reduced by 15–35% as a result of public lighting interventions. The effect size was greater where more accidents occurred at night as compared with during the day. Fatal accidents reduced by 65% (range 52–75%) and property damage reduced by 17% (range 13–21%). The effects were also dependent upon the decade of study (greatest in the 1980s), the country of study (largest effect in Israel, smallest effect in Denmark), rural areas benefited more than urban environments, and pedestrians benefited more than other street users
Guardrails and crash cushions	4[51]	Installing median barriers increases the total number of accidents by about 30% (p<0.05). Severity of accidents is reduced. New median barriers reduce the probability of fatal accidents by 32% (range 14–46%), given the total number of accidents, but apparently have no effect on the probability of injury accidents (−2%, −7–4% change). Guardrails reduce both the number of accidents (by 27%, range 18–35%) and their severity. Crash cushions reduce both number (84%, range 74–93%) and severity of accidents although studies are few and of doubtful validity
Modifiable risk factors for child pedestrian injuries	3[52]	Child risk factors, in order of effect size, are age, behaviour, race, and sex. Social and cultural risk factors increasing likelihood of child pedestrian injuries are income (RR 5.7), crowding (RR 1.3 to 3.4), mother's working status and history of hospitalisation (RR 2–2.5), illness in the family (RR 2.3), and mother's education. Physical environment risk factors are, in descending order, volume of traffic, speed limit, predominant type of dwelling, absence of play area, location on road, protection of play area, proportion of curb side parking, street mean vehicle speed, shared driveway, type of road, time of day, weather, and lighting

RR, risk ratio.

Engineering improvements

Five reviews were identified although four[40 41 42 44] had major methodological flaws (table 2). Elvik's review of traffic calming schemes[42] had a Quality Index of 6. It found that traffic calming schemes had a mean effect of reducing accidents by 15% and that similar effect sizes were found in different decades and in different countries.

There is some evidence from less methodologically rigorous reviews for the effects of ignition interlock devices, studded tyres, daytime running lights, and measures to reduce vehicle speeds. Ignition interlock devices, which require drivers to record a legal breath alcohol level before the car engine can be started, were associated with reductions in re-conviction and re-arrest rates for driving while intoxicated of at least a third.[40] Studded tyres had mixed effects, on some road surfaces increasing accident rates and in others reducing them.[41] Laws to enforce the use of studded tyres were associated with statistically significant increases in accident rates of 3%–10%. The use of sidelights or dipped headlights during the day (daytime running lights) was associated with reductions in accidents involving more than one vehicle of about 14%, but this effect was much greater in more northerly countries.[43] Speed limit zones are effective in reducing personal accidents and material damage.[44] Creating raised road surfaces at crossroads may increase accidents, while noisy road surfaces (rumble strips) before crossroads are associated with reductions in accidents. Road humps and differential speed limits may reduce accidents locally but increase them in surrounding areas.

Environmental interventions

Three reviews considered environmental interventions (table 3) and all had more than minor methodological flaws.

Elvik's review[49 50] found that public lighting reduced night time accidents in all cases but depended on the baseline risk and the proportion of night time accidents.[49] Guard rails and crash cushions were found to increase numbers of accidents but decrease their severity.[51] One review,[52] with a Quality Index of 3, aimed to describe the effects of modifiable risk factors on child pedestrian injuries. Age, behaviour, race, and sex were considered to be among the strongest risk factors although it is not clear how any bad behaviour might be modified.

Legislative interventions

Six reviews considered the effectiveness of legislation on accidents, injuries, and drinking and driving (table 4). A review that had a quality score of 6 found that laws for a maximum legal blood alcohol concentration of 0.02% reduced night time injuries and fatal crashes.[53] The introduction of random breath alcohol testing is associated with a reduction in alcohol related hospital admissions, deaths, injuries, night time crashes, and charges for drink driving by around a fifth.[54] A review of laws against drink driving in the absence of any other offence ("administrative per se")[55] had minor flaws and found inconclusive results although no harmful effects. Other studies had more methodological flaws and their results should be interpreted with caution. Legislation to deter drinking and driving was effective in most cases although several studies on mandatory jail sentences showed increases in crashes after legislation.[56 57] Lighter sanctions against drink drivers increased subsequent crash rates by 7%[58] (see table 1). Foss[59] found that graduated driver licensing (where there is progressive freedom after passing the driving test to drive unaccompanied and at night) and night time curfews were associated with variable reductions in deaths and accidents. These were confounded to some extent by reductions in the rate of licensure among teenagers. Laws to enforce car seat belt use by adults increased belt use and reduced serious and fatal injuries.[60]

DISCUSSION

Evidence is available in well conducted systematic reviews both to support a range of transport related interventions that will benefit health and to indicate interventions that are intended to improve health but are in fact harmful and should not be implemented. Beneficial interventions include health promotion campaigns to prevent childhood injuries, efforts to increase bicycle and motorcycle helmet use, children's car seat and seatbelt promotion, traffic calming, and specific legislation against drink driving. Driver improvement and education courses may increase accidents by encouraging greater numbers of inexperienced drivers on to the roads. We agree with comments made in a review[38] published during the preparation of this paper that they cannot be recommended. Evidence for other health effects of transport interventions has also been identified in systematic reviews that have more methodological flaws. Ignition interlock devices, daytime running lights, public lighting, graduated driver licensing, and laws to enforce seatbelt use may all be effective in improving health. The evidence is equivocal on the benefits and harms of

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Table 4 Main findings of systematic reviews on legislative interventions to improve health through transport

Modes of intervention	Quality indices	Main results
Drinking and driving legislation, including administrative per se, random screening and lowering the legal blood alcohol limit	4[illegible]	A systematic review on drink driving control showed that licence suspension, illegal and administrative per se laws, selective and regular enforcement patrols and sobriety checkpoints were most effective, with typical effect sizes of around 10% reduction in a variety of outcomes. Several studies on mandatory jail sentences showed increases in crashes following implementation
	6[illegible]	Laws requiring a reduction to maximum 0.02% blood alcohol concentration associated with reduction in night time injuries of 17% (NS); 12% reduction in injuries in men, 24% in women, 17% reduction in fatal crashes among younger drivers (p<0.001), 1% in older drivers; 22% net reduction in fatal crashes
		Pre-post with interrupted time series (1 study): 4% reduction in serious injuries using time series, 6% reduction using pre-post – both NS
		Interrupted time series (1 study): 11% or 33% reduction in "had been drinking" crashes depending on model chosen
	5[illegible]	Evaluation of licence suspension or revocation through administrative determination showed no clear effect in 1/3; in 1/3, recidivism in intervention v controls OR 0.60 (0.54 to 0.68) up to but not after 36 months; in 1/3, intervention v controls in first year – drunk driving offences OR 0.78 (0.76 to 0.79), traffic crashes OR 0.65 (0.63 to 0.67) and alcohol related crashes OR 0.73 (0.70 to 0.77).
	6[illegible]	Random breath testing reduced hospital admissions by 20%, reduced deaths and injuries by 17–35%, reduced night-time crashes by 18–19% and reduced charges for drink driving.
		Checkpoints reduced nighttime crash rates by 10–38% and reduced fatal crashes by 17–25%.
Graduated driver licensing among young drivers	4[illegible]	Graduated driver licensing was associated with a reduction in hospital admissions of up to 23% and a reduction in deaths of 5.5% in 15–19 year olds; however, there was a simultaneous reduction in 15–19 year olds who drove and a 5% decrease in the teenage population in New Zealand
		A provisional licencing programme for 16–17 year olds showed a 5% decrease in daytime crashes; no effect of night time driving restriction; and a 10% decrease in traffic violation convictions
		Curfew laws in under-18s: (1/4) found no apparent effects; (3/4) found decrease in fatality by 23–28%
Car safety belt laws (only for adults)	3[illegible]	Prevalence of seat belt use increased by 1.08–1.3 times after laws introduced
		Primary enforcement compared with no laws found 1.5–4.1 times more prevalent seat belt use (17 studies); one outlier of 15.4 times more use of seatbelts; RR fatal injury 0.69 to 0.97 (20 studies) but 1.12 (NS) in 1 study; serious non-fatal injury RR 0.20 to 0.89 (11 studies)
		Secondary enforcement compared to no laws found a prevalence of seatbelt use 2.1–2.6 times higher in the former group (6 studies), RR fatal injury 0.62 to 1.03 (7 studies), but no significant value over 1.00; serious non-fatal injury RR 0.75 to 0.85 (4 studies).
		Any law compared with no law: 4 studies found that relative risk of fatal injury was 0.91 to 0.95 in the former.

RR, risk ratio; OR, odds ratio; RCT, randomised controlled trial; NS, not significant at p<0.05 level

guard rails, crash cushions, and interventions to reduce vehicle speeds. Some modes of drink driving remediation, including mandatory jail sentences and laws to enforce studded tyres, are associated with harmful effects on health. Further research, beginning with more rigorously conducted systematic reviews, is needed to determine whether these findings are valid.

The scope of this review

All 28 systematic reviews and meta-analyses on transport and health that we identified were concerned with injury prevention and all but four were concerned with preventing motorcar injuries. We did not use accident prevention as a primary search term because published and ongoing reviews exist in this area.[22–?] We found no evidence to suggest that any intervention will bring about a shift in the use of different modes of transport and as a result improve health in the broader ways suggested in the introduction. Such evidence may exist in primary studies that have not been synthesised in systematic reviews. For those who support public policies to promote walking, cycling, and public transport, experimental evidence may be superfluous and the intrinsic value of reducing our dependence on the car may be self evident. But this review has identified several counterintuitive effects of apparently beneficial transport programmes. We therefore believe that evidence of outcomes should guide transport interventions that are intended to benefit health and that good intentions are not enough.

Information from qualitative and quantitative research that describes important relations between transport use and broader determinants of health, for example exercise[?] or severance of communities by roads[?] may be helpful both in designing more effective new interventions and in understanding how the social and environmental context of an intervention may influence its effectiveness. It was not our aim to review the entire body of literature on how transport affects health, however, but to identify where population based interventions have been shown to impact upon health.

Because of the loss of information in summarising reviews we would recommend that anyone considering using their findings obtains the original papers.

Quality of included reviews

Oxman and Guyatt's quality scores[21] for each study indicate that only six reviews achieved a score of 7, indicating minimal flaws. Six studies had a score of 3 or less, indicating major flaws. Failure to demonstrate that selection bias had been avoided and inappropriate assessment of validity were the commonest methodological problems overall. Oxman and Guyatt scores mark down failure to report review methods, even if they have been carried out. It is therefore important for systematic reviews to make their methodology explicit. Improvements in database search engines are also needed so that, for example, controlled trials can be more readily identified.[?]

One implication of these results is that systematic reviews and meta-analyses have a useful contribution to evidence based policymaking for transport. As evidence of the health effects of other interventions continues to accrue, regularly updated systematic reviews will be required. Some of this work may fall within the remit of the newly established Campbell Collaboration (http://campbell.gse.upenn.edu/).

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Key points

- It may be possible to improve health by changing the way that people use different forms of transport.
- The evidence to support the actual effects of changing transport policies, plans, and programmes is often poorly described.
- Systematic reviews can provide accessible summaries of evidence on the effects of transport on health, using comprehensive search methods and explicit criteria for evaluating the quality of included primary studies.
- We found that health can be improved through health promotion campaigns, traffic calming schemes, and some legislation. But some interventions, such as driver improvement and education courses, may be harmful to health.
- The population health would be improved by implementing transport policies based on high quality research evidence and by withdrawing those where there is good evidence that any benefits are outweighed by harms.

Systematic reviews do not, however, obviate the need for high quality primary studies as important sources of evidence to improve health through transport choices.

Conclusions

Systematic reviews are able to provide evidence about effective ways of improving health through transport related interventions. The best evidence indicates that health promotion campaigns to prevent childhood injuries, increase bicycle and motorcycle helmet use, and children's car seat and seatbelt use, plus traffic calming, and specific legislation against drink driving are all beneficial, while driver improvement and education courses may be harmful. A systematic review of primary studies that embraces a wider range of possible health effects of transport—including social and environmental effects—is required and work on this is underway by the authors. This should determine if evidence is available to support claims for a spectrum of health effects, whether this evidence is of acceptable quality, and if not, where new primary studies should be directed. In the meantime, we suggest that policymakers, planners and health professionals put the available evidence into practice and monitor its benefits on health.

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Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations

Analysis of Pedestrian Crashes in 30 Cities

Charles V. Zegeer, J. Richard Stewart, Herman Huang, and Peter Lagerwey

Pedestrians are legitimate users of the transportation system and they should, therefore, be able to use the system safely. Pedestrian needs in crossing streets should be identified, and appropriate solutions should be selected to improve pedestrian safety and access. Deciding where to mark crosswalks is only one consideration in meeting that objective. This study involved an analysis of 5 years of pedestrian crashes at 1,000 marked crosswalks and 1,000 matched unmarked comparison sites. None of the sites in this study had a traffic signal or stop sign on the approaches. Detailed data were collected on traffic volume, pedestrian exposure, number of lanes, type of median, speed limit, and other site variables. Poisson and negative binomial regressive models were used. Study results revealed that on two-lane roads the presence of a marked crosswalk alone at an uncontrolled location was associated with no difference in pedestrian crash rate, compared with an unmarked crosswalk. Further, on multilane roads with traffic volumes above about 12,000 vehicles per day, having a marked crosswalk was associated with a higher pedestrian crash rate (after controlling for other site factors) compared with an unmarked crosswalk. Raised medians provided significantly lower pedestrian crash rates on multilane roads, compared with roads without a raised median. Older pedestrians had crashes that were high relative to their crossing exposure. More substantial improvements were recommended to provide for safer pedestrian crossings, including adding traffic signals (with pedestrian signals) when warranted, providing raised medians, and implementing speed-reducing measures.

Pedestrians are legitimate users of the transportation system and they should, therefore, be able to use this system safely and without unreasonable delay. Pedestrians have a right to cross roads safely; planners and engineers, therefore, have a professional responsibility to plan, design, and install safe crossing facilities. Pedestrians should be included as "design uses" for all streets.

As a starting point, roads should be designed with the premise that there will be pedestrians, that they are going be able to cross the street, and that they will be able to do it safely. The design question is, How can this task be best accomplished?

Providing marked crosswalks has traditionally been one measure used in an attempt to facilitate crossings. They are commonly used at uncontrolled locations and sometimes at midblock locations. However, there have been conflicting studies and much controversy about the safety effects of marked crosswalks. This study evaluated marked crosswalks at uncontrolled locations and offers guidelines for their use.

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HOW TO USE THIS STUDY

Marked crosswalks are one tool to ensure pedestrians can safely cross the street. When marked crosswalks at uncontrolled locations are being considered, the question should not be simply, Should I provide a marked crosswalk or not? Instead, the question should be, Is this an appropriate tool for getting pedestrians across the street? Regardless of whether marked crosswalks are used, there remains the fundamental obligation to ensure that pedestrians can safely cross the street.

In most cases marked crosswalks are best used in combination with other treatments (e.g., curb extensions, raised crossing islands, traffic signals, roadway narrowing, enhanced overhead lighting, traffic-calming measures, etc.). Marked crosswalks should be thought of as one option in a progression of design treatments. If one treatment does not adequately accomplish the task, then move on to the next one.

Failure of one particular treatment is not a license to give up and do nothing. In all cases the final design must accomplish the goal of getting pedestrians across the road safely.

