24TH AND HARRISON STREETS PROJECT CEQA ANALYSIS

City of Oakland

July 2016

URBAN PLANNING PARTNERS INC.

TABLE OF CONTENTS

ATTACHMENTS

List of Tables

List of Figures

24th and Harrison Streets Project
CEQA Analysis

Pursuant to California Resources Code Sections 21083.3, 21094.5.5, and 21166 and State CEQA Guidelines Sections 15164, 15183, 15183.3

Date:	July 15, 2016
Project Address:	24th and Harrison streets (277 27th Street and 300, 302, and 304 24th Street)
Project Number:	PLN 16-080
Zoning:	D-BV-1 (Retail Commercial Zone 1)
General Plan:	Central Business District
APNs:	008-0671-020-01, 008-0671-023-03, 008-0671-024-00, 008-0671-025-00, and 008-0671-021-01
Lot Size:	2.28 acres
Plan Area:	Broadway Valdez District Specific Plan
Applicant:	NASH – Holland 24th and Harrison Investors, LLC. 4301 Hacienda Drive, Suite 250 Pleasanton, CA 94588 Attn: Heidi Kiehn (925) 226-2469
Staff Contact:	Peterson Z. Vollmann (510) 238-6167 pvollmann@oaklandnet.com

I. EXECUTIVE SUMMARY

The project applicant, NASH – Holland 24th and Harrison Investors, LLC, is proposing to redevelop five parcels within the Broadway Valdez District Specific Plan (BVDSP, or Plan) area into a mixed-use development. The project site is currently occupied by an Acura car dealership and warehouse, surface parking lots, auto repair shops, and a fitness facility. The 24th and Harrison streets project (proposed project) would include construction of a an 18-story mixed-use residential and retail building, including a parking garage, with an area of approximately 730,655 gross square feet. The proposed building would have a maximum height of 200 feet and would be built above one level of subterranean parking.

The project would include approximately 65,000 square feet of commercial space along 24th and 27th streets, and approximately 355,645 square feet of residential uses with up to 448 residential units. The project would provide up to 181,848 square feet of parking in the podium structure, consisting of up to 465 vehicle parking spaces and 302 bicycle parking spaces.

The BVDSP Environmental Impact Report (EIR)[1] analyzed environmental impacts associated with adoption and implementation of the BVDSP and, where the level of detail available was adequate for analyzing potential environmental effects, provided a project-level California Environmental Quality Act (CEQA) review of reasonably foreseeable development. Project-level analysis allows the use of CEQA streamlining and/or tiering provisions for projects that are developed under the BVDSP.

Applicable CEQA streamlining and/or tiering code sections are described below, each of which, separately and independently, provides a basis for CEQA compliance.

1. **Community Plan Exemption.** Public Resources Code Section 21083.3 and State CEQA Guidelines Section 15183 allow streamlined environmental review for projects that are "consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified, except as might be necessary to examine whether there are project-specific significant effects that are peculiar to the project or its site." Section 15183(c) specifies that "if an impact is not peculiar to the parcel or to the proposed project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards…, then an EIR need not be prepared for the project solely on the basis of that impact."
2. **Qualified Infill Exemption.** Public Resources Code Section 21094.5 and State CEQA Guidelines Section 15183.3 allow streamlining for certain qualified infill projects by limiting the topics that are subject to review at the project level, provided the effects of infill development have been addressed in a planning-level decision or by uniformly applicable development policies. Infill projects are eligible if they are located in an urban area and on a site that either has been previously developed or adjoins existing qualified urban uses on at least 75 percent of the site's perimeter, able to satisfy the performance standards provided in State CEQA Guidelines Appendix M, and consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy. No additional environmental review is required if the infill project would not cause any new specific effects or more significant effects or if uniformly applicable development policies or standards would substantially mitigate such effects.