What Is the Legal Definition of a Crosswalk?

The 1992 Uniform Vehicle Code (Section 1-112) defines a crosswalk as follows (*1*):

> (*a*) That part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway measured from the curbs, or in the absence of curbs, from the edges of the traversable roadway; and in the absence of a sidewalk on one side of the roadway, the part of a roadway included within the extension of the lateral lines of the existing sidewalk at right angles to the centerline.
> (*b*) Any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface.

Thus, legal crosswalks exist at all public intersections where there is a sidewalk on at least one side of the street. The only way a crosswalk can exist at a midblock location is if it is marked. Further, according to the *Manual on Uniform Traffic Control Devices* (MUTCD) (Section 3B-18), a crosswalk may be marked with paint, thermoplastic materials, and plastic tape, among other materials (*2*).

Specifically, crosswalks serve as the pedestrian right-of-way across a street. The level of connectivity between pedestrian facilities is directly related to the placement and consistency of street crossings.

Why Are Marked Crosswalks Controversial?

There has been considerable controversy in the United States regarding whether providing marked crosswalks will increase or decrease pedestrian safety at crossing locations that are not controlled by a traffic signal or stop sign. When citizens request the installation of marked crosswalks (with the assumption that marked crosswalks will increase their ability to cross the street safely), some engineers and planners still refer to the 1972 study by Bruce Herms (*3*) as justification for not installing them at uncontrolled locations. That study found an increased incidence of pedestrian collisions in marked crosswalks, compared with unmarked crosswalks at 400 uncontrolled intersections in San Diego, California. Questions have been asked about the validity of that study, and the study results have sometimes been misquoted or misused. Some have misinterpreted the results of that study; the study did not conclude that all marked crosswalks are "unsafe," and school crosswalks were not included in the study.

A few other studies since the Herms study have tried to address this issue. Some are not conclusive because of their methodology or sample size problems, and some have fueled the disagreements and confusion on the issue. Further, most of the previous crosswalk studies have analyzed the overall safety effects of marked crosswalks but did not investigate their effects in the presence of various numbers of lanes, different traffic volumes, or other roadway features. Like other traffic control devices, crosswalks should not be expected to be equally effective or appropriate under all roadway conditions.

Where Are Crosswalks Typically Installed?

The practice of deciding where to install crosswalks differs considerably from one jurisdiction to another across the United States, and engineers have been left to use their own judgment (sometimes influenced by political or public pressure) in reaching decisions. Some cities have developed their own guidelines. At a minimum, many cities tend to install marked crosswalks at signalized intersections (particularly urban areas), at school crossing locations (such as where adult crossing guards are used), and also at intersections controlled by a stop sign.

Some agencies rarely, if ever, choose to install marked crosswalks at uncontrolled locations (i.e., sites not controlled by a traffic signal or stop sign), whereas others have installed them at selected pedestrian crossing locations. Some towns and cities have chosen to supplement selected crosswalks with pedestrian warning signs, flashing lights, "Stop for Pedestrians in Crosswalk" signs, supplemental pavement markings, or a combination of these measures.

STUDY PURPOSE AND OBJECTIVE

Many highway agencies routinely mark crosswalks at school crossings and signalized intersections. Although questions have been raised about marking criteria at these sites, most of the controversy on whether to mark crosswalks has pertained to the many uncontrolled locations in U.S. towns and cities.

The purpose of this study was to determine whether marked crosswalks at uncontrolled locations are safer than unmarked crosswalks under various traffic and roadway conditions. Another objective was to offer recommendations on how to provide safer crossings for pedestrians.

The results of this study should not be misused as a justification for doing nothing to help pedestrians safely cross streets. Instead, pedestrian crossing problems and needs should be routinely identified, and appropriate solutions should be selected to improve pedestrian safety and access. Deciding where to mark or not mark crosswalks is only one consideration in meeting that objective.

This paper is based on a major research study for FHWA conducted by the University of North Carolina's Highway Safety Research Center (*4*). The study compared the safety of marked crosswalks versus matched unmarked crossings.

DATA COLLECTION AND ANALYSIS METHODOLOGY

An ideal study design would involve removing all crosswalks in several test cities and randomly assigning sites for crosswalk marking and sites to serve as unmarked control sites. However, it would be impossible to get the level of cooperation from the cities needed to conduct such a study because of liability considerations. Also, such random assignment of crosswalk markings would result in many crosswalks not being marked at the most appropriate locations.

Thus, because of real-world constraints, a treatment and matched comparison site methodology was used to quantify the pedestrian crash risk of marked versus unmarked crosswalks. This allowed for selection of a large sample of study sites in cities throughout the United States where marked crosswalks and similar unmarked comparison sites were available. At intersections, typically the unmarked crosswalk comparison site was the opposite leg of the intersection selected as the marked crosswalk site. For each marked midblock crosswalk, a nearby midblock crossing location was chosen as the comparison site on the same street (usually a block or two away) where pedestrians were observed to cross. (Even though an unmarked midblock crossing is not technically or legally a crosswalk, it was a suitable comparison site for a midblock crosswalk). The selection of a matched comparison site for each crosswalk site (typically on the same route and very near the crosswalk site) helped to control for the effects of vehicle speeds, traffic mix, and a variety of other traffic and roadway features.

A before and after experiment was not considered to be practical because of regression-to-the-mean problems, limited sample sizes of new crosswalk installations, and so on. A total of 1,000 marked crosswalk sites and 1,000 matched unmarked comparison sites in 30 cities across the United States was selected for analysis. Test sites were chosen without any prior knowledge of their crash history. School crossings were not included in this study because of crossing guards, special school signs and markings, or both, that may increase the difficulty of quantifying the safety effects of crosswalk markings.

Test sites were selected from the following cities:

- East: Cambridge, Massachusetts; Baltimore, Maryland (city and county); Pittsburgh, Pennsylvania; Cleveland, Ohio; Cincinnati, Ohio.
- Central: Kansas City, Missouri; Topeka, Kansas; Milwaukee, Wisconsin; Madison, Wisconsin; St. Louis, Missouri (city and county).

- South: Gainesville, Florida; Orlando, Florida; Winter Park, Florida; New Orleans, Louisiana; Raleigh, North Carolina; Durham, North Carolina.
- West: San Francisco, California; Oakland, California; Salt Lake City, Utah; Portland, Oregon; Seattle, Washington.
- Southwest: Austin, Texas; Ft. Worth, Texas; Phoenix, Arizona; Scottsdale, Arizona; Glendale Arizona; Tucson, Arizona; Tempe, Arizona.

Detailed information was collected at each of the 2,000 sites, including pedestrian crash history (average of 5 years per site), daily pedestrian volume estimates, average daily traffic (ADT) volume, number of lanes, speed limit, area type, type of median, type and condition of crosswalk marking patterns, location type (midblock versus intersection), and other site characteristics. Various crosswalk marking patterns are given in the MUTCD (2).

Crosswalk marking patterns found at the study sites included standard (parallel lines), solid (painted within the parallel lines), dashed, ladder, zebra, and continental style. Each of the 1,000 marked crosswalks had one of these marking patterns. Very few of the marked crosswalks had any type of supplemental pedestrian warning signs. Furthermore, none of the test sites had traffic-calming measures or special pedestrian devices (e.g., in-pavement flashing lights).

Estimates of daily pedestrian volumes at each crosswalk site and unmarked comparison site were determined based on pedestrian volume counts at each site, which were expanded to estimated daily pedestrian volume counts based on hourly adjustment factors. Specifically, at each of the 2,000 crossing locations, trained data collectors conducted on-site counts of pedestrian crossings and classified pedestrians by age group based on observations. Pedestrian counts were collected simultaneously for 1 h at each of the crosswalk and comparison sites. Full-day (8- to 12-h) counts were conducted at a sample of the sites and used to develop adjustment factors by area type (urban, suburban, fringe) and by time of day. The adjustment factors were then used to determine estimated daily pedestrian volumes in a way similar to that used by many cities and states to expand short-term traffic counts to average annual daily traffic.

This methodology was intended to measure relative pedestrian exposure at the crosswalk and comparison sites for use as a control variable in the analysis. Collecting the volume counts simultaneously at each crosswalk and matched comparison site helped to control for time-related influences on pedestrian exposure.

The crash data periods varied somewhat from city to city, and averaged approximately 5 years per site (typically from about January 1, 1994, to December 31, 1998). Police crash reports were obtained from each of the cities (except for Seattle, where detailed computer printouts were obtained for each crash). Crashes were carefully reviewed to assign a crash type and to ensure accurate matching of the correct location, that is, at or within 6.1 m (20 ft) of the marked or unmarked crossing of interest.

Standard pedestrian crash typology was used to review police crash reports and to determine the appropriate pedestrian crash types (e.g., multiple threat, midblock dart-out, intersection dash), as discussed later. All treatment (crosswalk) and comparison sites were chosen without prior knowledge of crash history. All sites used in this study were intersection or midblock locations with no traffic signals or stop signs on the main road approach (i.e., uncontrolled locations). This study focused on pedestrian safety and, therefore, data were not collected on vehicle-vehicle or single-vehicle collisions, even though it is recognized that marking crosswalks may increase vehicle stopping, which may also affect these collision types.

The selected analysis techniques were deemed to be appropriate for the type of data in the sample. Because of relatively low numbers of pedestrian crashes at a given site (e.g., there were many sites with zero pedestrian crashes in a 5-year period), Poisson modeling and negative binomial regression were used in the analysis of the data. Using these analysis techniques allowed for determining statistically valid safety relationships. In fact, there were a total of 229 pedestrian crashes at the 2,000 crossing sites over an average of 5 years per site. This translates to an overall average of one pedestrian crash per crosswalk site every 43.7 years.

All analyses of crash rates at marked and unmarked crosswalks took into account traffic volume, pedestrian exposure, and other roadway features (e.g., number of lanes, median type). To supplement the pedestrian crash analysis, a corresponding study by Knoblauch et al. (5) was conducted on pedestrian and driver behavior before and after marked crosswalks were installed at selected sites in California, Minnesota, New York, and Virginia.

STUDY RESULTS

Significant Variables

Poisson and negative binomial regression models were fit to pedestrian crash data at marked and unmarked crosswalks. These analyses showed that several factors in addition to crosswalk markings were associated with pedestrian crashes. Traffic and roadway factors found to be related to a greater frequency of pedestrian crashes included higher pedestrian volumes, higher traffic ADT, and a greater number of lanes (i.e., multilane roads with three or more lanes had higher pedestrian crash rates than two-lane roads). For this study, a center two-way left-turn lane was considered to be a travel lane and not a median.

The presence of a raised median (or raised crossing island) was associated with a significantly lower pedestrian crash rate at multilane sites with both marked and unmarked crosswalks. Further, on multilane roads, medians that were painted (but not raised) and center two-way left turn lanes did not offer significant safety benefits to pedestrians, compared with multilane roads with no median at all. These results were in basic agreement with a major study by Bowman (6) as well as a study by Garder (7), which found that raised medians and refuge islands, respectively, provided safety benefits for pedestrians.

There was also a significant regional effect; that is, sites in western U.S. cities had a significantly higher pedestrian crash rate than eastern U.S. cities (after controlling for pedestrian exposure, number of lanes, median type, and other site conditions). The reason(s) for these regional differences in pedestrian crash rate is not known, although it could be related to regional differences in driver and pedestrian behavior, higher vehicle speeds in western cities, differences in pedestrian-related laws, variations in roadway design features, other factors, or a combination.

Nonsignificant Variables

Factors having no significant effect on pedestrian crash rate included area type (e.g., residential, downtown), location type (i.e., intersection versus midblock), speed limit, traffic operation (one-way or two-way), condition of crosswalk marking (excellent, good, fair, or poor), and crosswalk marking pattern (e.g., parallel lines, ladder type, zebra stripes).

Surprisingly, after controlling for other factors (e.g., pedestrian volume, traffic volume, number of lanes, median type), speed limit was not significantly related to pedestrian crash frequency. Certainly, one might expect that higher vehicle speed would be associated with an increased probability of a pedestrian crash (all else being equal). However, the lack of association found in this analysis between speed limit and pedestrian crashes may be because there was not much variation in the range of vehicle speed or speed limit at the study sites [i.e., 93 percent of the study sites had speed limits of 40.2 to 56.3 km/h (25 to 35 mph)].

Another possible explanation, as hypothesized by Garder (personal correspondence, Oct. 7, 1999, and March 2000), is that pedestrians may be more careful when crossing streets with higher speeds; that is, they may avoid short gaps on high-speed roads, which may minimize the effect of vehicle speed on pedestrian crash rates. In terms of speed and crash severity, the analysis showed that speed limits of 56.3 km/h (35 mph) and greater were associated with a higher percentage of fatal and A-type (serious or incapacitating) injuries (43 percent) compared with sites having lower speed limits (23 percent of crashes resulting in fatal or A-type injuries).

Marked versus Unmarked Crosswalk Comparisons

All of the variables related to pedestrian crashes (i.e., pedestrian volumes, traffic ADT, number of lanes, median existence and type, and region of the country) were then included in the models for determining effects of marked versus matched unmarked sites. Binomial comparisons were produced for marked versus unmarked crosswalks within subsets by ADT, median type, and number of lanes, as shown in Figure 1. The results revealed that on two-lane roads, there were no significant differences in pedestrian crashes for marked versus unmarked crosswalk sites. That is, pedestrian safety on two-lane roads was not found to be different, whether the crosswalk was marked or unmarked. This conclusion is based on a sample of 914 crossing sites on two-lane roads (out of 2,000 total sites.)

On multilane roads with ADTs of 12,000 or less, there were also no differences in pedestrian crash rates between marked and unmarked sites. On multilane roads with no raised medians and ADTs greater than 12,000, sites with marked crosswalks had higher pedestrian crash rates than unmarked crossings. On multilane roads (roads with 3 to 8 lanes) with raised medians and vehicle ADTs greater than 15,000, a significantly higher pedestrian crash rate was associated with marked crosswalk sites compared with unmarked sites.

Best-fit curves on multilane undivided roads were produced for pedestrian crashes (per million pedestrian crossings) at marked and unmarked crosswalks as a function of traffic ADT, as shown in Figure 2. Similar analyses were conducted for multilane divided roads. This analysis for multilane undivided roads revealed the following:

- For traffic volumes (ADTs) of about 10,000 or less, pedestrian crash rates were about the same (i.e., approximately 0.25 pedestrian crashes per million pedestrian crossings) at marked and unmarked crosswalks.
- For ADTs greater than 10,000, the pedestrian crash rate for marked crosswalks became increasingly worse as ADT increased. The crash rate at unmarked crossings increased only slightly as ADT increased.

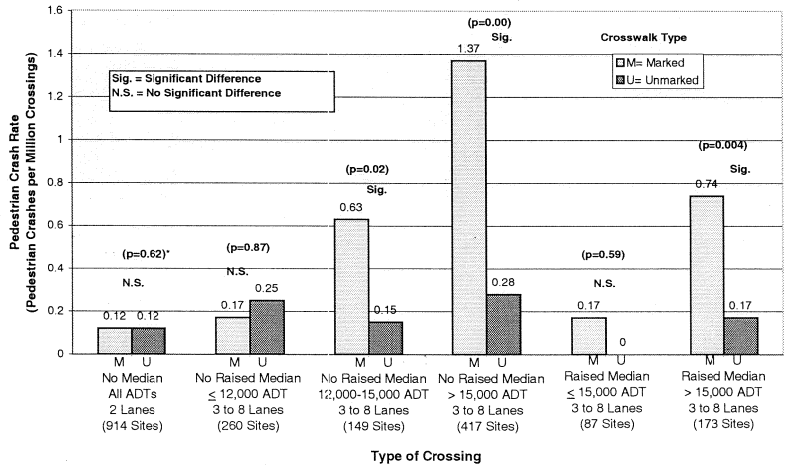

FIGURE 1 Pedestrian crash rate versus type of crossing (levels of significance between marked and unmarked crosswalks are based on binomial pedestrian crash modeling).

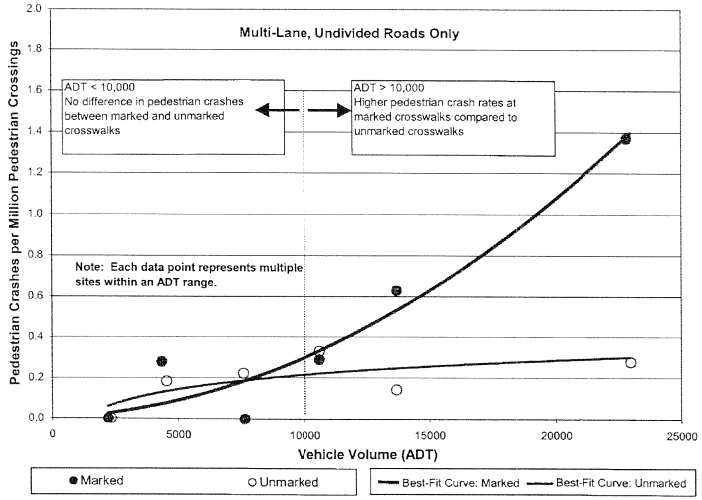

FIGURE 2 Pedestrian crash rates by traffic volume for multilane crossings with no raised medians—marked versus unmarked crosswalks.

Note that each point on the graph represents dozens of sites; that is, all of the sites corresponding to the given ADT group. For example, the data points for marked and unmarked crosswalks with ADTs greater than 15,000 correspond to more than 400 sites. All analyses in this study took into account the differences in pedestrian crossing volume, traffic volume, and other important site variables.

The results given above suggest that wide multilane streets are difficult for many pedestrians to cross, particularly if there are an insufficient number of adequate gaps in traffic because of heavy traffic volume and high vehicle speed. Furthermore, although marked crosswalks in themselves may not increase measurable unsafe pedestrian or motorist behavior [based on the Knoblauch study (*5*)], one possible explanation is that installing a marked crosswalk may increase the number of at-risk pedestrians (particularly children and older adults) who choose to cross there instead of at the nearest signal-controlled crossings.

The pedestrian crossing counts at the 1,000 marked crosswalks and 1,000 unmarked comparison crossings from this study may partially explain the difference. Overall, 66.1 percent of the observed pedestrians crossed at marked crosswalks versus 33.9 percent at unmarked crossings. More than 70 percent of pedestrians under age 12 and above age 64 crossed at marked crosswalks; about 35 percent of pedestrians in the 19- to 35-year-old range crossed at unmarked crossings. The age group of pedestrians was determined from on-site observation.

An even greater percentage of older adults (81.3 percent) and young children (76.0 percent) chose to cross in marked crosswalks on multilane roads compared with two-lane roads. Thus, installing a marked crosswalk alone at an already undesirable crossing location (i.e., wide, high-volume street) may increase the chance of a pedestrian crash occurring at a site if a few at-risk pedestrians are encouraged to cross where other adequate crossing facilities are not provided. This explanation might be evidenced by the many calls to traffic engineers from citizens who ask that a marked crosswalk be installed so they can cross the dangerous street near their houses. Unfortunately, often simply installing a marked crosswalk without other more substantial crossing facilities does not cause most motorists to stop and yield to pedestrians, contrary to the expectations of many pedestrians.

On three-lane roads (i.e., one lane in each direction with a center two-way left-turn lane), the crash risk was slightly higher for marked crosswalks compared with unmarked crosswalks, but this difference was not significant (based on a sample size of 148 sites).

Pedestrian Crash Types

The greatest difference in pedestrian crash types between marked and unmarked crosswalks involved "multiple-threat" crashes. A multiple-threat crash involves a driver stopping in one lane of a multilane road to permit pedestrians to cross, and an oncoming vehicle (in the same direction) strikes the pedestrian who is crossing in front of the stopped vehicle. This crash type involves both the pedestrian and driver failing to see each other in time to avoid the collision. To avoid multiple-threat collisions, drivers should slow down and look around stopped vehicles in the travel lane, and pedestrians should stop at the outer edge of a stopped vehicle and look into the oncoming lane for approaching vehicles before stepping into the lane.

A total of 17.6 percent (33 out of 188) of the pedestrian crashes in marked crosswalks were classified as multiple threat. None of the 41 pedestrian crashes in unmarked crosswalks were multiple threat. This finding may be partly attributable to the fact that drivers may be more likely to stop and yield to pedestrians in marked crosswalks compared with unmarked crossings; at least one motorist must stop for a pedestrian to set up a multiple-threat pedestrian collision. Also, some pedestrians in some instances may be more likely to step out in front of oncoming traffic in a marked crosswalk (particularly after the first vehicle stops) than at an unmarked location.

Motorists failing to yield (on through movements) represented a large percentage of pedestrian crashes in marked crosswalks (41.5 percent) and unmarked crosswalks (31.7 percent). Likewise, vehicle turn and merge crashes, also generally the fault of the driver, accounted for 19.2 percent (marked crosswalks) and 12.2 percent (unmarked crosswalks). These results indicate a strong need for improved driver enforcement and education programs that emphasize the importance of yielding to or stopping for pedestrians. More pedestrian-friendly roadway designs may also be helpful in reducing such crashes by slowing vehicles, providing pedestrian refuge (e.g., using raised medians), and giving better warning to motorists about pedestrian crossings.

A substantial proportion of pedestrian crashes involved dart-out, dash, and other types of crashes in which the pedestrian stepped or ran in front of an oncoming vehicle at unmarked crosswalks (23 of 41, or 56.1 percent) and a lesser proportion occurred at marked crosswalks (41 of 188, or 21.8 percent). These results are indicative of a need for improved pedestrian education programs, which is in agreement with recommendations of other important studies related to improving the safety of vulnerable road users (*8*). Further, in addition to unsafe pedestrian behaviors, speeding drivers can often be a contributing factor in dart-out crashes. Creating more pedestrian-friendly crossings, such as crossings with curb extensions, traffic calming measures, and so on may also be useful in reducing many of these crashes (to be discussed in a later section).

Pedestrian Crash Severity

An analysis was conducted to compare pedestrian crash severity in marked versus unmarked crosswalks. Crash severity did not differ significantly between marked and unmarked crosswalks on two-lane roads. On multilane roads, there was evidence of more fatal plus A-type injury pedestrian crashes at marked crosswalks compared with unmarked crosswalks. This result probably reflects the fact that older pedestrians are more likely than any other age group to walk in marked rather than unmarked crosswalks, as discussed previously. Furthermore, they are much more likely to sustain fatal and serious injuries than younger pedestrians.

Lighting and Time of Day

Nighttime pedestrian crash percentages were about the same at marked and unmarked crosswalks (approximately 30 percent). In terms of time of day, the percentage of pedestrian crashes in marked crosswalks tended to be higher than for unmarked crosswalks during the morning (6 to 10 a.m.) and afternoon (3 to 7 p.m.) peak periods, but lower in midday (10 a.m. to 3 p.m.) and evening (7 p.m. to midnight) periods. This is probably because pedestrians are more likely to cross in marked crosswalks than in unmarked crossings during peak traffic periods (e.g., walking to and from work) than at other times. Adequate nighttime lighting should be provided at marked crosswalks to enhance the safety of pedestrians crossing at night.

Age Effects

A separate analysis of pedestrian crashes and crossing volumes by age of pedestrian was conducted. For virtually every situation studied, pedestrians age 65 and older were overrepresented in pedestrian crashes compared with their relative crossing volumes. Figure 3 shows the relative proportion of crashes and exposure for various age groups for marked crosswalks on two-lane and multilane roads. For a given age group, when the proportion of crashes exceeds the proportion of exposure, then crashes are overrepresented; that is, pedestrians in that population group are at greater risk of being in a pedestrian crash than would be expected from their volume alone.

The pedestrian age groups younger than 65 showed no clear increase in crash risk compared with their crossing volumes. One possible reason that young pedestrians were not overinvolved in crash occurrence is the fact that many crashes involving young pedestrians (particularly ages 5 to 9) occur on residential streets. However, this study did not include school crossings, and most sites were drawn from collector and arterial streets (where marked crosswalks exist), which are less likely to be frequented by unescorted young children.

Some of the possible reasons that older pedestrians are at greater risk when crossing streets compared with other age groups include the fact that older adults are more likely (as an overall group) than younger pedestrians to have the following problems or impairments:

- Slower walking speeds (and thus greater exposure time);
- Visual or hearing impairments or both;
- Difficulty in judging the distance and speed of oncoming traffic;
- More difficulty keeping track of vehicles coming from different directions, including turning vehicles; and
- Inability to react (e.g., stop, dodge, or run) as quickly as younger pedestrians to avoid a collision under emergency conditions.

Pedestrian and Motorist Behavior at Crosswalks

To help gain a better understanding of the effects of marked crosswalks versus unmarked crossings, Knoblauch (*5*) conducted a complementary study on pedestrian and motorist behavior and also vehicle speed before and after crosswalk installation at sites in California, Minnesota, New York, and Virginia (on two-lane and three-lane streets). The study results revealed that very few motorists stopped or yielded to pedestrians either before or after marked crosswalks were installed. After marked crosswalks were installed, there was a small increase in pedestrian scanning behavior (before stepping out into the street). Also, there was a reduction in vehicle speed of approximately 1.6 km/h (1 mph) after the marked crosswalks were installed (*5*).

These behavioral results from the Knoblauch study tend to contradict the "false sense of security" claims attributed to marked crosswalks, since observed pedestrian behavior actually improved after marked crosswalks were installed at the study sites. However, it should also be remembered that measures of "pedestrian awareness" and "pedestrians' expectation that motorists will stop for them"

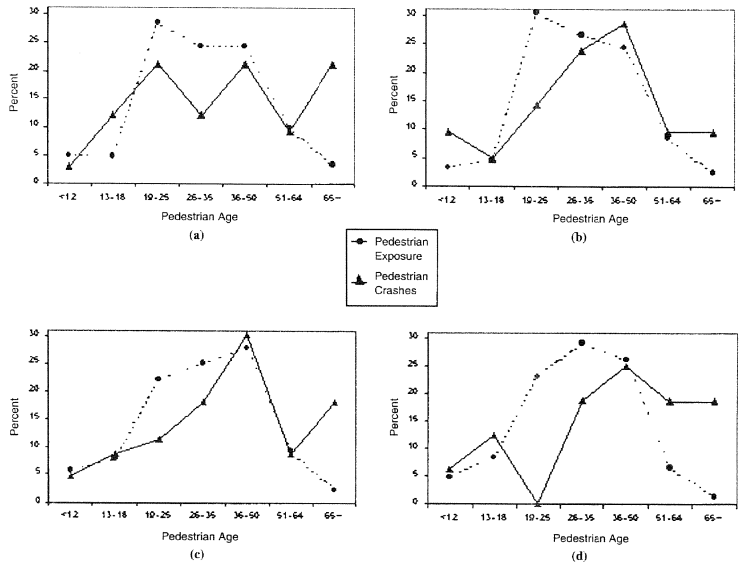

FIGURE 3 Percentage of crashes and exposure by pedestrian age group and roadway type at uncontrolled marked and unmarked crosswalks: (*a*) two-lane roads, marked crosswalks; (*b*) two-lane roads, unmarked crosswalks; (*c*) multilane roads, marked crosswalks; (*d*) multilane roads, unmarked crosswalks.

cannot be collected by field observation alone. It should also be mentioned that installing marked crosswalks or other measures can affect pedestrian level of service if they increase the number of motorists who stop and yield for pedestrians. Future studies using focus groups of pedestrians as well as questionnaires completed by pedestrians in the field could shed further light on such measures.

STUDY CONCLUSIONS AND RECOMMENDATIONS

Pedestrian needs in crossing streets should routinely be identified, and appropriate solutions should be selected to improve pedestrian safety and access. Deciding where to mark crosswalks is only one consideration in meeting that objective.

Street crossing locations should be routinely reviewed to consider the following available options:

- Option 1: No special provisions needed.
- Option 2: Provide a marked crosswalk alone.
- Option 3: Install other crossing improvements (with or without a marked crosswalk) to reduce vehicle speeds, shorten crossing distance, increase likelihood of motorists stopping and yielding, or produce other outcomes or a combination of these outcomes.

Because sites in this study were confined to those having no traffic signal or stop sign on the main road approaches, it follows that these results do not apply to crossings controlled by traffic signals, stop or yield signs, traffic-calming treatments, or other devices. They also do not apply to school crossings, because these sites were purposely excluded from the site-selection process.

Conclusions Regarding Marked Crosswalks at Uncontrolled Locations

The results of this study have some clear implications on the placement of marked crosswalks and the design of safer pedestrian crossings at uncontrolled locations. These include the following:

1. Pedestrian crashes are relatively rare at uncontrolled pedestrian crossings (1 crash every 43.7 years per site in this study); however, the certainty of injury to the pedestrian and the high likelihood of a severe or fatal injury in a high-speed crash makes it critical to provide a pedestrian-friendly transportation network.
2. Marked crosswalks alone (i.e., without traffic calming treatments, traffic signals with pedestrian signals when warranted, or other substantial crossing improvements) are not recommended at uncontrolled crossing locations on multilane roads (i.e., 4 or more lanes) where traffic volume exceeds approximately 12,000 vehicles per day (with no raised medians) or approximately 15,000 ADT (with raised medians that serve as refuge areas). This recommendation is based on the analysis of pedestrian crash experience, exposure data, and site features described earlier.
3. The authors of this study also recommend against installing marked crosswalks alone on roadways with speed limits higher than 64.4 km/h (40 mph). In fact, Germany, Finland, and Norway do not allow uncontrolled crosswalks on roads with high speed limits (*8*). It is also important for motorists to understand their legal responsibility to yield to pedestrians at marked and unmarked crosswalks. Furthermore, pedestrians should use proper caution when crossing streets, regardless of who has the legal right-of-way, since it is the pedestrian who suffers the most physical injury in a collision with a motor vehicle.
4. On two-lane roads and lower volume multilane roads (ADTs less than 12,000), marked crosswalks were not found to have any positive or negative effect on pedestrian crash rates at the study sites. Marked crosswalks may encourage some pedestrians to cross the street at such sites. However, it is recommended that crosswalks alone (without other substantial crossing improvement) not be installed at locations that may pose unusual safety risks to pedestrians. Pedestrians should not be encouraged to cross the street at sites with limited sight distance, complex or confusing designs, sites with certain vehicle mixes (many heavy trucks), or other dangers, without first providing them with adequate design features, traffic control devices, or both.
5. At uncontrolled pedestrian crossing locations, installing marked crosswalks should not be regarded as a magic cure for pedestrian safety problems. However, they also should not be considered as a negative measure that will necessarily increase pedestrian crashes. Marked crosswalks are appropriate at some crossing locations (e.g., at low-speed two-lane streets at downtown crossing locations) to help channel pedestrians to preferred crossing locations, but other roadway crossing improvements (e.g., raised medians, traffic signal) should also be provided when used at other locations.
6. For three-lane roads, adding marked crosswalks alone (without other substantial crossing improvement) is generally not recommended for ADTs greater than 12,000, although exceptions may be allowed under certain conditions (e.g., lower-speed roads).
7. If nothing else is done beyond marking crosswalks at an uncontrolled location, pedestrians will not experience increased safety (under any situations included in the analysis). Research from Europe shows the need for pedestrian improvements beyond uncontrolled crosswalks (*8, 9*).
8. In some situations (e.g., low-speed, two-lane streets in downtown areas), installing a marked crosswalk may help consolidate multiple crossing points. Engineering judgment should be used to install crosswalks at preferred crossing locations (e.g., at a crossing location at a street light as opposed to an unlit crossing point nearby). Also, to minimize the overuse of marked crosswalks, higher priority should be placed on providing marked crosswalks where the pedestrian crossing volume exceeds 20 per peak hour (or 15 or more elderly pedestrians or children per peak hour).