[1] ESA (Environmental Science Associates). 2013. *Broadway Valdez District Specific Plan, Draft Environmental Impact Report*. SCH No. 2012052008. September.
ESA (Environmental Science Associates). 2014. Broadway Valdez District Specific Plan, Responses to Comments and Final. May.
(These documents can be obtained at the Bureau of Planning at 250 Frank Ogawa Plaza, #3115, or online at http://www2.oaklandnet.com/Government/o/PBN/OurServices/Plans/OWD008194.)

3. **Addendum.** Public Resources Code Section 21166 and State CEQA Guidelines Section 15164 state that an addendum to a certified EIR is allowed when minor changes or additions are necessary and none of the conditions for preparation of a subsequent EIR or negative declaration, per Section 15162, are satisfied.

The CEQA Checklist provided below evaluates the potential project-specific environmental effects of the proposed project and whether such impacts were adequately covered by the BVDSP EIR to allow the above-listed streamlining and/or tiering provisions of CEQA to apply. The analysis conducted incorporates by reference the information contained in the BVDSP EIR. Mitigation measures and Standard Conditions of Approval (SCAs) identified in the BVDSP EIR that would apply to the proposed project are listed at the end of the CEQA Checklist. The proposed project is legally required to incorporate and/or comply with the applicable requirements of the mitigation measures identified in the BVDSP EIR as well as applicable City of Oakland (City) SCAs; therefore, the measures and SCAs are herein assumed to be included as part of the proposed project (see Attachment A).

The proposed project satisfies each of the foregoing CEQA provisions, as summarized below.

- **Community Plan Exemption.** As stated in Section 1.2.2 of the BVDSP, when development proposals in the BVDSP area are brought before the City, the staff and decision-makers use the BVDSP as a guide for project review. Projects are evaluated for consistency with the intent of BVDSP policies and conformance with development regulations. The environmental review of the BVDSP was intended to expedite the processing of future projects that are consistent with the BVDSP. Therefore, consistent with Section 1.2.3 of the BVDSP and State CEQA Guidelines Section 15183, this CEQA analysis satisfies, based on the analysis conducted in this document, the requirements for a community plan exemption. The proposed project is permitted in the zoning district where the project site is located and consistent with the bulk, density, and land use standards envisioned in the BVDSP. The CEQA Checklist below concludes that the proposed project would not result in significant impacts that (1) would be peculiar to the project or project site; (2) were not identified as significant project-level, cumulative, or off-site effects in the BVDSP EIR; or (3) were previously identified as significant but later found to have a more severe adverse impact than that discussed in the EIR. Findings regarding the proposed project's consistency with the BVDSP are included as Attachment B to this document.
- **Qualified Infill Exemption**. The analysis conducted indicates that the proposed project is eligible for a qualified infill exemption, pursuant to State CEQA Guidelines Section 15183.3. The infill eligibility criteria are evaluated in Attachment C and supported by the CEQA Checklist included below.
- **Addendum.** The analysis conducted, as described in this document, demonstrates that preparation of an addendum to the BVDSP EIR is allowed for the proposed project. Therefore, this CEQA analysis is considered to be the addendum. The BVDSP EIR

analyzed the Broadway Valdez Development Program (Development Program), which represents the maximum level of feasible development that can reasonably be expected to occur in the Plan area over a 25-year planning period, according to City of Oakland projections. In total, the Development Program includes approximately 3.7 million square feet of development, including approximately 695,000 square feet of office space, 1,114,000 square feet of restaurant/retail space, 1,800 residential units, a new 180-room hotel, 6,500 parking spaces, and 4,500 new jobs. The BVDSP allows for flexibility with respect to the quantity and profile of future development within each subarea, and between subareas, as long as such development conforms to the general traffic generation parameters established by the Plan. The Development Program is not intended to be a cap that would restrict development.

As shown in Table 1, the proposed project would provide more dwelling units and less commercial uses for the project site than contemplated in the Illustrative Development Program Map in Appendix D of the BVDSP (448 units instead of 0 units and 65,000 square feet of commercial uses instead of 127,733 square feet). The Illustrative Development Program Map is conceptual only and illustrates one of many possible development scenarios under the BVDSP; a plan that specifically did not prescribe or assume exact land uses on a site-by-site basis. While the Illustrative Development Program Map did not include residential uses on the project site, residential uses are conditionally permitted with the development of retail uses and the proposed project, which includes retail and residential uses, is therefore consistent with the zoning for the site as described in Attachment B.