What Are Possible Measures to Help Pedestrians Cross Streets Safely?

Although simply installing marked crosswalks by themselves cannot solve pedestrian crossing problems, the safety needs of pedestrians must not be ignored. More substantial engineering and roadway treatments need to be considered, as well as enforcement and education programs. Transportation and safety engineers have a responsibility to consider all types of road users in roadway planning, design, and maintenance. Pedestrians must be provided with safe facilities for travel.

1. A variety of pedestrian facilities have been found to improve pedestrian safety and the ability to cross the street under various conditions (*8–20*). Examples of some of these pedestrian improvements include the following:
   - Provide raised medians or crossing islands on multilane roads.
   - Install traffic signals with pedestrian signals, where warranted.
   - Reduce the effective street crossing distance for pedestrians by
     - Providing curb extensions;
     - Providing raised pedestrian islands at intersections; and
     - Reducing four-lane undivided road sections to two through lanes with dual left-turn lane or left-turn bays (plus sidewalks and bicycle lanes).
   - Consider installing traffic-calming measures. They may be appropriate on certain streets to slow vehicle speeds, reduce cut-through traffic, or both. Such measures may include the following (*16*):
     - Raised crossings (raised crosswalks, raised intersections);
     - Street-narrowing measures (chicanes, slow points, "skinny street" designs); and
     - Intersection designs (traffic mini-circles, diagonal diverters).

   Some of these traffic-calming measures may not be appropriate on major collector or arterial streets.
   - Provide adequate nighttime lighting for pedestrians, particularly at marked crosswalks and areas near churches, schools, and community centers with nighttime pedestrian activity.
   - Design safer intersections for pedestrians (e.g., crossing islands, tighter turn radii).
   - Provide narrower widths, access management, or both (e.g., consolidation of driveways).
   - Use various pedestrian warning signs, flashers, and other traffic control devices to supplement marked crosswalks. However, the effects of supplemental signs and other devices at marked crosswalks are not well known under various roadway conditions. According to the MUTCD, pedestrian crossing signs should be used only at locations that are unusually hazardous or at locations where pedestrian crossing activity is not readily apparent (*2*).
   - Build narrower streets in new communities to achieve desired vehicle speeds.
   - Increase the frequency of two-lane or three-lane arterials when designing new street networks so that fewer multilane arterials are required.
2. Whenever a marked crosswalk is installed on an uncontrolled multilane road (i.e., three or more lanes), consideration of an advance stop line is recommended at a point up to approximately 9.1 m (30 ft) in advance of the crosswalk along with the sign "Stop Here for Crosswalk." According to a study by Van Houten (*17*), this measure can cause motorists to stop further back from the crosswalk, thereby improving sight distance and stopping distance for approaching motorists in the adjacent lanes. This could logically reduce the likelihood of pedestrian multiple-threat collisions on multilane roads.
3. It is recommended that parking be eliminated on the approach to uncontrolled crosswalks to improve vision between pedestrians and motorists.

4. Some agencies provide railings in the medians of multilane roads that direct pedestrians to the right and increase the likelihood of pedestrians looking for vehicles coming from their right in the second half of the street.

5. Proper planning and land use practices should be applied to benefit pedestrians. For example, busy arterial streets should be used as a boundary for school attendance or school busing. Major pedestrian generators should not be separated from each other or from their parking facilities by a busy street.

6. The current MUTCD pedestrian signal warrant should be reviewed to determine whether the warrant should be modified to more easily allow for installing a traffic signal at locations where pedestrians cannot safely cross the street (and where no alternative safe crossing exists nearby). Consideration must always include pedestrians with disabilities, and proper accommodations must be provided to meet Americans with Disabilities requirements.

7. There should be continued research, development, and testing of innovative traffic control and roadway design alternatives that could provide improved access and safety for pedestrians attempting to cross streets. For example, in-pavement warning lights, variations in pedestrian warning and regulatory signs (including signs placed in the centerline to reinforce motorists yielding to pedestrians), roadway narrowing, traffic-calming measures, automated speed-monitoring techniques, and so on deserve further research and development to determine their feasibility under various traffic and roadway conditions.

More details about these and other pedestrian facilities are given in the *Pedestrian Facilities User's Guide: Providing Safety and Mobility*, recently developed for FHWA (*18*); in the ITE publication *Design and Safety of Pedestrian Facilities* (*19*); and in *The Traffic Safety Toolbox*, (Chapter 19 "Designing for Pedestrians") (*20*).

ACKNOWLEDGMENTS

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DISCUSSION

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This paper addresses the long-standing conflict between enabling pedestrians to exercise their right to cross a street and reducing the number of motorists striking them as they do so. Previous studies showed a difference in collision frequency between marked and unmarked crosswalks. As this paper notes, although many questions were raised about the methodology of those studies and other issues, many communities removed crosswalk markings. This paper answers some of those questions and illustrates productive areas for future research.

METHODOLOGY

One question raised in previous studies concerned the matching between those pedestrians who use marked crosswalks versus those who do not. For meaningful results, the case and control should be equal or controlled for statistically. This study shows that case and control are unequal—pedestrians self-select and the results vary markedly with the age of the pedestrian.

With an equal number of marked and unmarked locations, 66.1 percent of the observed pedestrians crossed at marked crosswalks versus 33.9 percent at unmarked crossings. Controlling for self-selection may be difficult, though this paper shows that pedestrian age is one factor. There may be other factors, including risk taking.

This study shows that much of the observed danger of marked crosswalks results from the inability of pedestrians age 65 and older to cross unharmed, in contrast to the ability of 19- to 25-year-olds to use unmarked crossings. Possibly this danger results from mobility impairment; however, this study indicates "a substantial proportion of pedestrian crashes involved dart-out, dash, and other types of crashes in which the pedestrian stepped or ran in front of an oncoming vehicle," despite the fact that most injured parties are middle-aged or older. Future research on this issue should control for mobility impairment, and also visual, cognitive, and alcohol-induced impairment and risk-taking behavior. We need to understand how a given pedestrian, with given crossing abilities, can cross a street.

SCOPE

It is a false dichotomy to limit research to marked and unmarked crosswalks, when neither approach alone prevents these collisions. This study suggests other possibly desirable approaches to reducing motorist versus pedestrian collisions, including more visible crossings and better conveyance to motorists of their responsibility to stop. Although these approaches may be rare in practice, future research should examine many different types of crossings, and provide guidance on effective techniques. With a collision rate of 1 every year per 43.7 sites, both marked and unmarked crosswalks endanger pedestrians unduly.

MOTORIST BEHAVIOR

The analysis is silent on the motorist's role in collision avoidance. Legally, motorists must exercise due care to avoid colliding with any pedestrian at all locations, but they also have a special obligation to yield right-of-way at intersections and marked midblock crosswalks. The observation that a collision is less likely to occur outside an intersection or marked crosswalk implies that the pedestrian is the only party undertaking collision-avoiding behavior. Instead of unmarking crosswalks, designers should look toward making crosswalks more visible and communicate to motorists their responsibility to yield.

UNINTENDED CONSEQUENCES

Anecdotal evidence suggests that police may fail to properly note the presence of a crosswalk if it is unmarked. Collision reports should be reviewed to investigate this serious concern, which would reduce the victim's legal rights and society's ability to detect and punish dangerous drivers.

In addition, the fact that fewer people use unmarked crossings causes concern. This study found that 66.1 percent of the observed pedestrians crossed at marked crosswalks versus 33.9 percent at an equal number of unmarked crossings that were determined to be otherwise equal. Discouraging people from walking reduces exercise and increases congestion, both of which are serious public concerns.

CONCLUSION

At this time and state of knowledge, it appears inappropriate to remove crosswalk markings. This study shows that unmarked crossings have fewer collisions because of the agility of youngsters, whereas more than half of the pedestrians in this study struck by motorists are middle aged or older. Designers should follow this paper's recommendations and look to make crossings more visible, not less so, and better convey to motorists their responsibilities.

DISCUSSION

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As in other studies in the past, the authors found that the mere marking of crosswalks without additional improvements either did not reduce pedestrian crashes or increased them. They suggest stricter driver compliance, raised medians, traffic signals, and various other remedies. During the presentation of the study at the TRB January 2001 meeting, a participant suggested the removal of marked crosswalks, as some jurisdictions already had done. This comment is written to support that suggestion and to propose the repeal of crosswalk laws.

Before the adoption of statutory right-of-way rules, all road users had equal and mutual rights to be exercised under common law so as not to interfere unreasonably with the rights of others. Drivers had to look out for pedestrians and other traffic and have their vehicles under such control that they could avoid a collision. All had to avoid causing unnecessary obstruction and use such care for their own safety as a reasonable person would under the circumstances (*21*). The supreme rule of the road was the rule of mutual forbearance (*22*).

Crosswalks built of solid materials were originally not meant to protect pedestrians but to help them get from one paved sidewalk to another across a muddy unpaved road (*23*). In the 1880s, even before the automobile arrived, the courts began to rule in civil negligence cases that riders and drivers had to exercise special caution at crosswalks, where the presence of pedestrians was to be anticipated (*24*).

In the early 1910s municipalities began to issue ordinances that were intended to reinforce pedestrians' safety by giving them the right-of-way on crosswalks. Elsewhere pedestrians had to yield the right-of-way to vehicles.

Like other traffic regulations, these ordinances, which were later written into the rules of the road of state codes, were adopted without study of their effects on safety and mobility. As pedestrians had the right-of-way at intersectional and other crosswalks, they were led to believe that intersections were the safest locations at which to cross, and that marking a crosswalk with paint enhanced safety, two beliefs still widely held today.

The flaws in the crosswalk law become apparent when we compare the pedestrian's right-of-way with that of a side-street driver who must wait at a stop sign for a gap until it is safe to cross. The law gives pedestrians the opposite instruction. Their right-of-way on crosswalks tells them they may do what is forbidden to the side-street driver—to get in the way of moving traffic. We need no statistics to demonstrate that it is safer to cross a street after the cars on it have passed than to cross in front of them.

The poorer safety record of the marked crosswalk has often been ascribed to the false sense of security it induces. For example, inadequate scanning and heavy reliance on driver compliance with the strict California crosswalk law, combined with an "alarmingly high rate of accidents at marked crosswalks," was reported from San Francisco (*25*).

Walk Alert and similar safety programs try to correct this behavior. Adopted by the U.S. Department of Transportation, the National Safety Council, and many other organizations, Walk Alert tells pedestrians not to rely on traffic controls but to wait before crossing until they find an adequate gap.

The need for safety programs that teach people how to avoid the dangers of acting in accordance with the law shows that the law is defective. It seems somewhat naive to give people a right-of-way that is meant to protect them from danger and then tell them to forgo that right as soon as the danger arises. The wisdom of having crosswalk laws is altogether questionable. Pedestrians need only be taught "Cross when it is safe. Don't cross when it is not safe." In the District of Columbia, drivers rarely yield to pedestrians, so that our instinct of self-preservation has long trained us to do what Walk Alert and the many similar pedestrian safety programs are trying to teach us.

It also seems counterproductive to designate "safe" crossing places that allow drivers to be less careful elsewhere. The courts have held that the pedestrian's duty of caution was greater outside crosswalks and that of the driver correspondingly less (*26, 27*). The driver who hits a pedestrian outside a crosswalk does not violate the law. It is the pedestrian who appears in the police report as the violator for failure to yield, even if the driver could have avoided the collision. It is one thing to advise pedestrians to be careful and not step in front of a moving vehicle but quite another to have a legal mandate that makes the pedestrian a violator of the law, prima facie negligent in a civil case, and carrying the burden of proof that the motorist could have avoided the collision.

Normally, the right of one person ends when it unreasonably intrudes on the rights of another. Except in self-defense one may not kill someone who committed an illegal act. A householder who uses excessive force and kills a burglar is liable to prosecution. By contrast, the law tolerates that motorists run down pedestrians without fear of penal consequences, provided they did not do it deliberately and committed no other offense at the same time (*24*).

Past attempts to improve driver compliance by making crosswalks more conspicuous or through stricter law enforcement were found ineffective (*28, 29*). Better compliance with unsafe laws and their stricter enforcement are unlikely to lower the accident toll. The authors note that better compliance may cause more multiple-threat and rear-end crashes. Collisions between left-turners and opposing through-vehicles may also increase when pedestrian movements block left-turners within the intersection (*24*), a risk that may be aggravated when illuminated warning devices make crosswalks more conspicuous.

As a minimum, the *Manual on Uniform Traffic Control Devices* should mandate consideration of alternatives (primarily raised median refuges) to marked crosswalks, just as it requires consideration of alternatives to the traffic signal. A logical remedy would be to remove marked crosswalks, teach pedestrians to wait for adequate gaps, repeal the driver-pedestrian statutory right-of-way laws, place the initial presumption of negligence and the onus to disprove it on the motorist in civil cases (*30*), and educate drivers to respect the pedestrian's right to life.

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AUTHORS' CLOSURE

RESPONSE TO COMMENTS BY KENNETH TODD

We would like to thank Todd for his comments on our paper. We would first add that the topic of where to add or not add crosswalks and the related legal and safety implications has been a topic of considerable disagreement for many years in the United States. Part of the controversy stems from U.S. crosswalk laws, the enforcement or nonenforcement of such laws, and their inconsistencies as well as differences in motorist and pedestrian behaviors across the country. Also, there is clearly a lack of understanding of who must legally yield the right-of-way to whom under different roadway situations. Further, more aggressive driving in many cities continues to worsen and, with it, concern by many about pedestrian rights. In the battle for space between a motorist and a crossing pedestrian, the motorist too often refuses to yield to the pedestrian, even when the pedestrian is in a legal crosswalk.

Todd proposes to remove all marked crosswalks and teach pedestrians to wait for gaps. His logic is that it is counterproductive to designate "safe" crossing places that allow drivers to be less careful elsewhere. In response to this point, we do agree that pedestrians should be trained to wait for gaps in traffic and to not step into the street directly in the path of an approaching motor vehicle. However, this does not require that all marked crosswalks be removed. Education and marked crosswalks are not mutually exclusive. In an ideal world, all motorists would stop and yield to pedestrians at all crosswalks in all cases, regardless of whether the crosswalk is marked or not. However, even a well-meaning motorist may not always see a pedestrian in time to stop, particularly at night or in complex driving situations.

We also disagree with Todd's claim that marked crosswalks are counterproductive in terms of causing drivers to be less cautious where the crosswalk is not marked. If all marked crosswalks are removed, there is nothing to suggest that drivers will be more careful elsewhere. Also, the same logic that says that marked crosswalks allow drivers to be less careful elsewhere could be used to argue that all crosswalks should be marked.

Todd recommends the repeal of the driver and pedestrian statutory right-of-way laws. His reasoning is that since drivers entering at a side street must wait for a gap, so should pedestrians. We disagree with this opinion for several reasons. First of all, it should not be assumed that the same rules should apply to both drivers and pedestrians. Whereas in some cases this may be true, in many other cases it is not. For example, because of their ability to quickly accelerate to high speeds, motorists require much smaller gaps than pedestrians to safely cross the street. Because pedestrians require larger gaps than motorists to cross the street, pedestrians find fewer adequate gaps than motorists. This is especially problematic on busy streets, where pedestrians may become tired of waiting for an adequate gap and may decide to "make a run for it," thereby exposing themselves to the risk of being struck by a motor vehicle. Pedestrians have the flexibility of crossing on either side of an intersection and can do it in two phases if there is a median. Motor vehicles lack this flexibility. Motorists are often turning right or left onto a roadway, which is a different movement than that of the pedestrian who is crossing the roadway to get to the other side. In other words, there are fundamental differences between the behavior and abilities of drivers and pedestrians. It is illogical to simply assume that the same rules should apply. Finally, the vulnerability of pedestrians and the fact that they include people of all ages (kids, seniors, people with disabilities, etc.) suggest that there should be some additional legal protection for pedestrians at crosswalks.

Todd also suggests that the initial presumption of negligence in a pedestrian and motor vehicle collision should be placed on the motorist and that drivers should be better educated. The assumption here is that drivers are more careful in avoiding collisions with pedestrians. We agree that motorists must be made accountable for collisions with pedestrians in cases where they are at fault. This goal could be better accomplished if police and the judicial system would do a better job of properly assigning fault to the at-fault driver in the many types of collisions where the driver is currently not charged. In other words, properly enforcing existing crosswalk laws would go a long way toward correcting this problem. It is not clear to the authors how repealing the crosswalk law would accomplish the goal of holding at-fault drivers accountable. In fact, in the absence of a law that specifies who must yield the right-of-way in various situations, officers and the courts may assign fault more often to the pedestrian and less often to the motorist than is currently the case. Thus, if crosswalk laws were repealed, drivers might be found less accountable, not more.

We would agree that one of the messages of the Walk Alert program did in fact convey to pedestrians that they should not rely totally on traffic control devices to protect them. Unfortunately, one of the reasons to convey such a message to pedestrians is that many motorists run red lights or fail to yield to pedestrians while turning at intersections. Asking pedestrians to be aware of their environment when crossing streets does not in any way condone illegal or unsafe driver behavior. It is simply a necessary ingredient to improve pedestrian safety. Walk Alert also has strong components of education and enforcement aimed at drivers and engineering recommendations to help make the roadway environment safer for travel by foot.

RESPONSE TO COMMENTS BY PETER JACOBSEN

As Jacobsen correctly points out, one of the difficulties to properly conducting a study of marked versus unmarked crosswalks (or for evaluating any roadway treatment) is the need for case and comparison sites (i.e., marked and matched comparison sites) to be equal or statistically controlled for. In the real world, no two sites are exactly alike, so extensive efforts were made to select a suitable comparison site for each of the 1,000 marked crosswalk sites and to statistically control for the differences. In a majority of these cases, the comparison site selected for the treated (marked crosswalk) site was the opposite leg of the same intersection. Pedestrian count data were separately collected by age group for each of the marked and unmarked crosswalk sites, along with other geometric and site characteristics, and statistical methods were used to control for the relevant factors in determining the crash effects of marked versus unmarked crosswalks.

Unfortunately, it is not possible to know the detailed characteristics and behaviors of every driver and pedestrian who passes through the 2,000 test sites in the 30 cities. However, we were able to determine the distribution of pedestrian crossing activity by age group, for example, which helps us to better understand choices that different age groups make on whether they cross at a marked or unmarked crosswalk. In addition to the pedestrian-crash analyses discussed in detail in this paper, we also had a parallel study conducted by a subcontractor (Center for Applied Research), which included a detailed analyses of motorist and pedestrian behavior at sites in four states before and after marked crosswalks were installed. As reported in our paper, in this companion study Knoblauch et al. (*5*) found that marking a crosswalk was not associated with any increase in unsafe pedestrian behavior but actually resulted in slightly better "search behavior" by pedestrians at marked crosswalks than at unmarked crosswalks. Vehicle speeds also dropped slightly after the marked crosswalks were installed.

We would add that although our crash-based study, combined with the companion study on pedestrian and motorist behavior, does provide a considerable amount of new information on the effects of marked versus unmarked crosswalks, there is certainly more that we can learn about why certain pedestrians and motorists exhibit certain behaviors that lead to crashes. For example, further research could attempt to quantify pedestrian and motorist risk-taking behavior as a function of mobility, visual, cognitive, and alcohol impairments.

Jacobsen also states that "it is a false dichotomy to limit research to marked and unmarked crosswalks, when neither approach alone prevents these collisions. This study suggests other possibly desirable approaches to reducing motorist versus pedestrian collisions, including more visible crossings and better conveyance to the motorists of their responsibility to stop."

We agree that other pedestrian roadway improvements need to be considered to improve pedestrian safety, not just whether to mark crosswalks. This is why we spent much of the later portion of our paper recommending considerations of specific pedestrian treatments. Also, our study on marked versus unmarked crosswalks was only one of a series of parallel studies that were conducted simultaneously for FHWA on pedestrian safety and mobility by the University of North Carolina Highway Safety Research Center. In several other studies, pedestrian-related measures were examined, such as overhead crosswalk signs, "pedestrian safety cones" (i.e., regulatory signs placed at the roadway centerline requiring motorists to stop for pedestrians), illuminated pedestrian signs (push-button activated with illuminated messages such as "Stop for Pedestrians in Crosswalk"), automated pedestrian detectors (at signalized intersections), and various traffic calming devices. The results of some of these pedestrian facility evaluations are published in another *Transportation Research Record* (*31–33*). We would also mention that the results of numerous other research studies on pedestrian facilities in the United States and pedestrian safety research synthesis reports from Canada, Sweden, Australia, the Netherlands, and the United Kingdom (as part of the same FHWA study) may be found at the Pedestrian and Bicycle Information website (www.walkinginfo.org/rd/index.htm).

Jacobsen appropriately elaborates on the motorist's role in collision avoidance. In the paper, we discuss the causes of pedestrian crashes from our crash analysis, including the involvement of various types of fault by the driver, such as failing to yield to pedestrians at crosswalks. The paper goes on to say that "these results indicate a strong need for improved driver enforcement and education

programs that emphasize the importance of yielding to or stopping for pedestrians."

Jacobsen also states that instead of unmarking crosswalks, designers should make crosswalks more visible and communicate to motorists their responsibility to yield. We agree with this; in fact, we strongly suggest that if there is a marked crosswalk that is "unsafe," the first response should be to explore installing other treatments, not simply to have it removed. One response should always be to consider looking for ways to make a crossing more visible. However, there may be situations where, after all other possibilities have been exhausted, a marked crosswalk should be removed.

Jacobsen farther states that removing marked crosswalks may result in fewer people walking, and discouraging people from walking reduces exercise and increases congestion. We agree that an objective of state and local agencies should be to increase the amount of safe walking (and bicycling), in accordance with the National Bicycling and Walking Study (*34*). Therefore, we recommended that agencies should systematically consider a wide range of facility options to increase pedestrian safety and mobility, not just whether to install or take out marked crosswalks.

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APPENDIX D

ENVIRON' s Evaluation of UC Berkeley Health Impact Assessment Recommendations

(Responses to Rajiv Bhatia Letters of March 22 and 23, 2006, and undated Recommendations)

EVALUATION OF UC BERKELEY HEALTH IMPACT ASSESSMENT RECOMMENDATIONS FOR THE OAK TO NINTH PROJECT

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03-15847A

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ACRONYMS

AC	Alameda-Contra Costa
ARB	Air Resources Board
BART	Bay Area Rapid Transit
CCERP	Central City East Redevelopment Plan
CDURP	Central District Urban Renewal Plan
CEQA	California Environmental Quality Act
EIR	Environmental Impact Report
FEIR	Final Environmental Impact Report
HAD	Health Development Agency
HIA	Health Impact Assessment
HVAC	Heating, Ventilation and Air Conditioning
MTC	Metropolitan Transportation Commission
NAS	Naval Air Station
TDMP	Transportation Demand Management Plan
UCBHIG	UC Berkeley Health Impact Group
UCLA	University of California, Los Angeles
UK	United Kingdom

1.0 INTRODUCTION

The purpose of this report is to address to the following three letters and one short two-page document recently sent to the Oakland City Council from the Dr. Rajiv Bhatia and the UC Berkeley Health Impact Group (UCBHIG) pertaining to the Oak to Ninth Project:

1. February 28, 2006. **RE: Health Impact Assessment of the Oak to Ninth Proposal**. Letter to Honorable Jane Brunner from the UC Berkeley Health Impact Group.

2. March 22, 2006. **RE: Air Quality and Noise Related Health Effects of the Oak to Ninth Proposal**. Letter to Honorable Jane Brunner from Rajiv Bhatia, For the UC Berkeley Health Impact Group.

3. March 23, 2005(6). **RE: Air Impact Assessment of the Oak to Ninth Proposal**. Letter to Honorable Jane Brunner from Rajiv Bhatia, For the UC Berkeley Health Impact Group.

4. Undated. **Oak to Ninth Avenue Development: Priority Recommendations for Health Promotion and Illness and Injury Prevention**. The UC Berkeley Health Impact Group.

In the February 28, 2006 letter, the UCBHIG announced that they were conducting a Health Impact Assessment (HIA) on the Oak to Ninth Project. The UCBHIG emerges from a graduate school seminar on HIA at the UC Berkeley School of Public Health. According to this letter, the UCBHIG would provide the Oakland City Council with a draft HIA report in April 2006, including health-based recommendations for the Oak to Ninth Project. The March 22 and 23, 2006 letters, which are very similar to each other, address air quality and noise issues related to the nearby I-880 freeway. The short two-page document provides eight recommendations made by the UCBHIG on a number of issues including housing affordability, air quality, noise, person-to-person contact, social relationships and social capital.

This report is divided into six sections. Section 1.0, Introduction, describes the purpose and scope of this report. Section 2.0, Air Quality Issues, addresses the air quality issues raised in the March 22 and 23, 2006 letters identified above. In response to the February 28, 2006 letter, Section 3.0, General Health Impact Assessment Issues, provides a context for understanding what an HIA is, its intended uses, and whether it is relevant to the Oak to Ninth Project. Section 4.0, Response to UCBHIG Recommendations, provides comments on the eight recommendations made in the short two-page document identified above. Section 5.0, Conclusions, provides our summary remarks and conclusions on the documentation received to date from the UCBHIG. Section 6.0, References, includes all references cited in this report.

2.0 RESPONSE TO AIR QUALITY ISSUES (LETTERS DATED MARCH 22 and 23, 2006)

According to the commenter (Dr. Rajiv Bhatia) of the letters, the following key points are made:

- The City has a responsibility to study freeway related air quality and noise health impacts and their feasible mitigations under the California Environmental Quality Act (CEQA);
- The Project creates potentially significant environmental impacts on air quality by locating a residential use in proximity to Interstate 880;
- The FIER for the Oak to Ninth Project fails to fully acknowledge the potential health impacts due to compromised air quality and fails to document that the wintertime winds can blow from the freeway over the Project;
- Oak to Ninth residents are likely to experience some adverse health effects due to freeway related traffic noise;
- Project design changes can potentially mitigate and prevent health impacts due to noise and poor air quality.

The commenter correctly states that the California Air Resource Board (ARB) Air Quality and Land Use Handbook (2005) ("Handbook") provides recommendations of separation between sensitive land uses and land uses that may be a source of toxic air contaminants. The Handbook includes the general recommendation that sensitive land uses (including residential uses) not be located within 500 feet of a freeway. The individual studies mentioned by the commenter were all used in support of the ARB Handbook. As such, this response is intended to address not only the specific comment that residences should not be located within 500 feet of a freeway, but also the cites that the commenter takes from the Handbook in support of repeating the Handbook recommendation.

While the general recommendation of the Handbook is provided, the commenter does not provide the context of the Handbook when he cites the Handbook's general recommendation. The Executive Summary of the Handbook clearly states,

> "These recommendations are advisory <u>and should not be interpreted as defined 'buffer zones (emphasis added).'</u> We recognize the opportunity for more detailed site-specific analyses always exists, and that there is no 'one size fits all' solution to land use planning."

Some of the support used to develop the Handbook's recommendation on freeways was based on the measurement of pollutants downwind from two large freeways in Southern California. The directionality of the winds, therefore, is critical as to whether it is likely that a freeway will impact nearby locations. Accordingly, a more site-specific analysis is presented below.

Figure 1 shows the planned residential developments and the Nimitz Freeway. As shown in Figure 1, the nearest residences are approximately 200 feet from the edge of the closest general travel lane of the freeway.

Figure 2 reproduces a figure from the Handbook that shows measurements of total particulate number as a function of downwind distance from the freeway for two freeways in the Los Angeles area: one has relatively high diesel traffic (I-710) and the other has relatively low diesel traffic (I-405). For the freeway with the higher fraction of diesel trucks, the total particle number drops to background, between 200 and 300 feet from the freeway. The distance would be less if the winds were not blowing directly from the freeway.

Figure 3 shows an aerial of the proposed development and available meteorological data stations. Three meteorological stations are roughly equidistant from the development: Port of Oakland, Oakland Sewer Treatment Plant, and Alameda Naval Air Station (NAS). Figure 4 shows annual wind roses from all three stations for a three year period. As can be seen, the three stations show similar wind directions. Therefore, for the remainder of this analysis we will be using the Alameda NAS as a representative station.

Figure 5 and 6 show the wind directions from the Alameda NAS meteorological station for 1994 through 1996. Figure 5 shows the winds for the entire year. Figure 6 shows the winds between 5AM and 9PM, when the traffic on the freeway is likely to be significant, and is therefore, more relevant for this evaluation. The wind from the North-Northwest through the East-Southeast have the potential to blow emissions from I-880 to the residents who may be residing in the proposed development, although winds from the North through the East have the greatest potential to impact residences. Table 1 shows the fraction of time that winds blow from I-880 towards the residences. As can be seen, winds have the greatest potential to blow from the freeway towards potential residents only 9.1% of the time during the hours when traffic is most likely to be significant.

Table 1: Frequency of Winds from Freeway to Proposed Development

	Potential to Impact	*Likely to Impact*
All Hours	20%	11%
Likely Traffic Hours (5 AM to 9 PM)	18%	9.1%

As a result of the low rate of winds blowing from the freeway towards the residents, this housing development near the freeway is less likely to be impacted by emissions from the freeway than are other areas where winds blow with a higher frequency from the freeways to the residential areas.

The health risk assessment presented in the EIR evaluated diesel particulate matter. Available data, as presented in the Handbook and reproduced above, indicates that all elevated particulate matter (both from diesel and gasoline-burning sources) is unlikely to persist at levels greater than background for more than between 300 feet downwind from the edge of the freeway. Again, accounting for the small fraction of winds from the freeway to the proposed residences, the annual average distances that elevated particulate matter would persist above background in this location is likely less than the distance cited in the Handbook.

The commenter also states that the "EIR fails to disclose that, based on a 20-year analysis of wind at Lake Merritt, wintertime winds often blow from the Southeast and Northwest and winds

are calm over 40% of the year". A review of the cited reference shows that the commenter is incorrect in his cite, on several grounds. First, the cited reference actually refers to data taken from the Alameda NAS from 1950 to 1970, before the advent of the most modern meteorological equipment. Furthermore, the commenter is incorrect in stating that the reference reports that the winds are calm for over 40% of the year. The document actually shows that the fraction of calm winds vary by quarter from 15.7% in the fall to 4.7% in the summer, for an annual average of approximately 10%. An analysis of newer data shows a lower fraction of calms, at 5.8% over a 10-year period from 1987 through 1996. The fraction of calm winds decrease as the low wind detection limit decreases with the advent of the use of modern meteorological equipment.

As shown above, winds are only relevant from the North-Northwest through the East-Southeast, and not from the Northwest or the Southeast. The reference cited by the commenter shows only a small fraction of winds from the relevant directions, consistent with the more recent data from the Alameda NAS, as described above.

The commenter's claims that particulate matter from the development will affect residents of Jack London Square, Chinatown, Downtown, Lower San Antonio and around Lake Merritt**.** The alleged increase in traffic volume that the commenter mentions will likely be indiscernible from the background produced by the existing mobile sources. Furthermore, the Project related traffic is likely to be emitted from gasoline burning vehicles and not diesel vehicles.

Based on information on the project in the EIR and the analysis conducted here, the commenter does not raise any new issues that require further study. The site-specific analysis conducted in the EIR is supported by the additional evaluation presented here.

3.0 RESPONSE TO GENERAL HEALTH IMPACT ASSESSMENT ISSUES (LETTER DATED FEBRUARY 28, 2006)

In their February 28, 2006 letter, the UCBHIG stated that it would provide the Oakland City Council with a draft HIA report in April 2006, including health-based recommendations for the Oak to Ninth development. This section provides a context for understanding what an HIA is, its intended uses, and whether it appropriately pertains to the Oak to Ninth Project.

3.1 WHAT IS AN HIA?

A HIA is defined as being "a multidisciplinary process within which a range of evidence about the health effects of a proposal is considered in a structured framework." This framework is "based on a broad model of health which proposes that economic, political, social, psychological, and environmental factors determine population health." (Northern and York Public Health Observatory, 2001). The goal of the HIA is to "provide unbiased information to policy-makers and the public, not to make decisions for them based on health criteria that would trump other social goals" (University of California, Los Angeles [UCLA] School of Public Health - HIA project: www.ph.ucla.edu/hs/health-impact/aboutus.htm). Many HIAs focus on policy issues such as the health effects of local "living wage" ordinances, health benefits of state-funded after-school programs, and the health consequences of a set of agricultural subsidies. HIAs are not a fundamental framework used by most environmental or health agencies and, are not regulatory or enforceable.

3.2 HIA PROCESS AND USES

The process of conducting HIAs is fairly new in the United States, with a review of the National Library of Medicine article database showing only two HIAs in peer-reviewed journals (Cole et al., 2004). As stated on the Health Impact Assessment Web Site prepared by the University of California, Los Angeles School of Public Health (UCLA School of Public Health - HIA project: www.ph.ucla.edu/hs/health-impact/aboutus.htm): "There is no such thing as a "HIA" methodology. The HIA borrows from a wide variety of fields including risk analysis, economics, and other fields, adapting and applying methodologies as dictated by available information needs of policy-makers and stakeholders." Regardless of the methodology, most HIA's follow the same general sequence of steps:

- scanning,
- screening,
- scoping,
- impact assessment,
- reporting and review.

Scanning is the process used to identify projects or policies on which to focus an HIA. Once a project is found, a screening process is conducted in order to assess whether a HIA would be appropriate. Some key aspects involved in the screening process are whether conducting a HIA

would significantly improve a population's health, whether there is sufficient data available to conduct a HIA, and whether the HIA will contribute significantly to the policy-making process. The screening process can be in depth; should review data, reports, and other resources relevant to the projects; and, with this information, be used to determine whether a HIA is necessary for a given project. The scoping step determines what key elements the HIA will focus on and how the HIA will be conducted. Next, the HIA is conducted, examining the key elements identified in the scoping step in both a quantitative and qualitative manner. It should be noted that health risks assessed in a HIA can be evaluated in a subjective manner, based on public perception of those risks, and do not necessarily need to be substantiated by technical data. Finally, findings, suggestions, and limitations are reported and provided to all parties affected by the HIA.

According to the United Kingdom (U.K.) Health Development Agency (HAD), there is a growing interest in monitoring the outcomes of a HIA – whether the adoption of recommendations has resulted quantifiable health outcomes, the accuracy of health-related predictions, and the assumptions behind the recommendations. "But suitable methods and techniques capable of tracking whether a HIA accurately predicted health impacts have not yet been developed and tested" (Taylor et al, 2003). An HAD review of HAIs in 2002 concluded that "There is currently no review-level evidence available to demonstrate if and how the HIA approach informs the decision making process, and, in particular if it improves health and reduces health inequalities." (Taylor and Quigley, 2002).

In a recent article published in the British Medical Journal (Parry and Stevens, 2006), the authors evaluated whether HIAs in their present form can reliably inform better decision making. According to the authors:

> "The advocates of health impact assessment make it predominantly a predictive rather than an empirical research tool, and its claims are substantial – to be able to inform policy and decision making to maximize benefits and minimize negative impacts on health. The definitions accorded to health impact assessment and its proposed utility in terms of modifying policy imply an objective, sophisticated, and apolitical process. The perception is that the estimation of health impacts has been achieved through the application of robust methods and is of sufficient validity to enhance the decision making process. However, we would argue that at present health impacts assessment is excessively subjective, subject to political drivers, and insufficiently rigorous to make any robust assumptions on the magnitude or even the direction of the health impacts of policy interventions." The authors conclude that although HIA is an intuitively appealing and simple concept, there is a gap between the objectives of the HIA and the methods currently adopted by practitioners.

Many articles on the HIA process emphasize the importance of including stakeholders early in the HIA process. According to Scott-Samuel et al. (2001), "The process of HIA requires broad participation if a comprehensive picture of potential health impacts is to be established. The co-operation and expertise of a wide range of stakeholders (people who are involved in the project or will be directly affected by it) and key informants (people whose roles results in them having knowledge or information of relevance to the project and its outcome) will be needed. Public participation through the HIA is essential…". These stakeholders include proponents (i.e., those

developing, planning or working on it) of the project. Additionally, the International Association for Impact Assessment encourages Environmental Impact Assessments to occur as early in the process as possible and this concept also logically applies to an HIA.

Even when preparing a rapid HIA, as appears to be the case for the UCBHIG assessment of the proposed Oak to Ninth development, stakeholder involvement is recommended. According to the U.K. – Health Impact Assessment Gateway, "Rapid appraisals are usually carried out with relatively minimal resources, but the preparation required for other important aspects of HIA such as stake holder – consultation, searching and compiling evidence and writing the recommendations should not be underestimated." (http://www.publichealth.nice.org.uk/page.aspx?o=503303).

The UCBHIG did not inform proponents of the Oak to Ninth development and the City about the HIA process being conducted by the UCBHIG for the Oak to Ninth development until shortly before the Planning Commision Hearing. This is true even though the class agenda for the UCBHIG graduate student seminar on HIA refers to the final product as a rapid "participatory" HIA and recommends that the students interview stakeholders (http://ehs.sph.berkeley.edu/china/edmund/hia/). In their letter, the UCBHIG references a large scale HIA being conducted by the San Francisco Department of Public Health regarding rezoning in three neighborhoods. A review of the San Francisco Department of Public Health web site regarding this project clearly states that the project is a "deliberative, multi-stakeholder and consensus based approach" (http://www.sfdph.org/phes/ENCHIA.htm).

3.3 APPLICABILITY TO OAK TO NINTH PROJECT

Summary/conclusions regarding the application of a HIA to the Oak to Ninth development are as follows:

- HIAs are not a fundamental framework used by most environmental or health agencies and, are not regulatory or enforceable. HIAs are not a standard component of the CEQA process or an EIR.

- An HIA can assess health risks based on public perception, without substantiating technical data, rendering it inappropriate in the CEQA context.

- HIAs rely on factors outside the scope of CEQA for an individual project, such as psychological, political, and broad-based social and economic factors.

- Because the screening process did not include the stakeholders, it is not clear whether a HIA is appropriate for the Oak to Ninth development.

- Suitable methods and techniques capable of tracking whether a HIA accurately predicts health impacts have not yet been developed and tested (Taylor et al., 2003), so it is difficult to know if recommendations based on the process are supportable or cost effective.

- "Current HIA is insufficiently rigourous to make robust assumptions on the magnitude or even the direction of the health impacts or policy interventions." (Parry and Stevens, 2006).

- The process of HIA requires broad participation if a comprehensive picture of potential health impacts is to be established. The process is meant to include the major stake holders involved or affected by a project. Instead, the UCBHIG has used the HIA to oppose the Project.

- It is not clear whether the UCBHIG considered the EIR when evaluating the Oak to Ninth proposal, which incorporates many of the aspects of a HIA, including evaluation of air quality, water quality aesthetics, cultural resources, land use and planning, noise, recreation, public transportation, population and housing, and public services.

- As with other impact assessments, an HIA would be expected to occur early in the decision process. According to the UCBHIG letter, a draft report would be provided to the Oakland City Council in April 2006, well after the comment period for the EIR has passed and the final EIR has been completed.

- As HIA recommendations often deal with policy issues (i.e., much broader application than any one project), the recommendations may not be suitable for decisions at a project level at this time (e.g., a much larger group of stakeholders may need to be involved in decisions that would have broader application than just the Oak to Ninth Project).

4.0 RESPONSE TO UCBHIG RECOMMENDATIONS (UNDATED)

Although the HIA has not been received to date, the UCBHIG did send the City Council eight recommendations "to promote and protect the health of Oakland residents". The recommendations given by UCBHIG come with little basis, supporting evidence, or reference to literature or policy documentation. Furthermore, all of the recommendations suggested by UCBHIG have been addressed in one form or another in the EIR (which is a publicly available document). Mitigation measures were recommended as part of the EIR wherever necessary.

The following are the recommendations made by the UCBHIG for the Oak to Ninth Project, followed by responses to these recommendations.

Recommendation I: Oak to Ninth should model ethnic and economic integration by providing housing affordable so that 1) the distribution of housing costs reflects the current household income distribution of Oakland, 2) at least 25% of housing is affordable to low income and very low income households, and 3) an additional 25% of housing is affordable to households earning the area's median income

Human Health Rationale: *Policies such as zoning and redevelopment can either facilitate or prevent segregation. Residents of low-income economically segregated communities in Oakland and elsewhere now live about six fewer years and experience a much greater burden of chronic disease than those in non-poverty neighborhoods. Research has demonstrated that reductions in life expectancy and are caused by many place based factors including air pollution, violence, traffic hazards, poor schools, the absence of parks, and limited economic opportunity and mobility. In contrast, mixed income neighborhoods are assured the health benefits of access to healthier foods, better schools, better public transit, safer neighborhoods, park access and cleaner environments. In addition, based on MTC (Metropolitan Transportation Commission) data and the Air Resources Board URBEMIS, higher levels of affordability will significantly reduce traffic congestion and reduce vehicle air pollution emissions.*

Response:

This recommendation specifies the commenter's opinion as to how housing costs should reflect the household income distribution of Oakland, without any substantiation whatsoever as to the selected numbers. The recommendation does not acknowledge that the project is located within a redevelopment area that requires affordable housing.

The Project EIR discusses housing values in Chapter IV, Part A: Land Use, Plans and Policies, on page 28 under the sub-section called Redevelopment plans. In accordance with the California Community Redevelopment Law, Oakland established the Central City East Redevelopment Plan (CCERP) in July 2003. The area covered under the CCERP extends through a portion of the Project site; lying East of Lake Merritt Channel. The CCERP "requires that at least 15 percent of all housing developed in the CCERP Project Area by non-Agency entities be affordable to very-low/low- and moderate-income households. Of these affordable units, at least 40 percent must be affordable to very-low income households." Approximately 2,800 market-rate units being developed in the Project site will fall within the CCERP. Based on CCERP

requirements, 420 units will be designated as low- to moderate- income residences, and would be constructed within 10 years of the start of the Project. At least 168 of these units will be designated as very-low-income residences.

Additionally, the project sponsor has agreed to provide Lots F and G for sale to the Redevelopment Agency for affordable housing and to provide a per unit contribution to the Agency for each affordable unit. Thus, the Project will provide the potential health benefits associated with a mixed-income development.

Recommendation II: Project should maximize accessibility to waterfront natural areas and recreation for Oakland residents by 1) modifying the project's footprint and bulk to create some unobstructed views of the water and open spaces from the Embarcadero <u>OR</u> by re-aligning the Embarcadero between residential uses and the shoreline park, 2) requiring high quality bicycle and pedestrian trails between the waterfront and neighborhoods and transit stations east of I-880, 3) providing infrastructure and facilities for diverse recreational uses identified through outreach with residents in surrounding neighborhoods, 4) requiring safe, frequent public transportation to the site, <u>and</u> 5) creating an oversight body with citywide membership for Oak to Ninth's waterfront park.

Human Health Rationale: *Contact with and views of natural landscapes reduce stress and depression, reduce violent and anti-social behaviors, and improve the ability to focus, pay attention, work, and learn. Access to open space facilitates physical activity reducing population levels of obesity, diabetes and hypertension.*

Responses:

This recommendation supplies no documentation for the rationale presented and no technical support showing that the recommended actions will have any significant positive effect on the health impacts claimed. Nothing about this rationale is specific to the Oak to Ninth Project. In addition, the accessibility to the waterfront natural areas and recreation for Oakland residents is discussed in detail in the EIR as follows:

1) As discussed in the EIR (Section IV. Environmental Setting, Impacts, and Mitigation Measures, Subsection A. Land Use, Plans and Policies, page IV.A-26), there are currently very limited views of the Oakland Estuary from points along the Embarcadero at the Project site due to existing buildings on the Project site, including the Ninth Avenue Terminal. The Project would align streets and site buildings of varied heights in an effort to create new and expanded views of the Estuary where none currently exist.

2 &4) Class I bicycle/pedestrian trails will connect to the existing trails that go to Lake Merritt, which will provides access to Bay Area Rapid Transit (BART) as well as Alameda-Contra Costs (AC) Transit lines. The proposed Transportation Demand Management Plan (TDMP) calls for the extension of AC transit to the site, a shuttle to BART, and ride share services as well as several bicycle and pedestrian measures.

These measures will also benefit accessibility to the waterfront and natural habitats along the waterfront for recreational users while increasing accessibility to public transit for commuters going to and from the development.

3) As discussed in the EIR (Chapter III, Part A: Project Location and Characteristics, page14, under the subsection Proposed Parks, Open Space and Trails), the Project is proposing a mix of recreational areas, consisting of active and passive parks and open spaces that will cover about 44% of the Project site. The proposed park scheme will be about 20.7 acres, total, in size. Potential uses for the parks and open spaces include playgrounds, picnic areas, and gardens. A continuous pedestrian trail and Class I bicycle facility will connect all of the recreational areas and link to the Bay Trail. The trail connects eastwards to the Martin Luther King Regional Shoreline. It also connects east-west over the Lake Merritt Channel Bridge and allows for future improvements on connections between Lake Merritt and the estuary.

   Additionally, the Oak to Ninth design guidelines include urban design principles and urban design concepts that call for a diverse network of public open spaces along the shoreline; the creation of an open space system that will serve as a city-wide and regional resource; and walkable, lively public streets, open space and pedestrian ways to provide visual and pedestrian links to the water.

5) The UCBHIG provides no health-based rationale or evidence to support this suggestion. The City has a Parks and Recreation Advisory Board that oversees city parks.

Recommendation III: The project should mitigate increases in the pedestrian injury rate caused by the project in the project area itself and in surrounding neighborhoods through: 1) crosswalk improvements (e.g. median islands), 2) sidewalk improvements (e.g. bulb-outs), and 3) grade separated bicycle and pedestrian trails and paths between the project, surrounding neighborhoods, and transit stations.

Human Health Rationale: *Oakland currently has ~85 pedestrian injuries per year per 100,000 people which is about ~4 times the Federal objective. Our pedestrian injury impact analysis shows that the project would contribute to 5 additional injuries per year in the surrounding neighborhoods, and when combined cumulatively with other projects, to an additional 20 injuries per year, generating medical and lost productivity costs of roughly $3 to 13 million dollars annually.*

Response:

As demonstrated in the project EIR and the attached Fehr and Peers memorandum, the commenter has failed to establish that the Project would have the claimed adverse pedestrian impacts.

1 & 2) Improvements to mitigate pedestrian injury are discussed in EIR Chapter IV, Part B: Transportation, Circulation, and Parking. This section discusses intersection improvements such as installation of crosswalks, bulb-outs to decrease distance to cross

the street, and pedestrian signal heads. As documented in the EIR, the project will promote pedestrian safety through the inclusion of pedestrian crosswalks in the Project area, new pedestrian trails and sidewalks in the project area, and new traffic signals with pedestrian signal heads at certain off-site locations and Project access points.

3) Bicycle and pedestrian trails and paths are discussed in the EIR Chapter III, Part A: Project Location and Characteristics pages 12-16, under the subsection Proposed Parks, Open Space and Trails. The Project includes new pedestrian and Class I bicycle trails along the shoreline, connecting all of the parks and open spaces, and also connecting to the San Francisco Bay Trail. Trails will also connect existing trails that go to Lake Merritt.

Recommendation IV: The project should mitigate adverse air quality impacts by: 1) building heating, ventilation and air conditioning (HVAC) systems with air intakes oriented away from particulate sources, 2) requiring all feasible and effective transportation demand management measures, and 3) advising future residents that living in proximity to a freeway can worsen asthma or other chronic respiratory conditions.

Human Health Rationale: *According to the California ARB the project is likely to result in increased frequency of respiratory symptoms and asthma exacerbations among project residents because of its location adjacent to I-880. Winds blowing from the North and Northwest in the wintertime have the potential of concentrating freeway particulate matter emissions directly over the project area.*

Response:

First, the rationale for this recommendation needs to be corrected. The California ARB has never stated that the Project is likely to result in increased frequency of respiratory symptoms and asthma exacerbations among Project residents because of its location adjacent to I-880. Instead, this is the commenter's interpretation of ARB's policy. The commenter recommendations are addressed in Section 2.0 of this report, Air Quality issues, and below.

1) Although not stated in this recommendation, it is assumed that "particulate sources" refers to the freeway. Based on the infrequent winds blowing from the freeway to the proposed development (see details in Section 2.0 of this report), this recommendation is not required.

2) The EIR discusses various driving alternatives to mitigate increases in automobile traffic that will likely result from this Project. Mitigation measures include AC Transit bus service, shuttle to BART, and rideshare/carpool services. Non-motorized alternatives will be encouraged by developing Class I bicycle/pedestrian trails connecting to existing trails, like the Bay trail, and also connecting to trails in Lake Merritt, which lead to the Lake Merritt BART station. The Project includes a comprehensive TDMP as outlined in the EIR.

3) The health risk assessment presented in the EIR evaluated diesel particulate matter. Available data, as presented in the California ARB Air Quality and Land Use Handbook (2005) ("Handbook"), indicates that all elevated particulate matter (both from diesel and gasoline burning sources) is unlikely to persist at levels greater than background for more than between 300 feet downwind from the edge of the freeway. Again, accounting for the small fraction of winds from the freeway to the proposed residences, the annual average distances that elevated particulate matter would persist above background in this location is likely less than the distance cited in the Handbook. (See discussion in Section 2.0 of this report).

Recommendation V: The project should protect residents from outdoor environmental noise by 1) orienting building to buffer roadway noise in courtyards and open spaces and 2) considering a multi-level parking as an additional acoustical buffer.

Human Health Rationale: *Exposure of 1400 residents to exterior noise levels up to 85 dBA in parcels A, F, G, K, and M will potentially results in mental stress, hypertension, speech disturbance, annoyance, and protest.*

Response:

The EIR acknowledges potential noise impacts to the Project due to the proximity to the Embarcadero and I-880 freeway and has proposed mitigations plans.

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for multi-unit resident buildings (Title 24, Part 2, California Code of Regulations). The proposed mitigation measures would comply with the he requirement of Title 24 in order to achieve an acceptable interior noise level. These mitigation measures include sound-rated assemblies (i.e., windows, exterior doors, and walls) and require that they be incorporated into project building design.

The Oak to Ninth Design Guidelines provide that buildings on the lots adjacent to the Embarcadero should be set back from the roadway and include landscaping to mitigate freeway noise.

Recommendation VI: The Oak to Ninth Project should include an on-site elementary school.

Human Health Rationale: *Neighborhood schools reduce traffic and air pollution, facilitate physical activity, promote parent involvement in schools and their children's educational success.*

Response:

This response supplies no documentation for the rationale presented and no technical support showing that the recommended actions will have any positive effects on the impacts claimed or that attendance at a nearby existing school will have any negative effects.

The EIR does discuss analysis of student generation and potential need for a new school as a result of the Project (EIR Chapter IV, Part L, pages 5-6, under subsection Student Generation and pages 13-15, under subsection Public School Impacts). The City generated an estimate using student generation rates developed by the California State Department of Education as well as rates based more specifically on the demographic represented by the Oak to Ninth target population. Based on the estimates generated specific to the local demographic, no new schools will be needed as a result of the Project. Two elementary schools are located near the Project: La Escuelita Elementary School, located about two-thirds of a mile from the Project; and Franklin Elementary School, located about 1.4 miles from the Project. The analysis done to determine Public School Impacts determined that existing area schools will be able to accommodate new students generated as a result of the Project.

Recommendation VII: The design and placement of housing units at Oak to Ninth design should support person-to-person contact, social relationships and social capital by 1) creating crossing points and common paths of access 2) providing common courtyards with benches, plants, and fountains.

Human Health Rationale: *Social capital and community ties can promote and individual's sense of security and satisfaction, reduce stress and blood pressure levels, provide material and emotional support, and facilitate recovery from illness.*

Response:

This response supplies no documentation for the rationale presented and no technical support showing that the recommended actions will have any significant positive effects on the health impacts claimed. As discussed in the EIR, Chapter III: Project Description, Part A: Project Location Characteristics, pages 1-29, planning for Oak to Ninth includes development of several parks, both passive and active (i.e. playing fields, playgrounds, and picnic areas would constitute active parks while open fields and garden areas would constitute passive parks). The Project also incorporates continuation of the Bay Trail for pedestrians and bicyclists, as well as creation of new paths which will serve to interconnect the various parks within the Project as well as connect these parks to other neighborhoods. This system of pathways and parks will create natural venues for people to interact, congregate, and socialize.

Recommendation VIII: The City of Oakland should specifically document how the project design has been responsive or not to public concerns and constructive design change recommendations raised in numerous public meetings and hearings on the Oak to Ninth Project.

Human Health Rationale: *Government responsiveness and accountability to needs articulated by the public is a critical determinant of population health. Meaningful participation means creating the opportunities for all affected people to understand what is at stake, to speak to their needs and concerns, and to have their needs addressed by people making the decision. A review of transcripts and public meeting summaries reveals that*

several concerns have been made repeatedly by diverse stakeholders at various stages of this process. Some of the most common statements are related to lack of attention to the existing Estuary Policy Plan, for affordable housing for lower-income individuals and families, preservation of open space and the 9th avenue terminal, and lack of meaningful and responsive public engagement.

Response:

The FEIR for the Oak to Ninth Project was published in February 2006. This report includes public commentary, responses to public commentary, and changes that were made either as a result of this commentary or other reasons. Additionally, a complete history of the Project is documented on the Project's website at:
http://www.oaklandnet.com/government/ceda/revised/planningzoning/MajorProjectsSection/oaktoninth.html
This website lists public meeting announcements and agendas, staff reports, postings for public outreach, and reports, among other items.

After responding to the above comments, it is not clear whether the UCBHIG reviewed the EIR when evaluating the Oak to Ninth Proposal, as many of the recommendations made by the UCBHIG were addressed in the EIR. Additionally, although the letter is not dated, it is noted that the comments made by the UCBHIG were received after March 23, 2006, well after public commentary for the proposed Project closed on October 28, 2005. With respect to the proposed HIA that is referred to at the bottom of page two of the UCBHIG undated letter, a HIA would be expected to occur early in the decision process for a proposed project. According to the UCBHIG, a draft report of their findings would be submitted to the Oakland City Council in April, 2006; and as of the date of this response, the report has not been received. In addition, the HIA process is meant to include all major stakeholders involved or affected by the project. This would include the City, the Port, the Redevelopment Agency and the Project sponsors. It is not clear based on this document that any group was involved in compiling these recommendations with the exception of the UCBHIG.

5.0 CONCLUSIONS

In their Health Impact Guidelines (September 2001), enHEALTH (the premier advisory body on environmental health in Australia) lists the following criteria for activities likely to require HIA or health assessment:

- the possibility of substantial change to the demographic or geographic structure of a community;
- potential exposure of individuals to hazardous products and processes, including substances that are clinical or infectious;
- changes to the environmental that may impact on disease vectors or parasites;
- the potential to render recreational facilities or water resources unsafe;
- potential impact on land productivity for horticultural and/or pastoral activities;
- impact on the microbiological or chemical safety of food chins and food supplies;
- substantial increase in the demands on public utilities;
- increase traffic flow with increased risk of injury or significant increase in the release of pollutants;
- generation of a high level of public interest in and/or concern about public health issues;
- identified ecosystems which are vulnerable and damage to which may cause health effects;
- potential exposure to the public to contaminants; and
- potential impact on the incidence of illness or infection in the community, especially in relation to populations such as children and the aged.

The Oak to Ninth Project either does not fit in these categories or the potential impacts have already been evaluated and have been determined not to be significant. In fact, the UCBHIG seems to have ignored the positive impacts the Project will have on the community including:

- The Project will remediate a contaminated site thereby protecting the physical environment, including the Estuary, and humans from the potential exposure to the harmful impacts of the contamination.
- The Project will transform a site with industrial uses and large vacant areas to a thriving mixed-use neighborhood.

- The Project will provide over 29 acres of new and improved parks, open space , and pedestrian and bicycle trails along the Estuary opening this area to all the residents of Oakland and the surrounding region.

- The Project will provide new housing and commercial space that meets current Code requirements, including health and safety regulations.

- The Project will provide significant construction and long-term job opportunities for Oakland residents, thereby providing economic opportunities for these workers and their families.

- The Project will provide significant opportunities for businesses to either locate on site or serve the new resident and business populations, thereby providing economic opportunities to local businesses.

- The Project will provide various traffic and roadway improvements and other infrastructure upgrades.

- The Project will generate a variety of fiscal benefits to the City and the Redevelopment Agency that will assist these agencies in providing services to Oakland residents.

- The Project will provide new affordable housing.

As acknowledged by the EnHealth Council, "[t]here is overwhelming evidence that development can have a beneficial effect on health and wellbeing; through the creation of employment, promotion of economic advancement and providing circumstances which can improve living standards." (Health Impact Assessment Guidelines, September 2001, p.vii) The significant health benefits of the Oak to Ninth Avenue Project are documented in the EIR and other evidence in the record. These benefits, based on factual evidence, define the health impact of this Project.

6.0 REFERENCES

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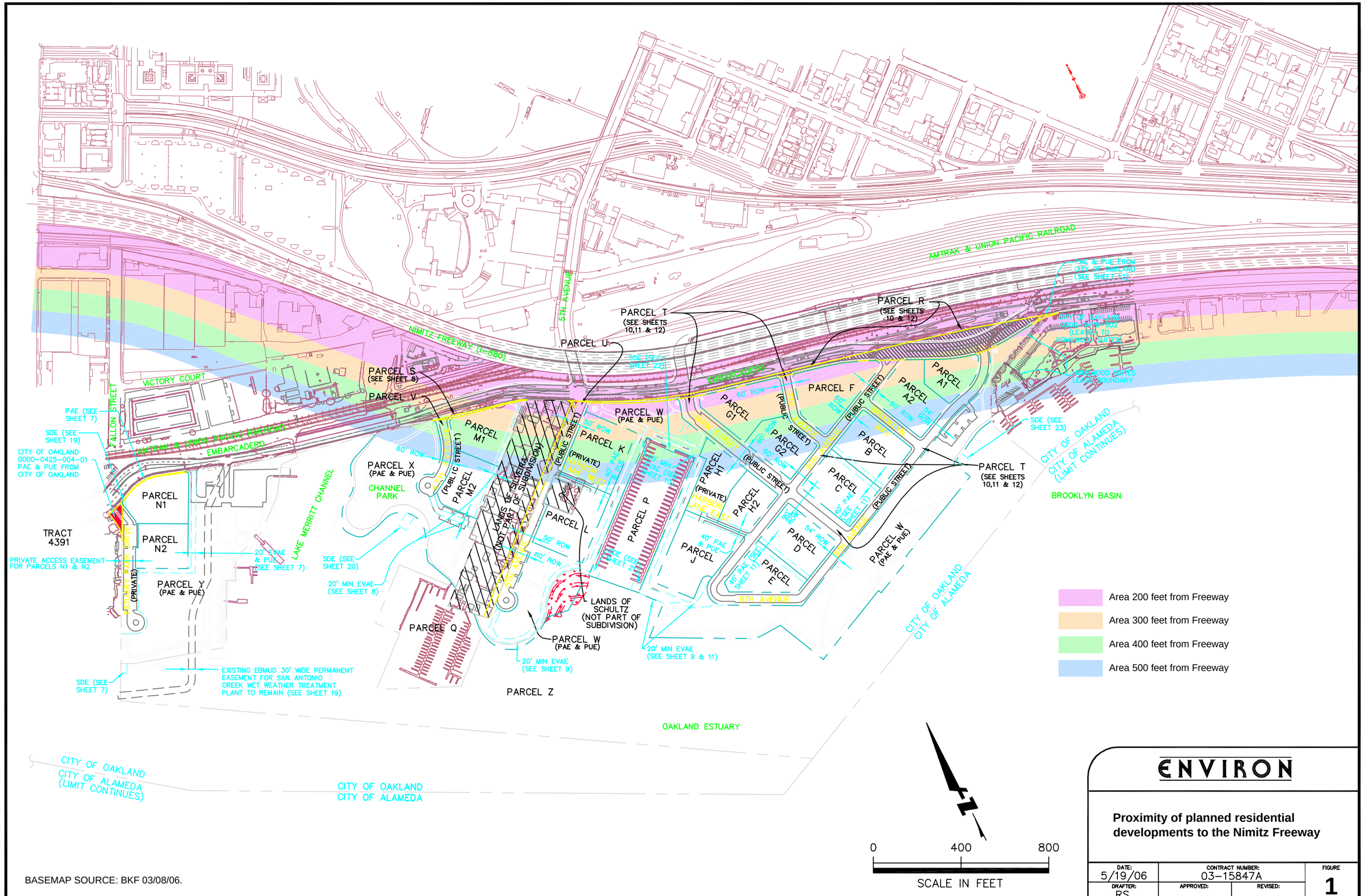


BASEMAP SOURCE: BKF 03/08/06.

0315847A-AFFECTED-AREA-MAP.DWG

ENVIRON

Proximity of planned residential developments to the Nimitz Freeway

DATE:	CONTRACT NUMBER:		FIGURE
5/19/06	03-15847A		1
DRAFTER: RS	APPROVED:	REVISED:	

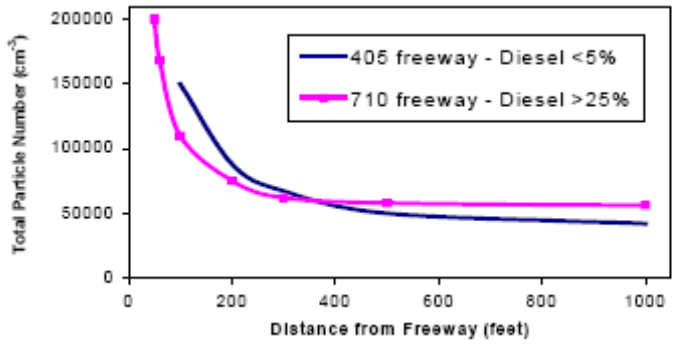
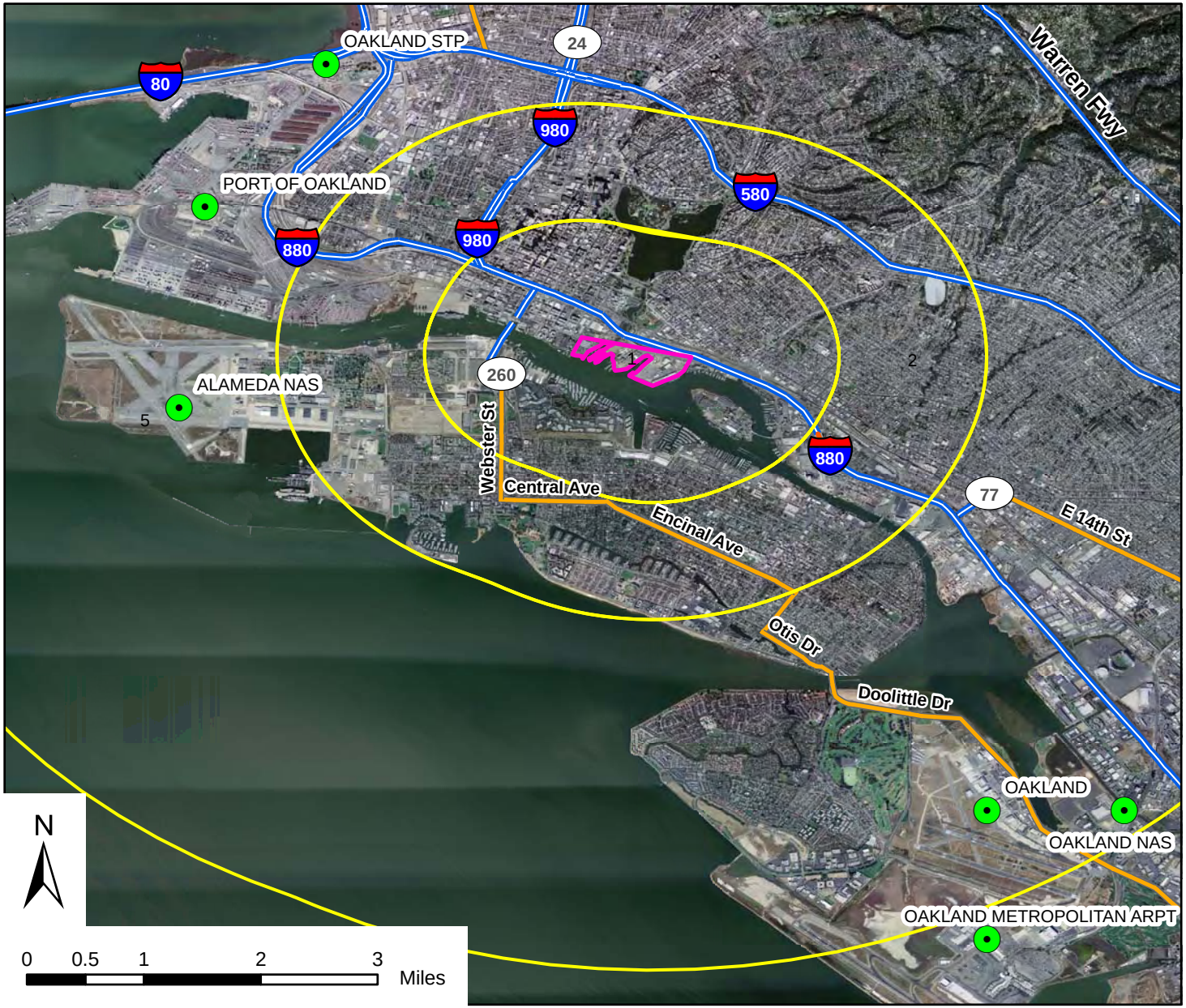


Figure 2: Particle Number vs. Downwind Distance from Freeway (ARB 2005)



Legend

- Meteorological Stations
- Approximate Project Boundary

Notes:

- 1, 2 and 5 mile distances from project boundary shown

ENVIRON

6001 Shellmound St., Suite 700, Emeryville, CA 94608

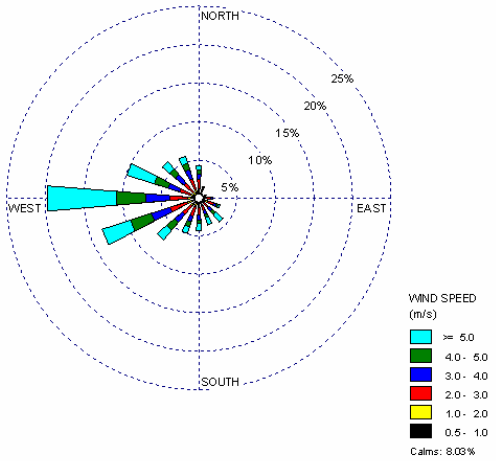
Meteorlogical Stations Near Proposed Oak to 9th Project Site

Figure 3

Date: 5/19/06

Contract Number: 03-15847A

a)



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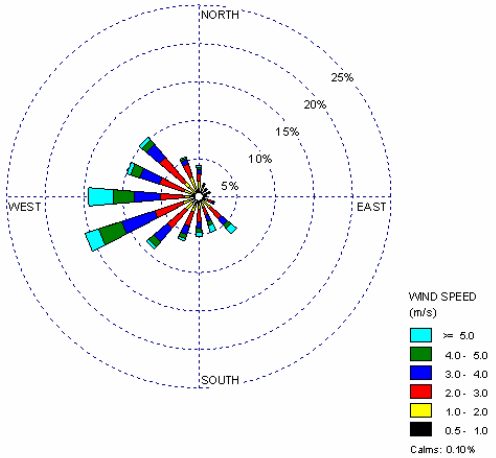

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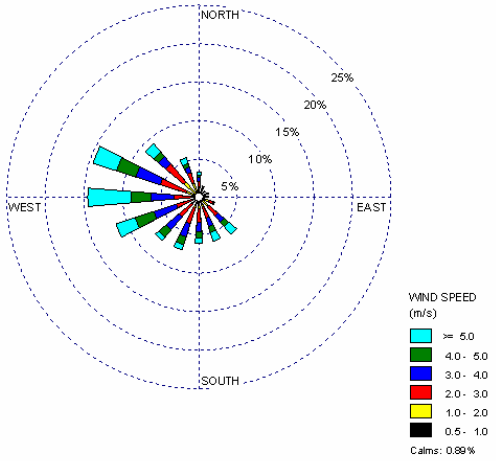

Figure 4: Three-year wind roses from a) Alameda NAS (1994-1997), b) Port of Oakland (1998 – 2000) and c) Oakland STP (1998-2000)

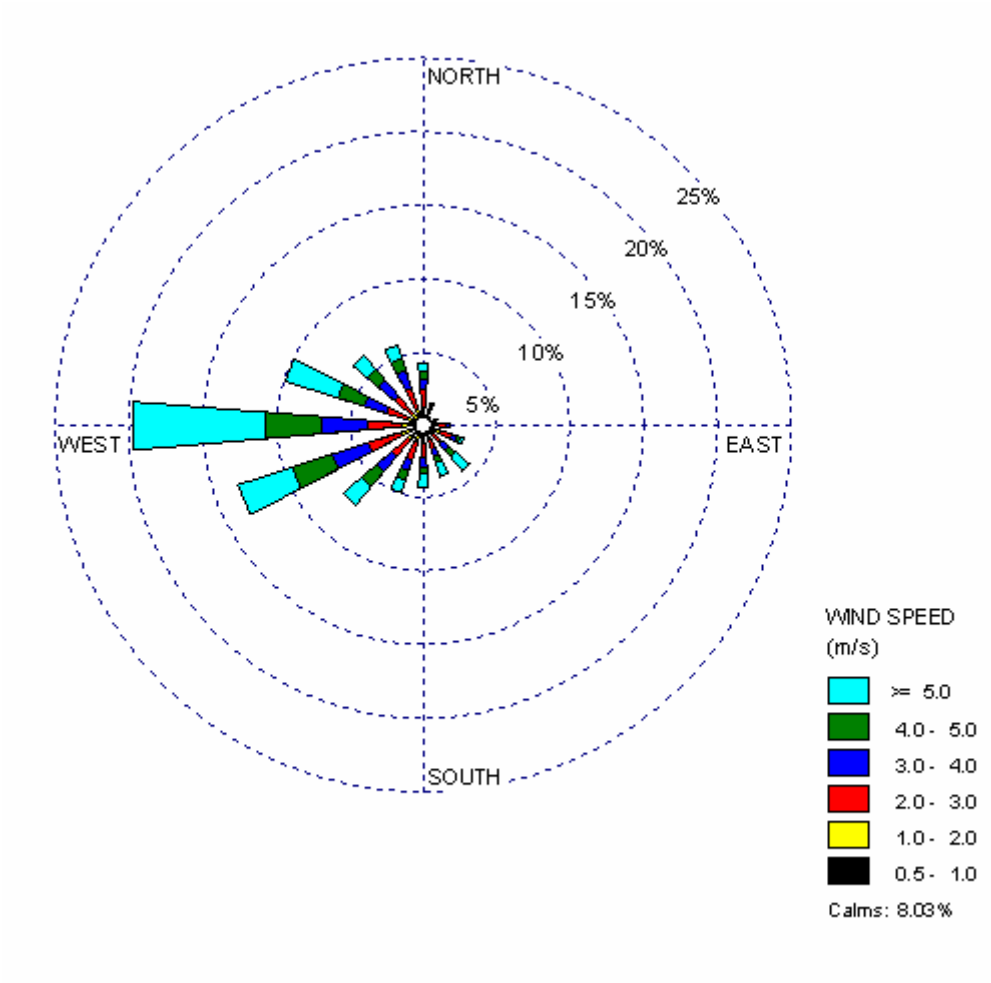

Figure 5: Wind directions at the Alameda NAS meteorological station for 1994 through 1996

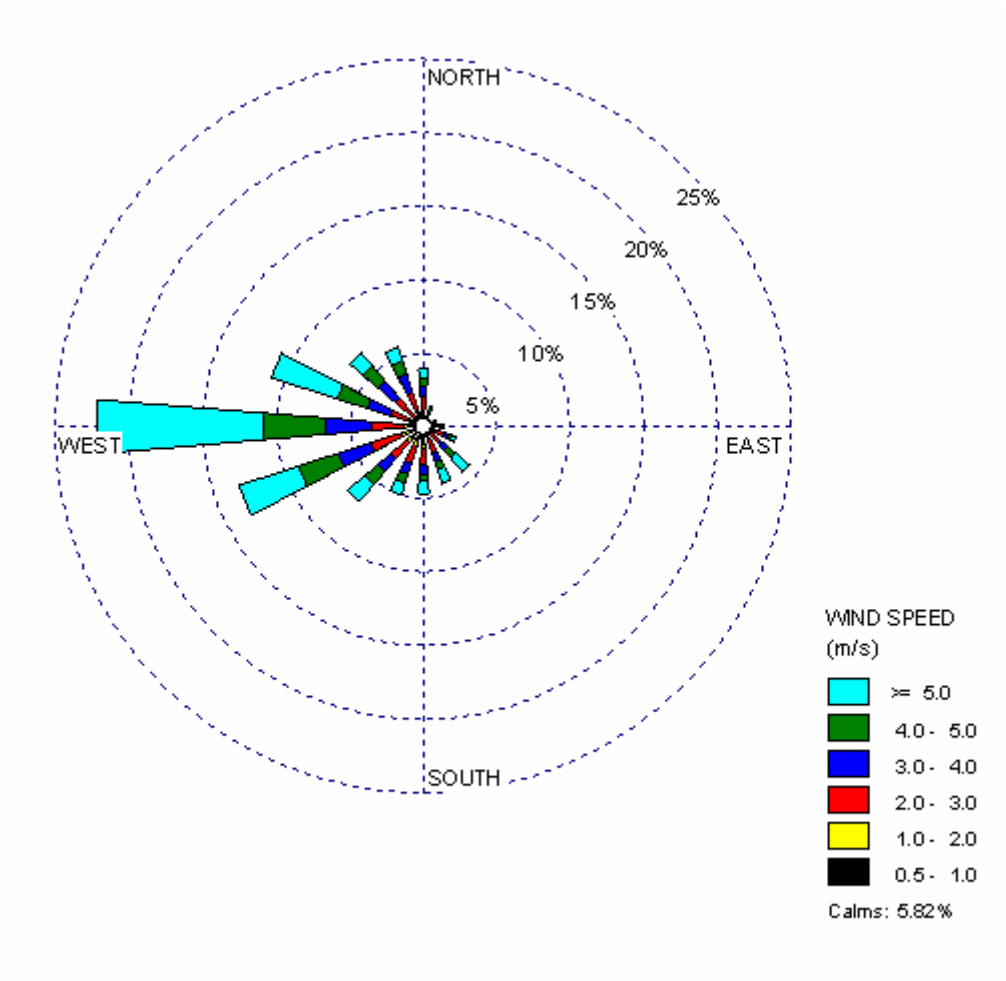

Figure 6: Wind directions at the Alameda NAS meteorological station for 1994 through 1996, winds between 5AM and 9PM