The proposed project is in Subdistrict 2 of the Valdez Triangle subarea of the Plan. It would generate 128 AM and 275 PM net new peak-hour vehicle trips. Together with trips generated by other projects that are currently under construction, approved, or proposed for development in the Plan area, this would represent approximately 39 percent of the AM and 44 percent of the PM peak-hour trips anticipated in the BVDSP EIR, 63 percent of the AM and 60 percent of the PM peak-hour trips anticipated in the BVDSP EIR for the Valdez Triangle subarea, and 78 percent of the AM and 60 percent of the PM peak-hour trips anticipated in the BVDSP EIR for Subdistrict 2. While the total number of residential units proposed by the project combined with the projects under construction, approved, and proposed in the Plan Area, as well as in the Valdez Triangle Subarea, would exceed the Development Program Buildout assumptions in the BVDSP EIR,[2] because their combined trip generation would be within the scope of the program analyzed under the

[2] As shown in Table 6 in Section 13, Transportation and Circulation, 2,573 net new residential units have been proposed or approved in the Plan Area compared to 1,800 residential units described in the BVDSP EIR.

Table 1 Comparison of BVDSP Development Program, Illustrative Development Program Map, and Proposed Project

Development Characteristics	Total BVDSP Development Program[a]	Illustrative Development Program Map for Project Area	Proposed Project
Height	Varied	Southern portion: Five stories (65 feet) Northern portion: Ten stories (125 feet)[b]	18 stories (up to 200 feet)
Residential Units	1,800	0[b]	up to 448
Retail Square Footage (net)	695,000 square feet of office space 1,114,000 square feet of restaurant/retail space 181 hotel rooms	127,733 square feet[c]	approximately 65,000 square feet

[a] Development Program Grand Total, listed in Appendix D, Table D.1: Illustrative Development Plan Program Map by Subdistrict.

[b] Broadway Valdez Development Program Physical Height Model, Figure 3-11 of the Broadway Valdez District Specific Plan EIR.

[c] Development Program for Project Site #11 in Subdistrict 2, listed in Appendix D, Table D.1: Illustrative Development Plan Program Map by Subdistrict. Note that Project Site #11 includes the entire block between 24th, 27th, and Valdez Streets. Thus, it applies to an area that includes other parcels in addition to the project site. Source: City of Oakland. 2014. *Broadway Valdez District Specific Plan*. Adopted June. HKS, 2016.

BVDSP EIR for the Plan area, the Valdez Triangle, and Subdistrict 2, the traffic impact analysis, which the EIR determined was the key environmental factor constraining development, remains valid. Therefore, the proposed project meets the requirements for preparation of an addendum, as evidenced in Attachment D to this document.

Examination of the analysis, findings, and conclusions of the BVDSP EIR, as summarized in the CEQA Checklist below, indicates that the BVDSP EIR adequately analyzed and covered the potential environmental impacts associated with the proposed project. The streamlining and/or tiering provisions of CEQA apply to the proposed project. Therefore, no further review or analysis, under CEQA, is required.

II. PROJECT DESCRIPTION

Project Location

The project site is 2.28-acres at 24th and Harrison streets which includes 277 27th Street and 300, 302, and 304 24th Street. The site consists of five parcels with the following Assessor's Parcel Numbers: 008-0671-020-01, 008-0671-023-03, 008-0671-024-00, 008-0671-025-00, and 008-0671-021-01.

The site occupies most of the triangular-shaped block that is northwest of the 24th and 27th street intersection. The block is bounded by Valdez Street to the west, 24th Street to the south, and 27th Street to the north and east, as shown in Figure 1. The project site is in Subdistrict 2 of the Valdez Triangle Subarea of the Broadway Valdez District Specific Plan (BVDSP), Retail Priority Site 4B, and is northeast of Uptown Oakland and northwest of Lake Merritt.

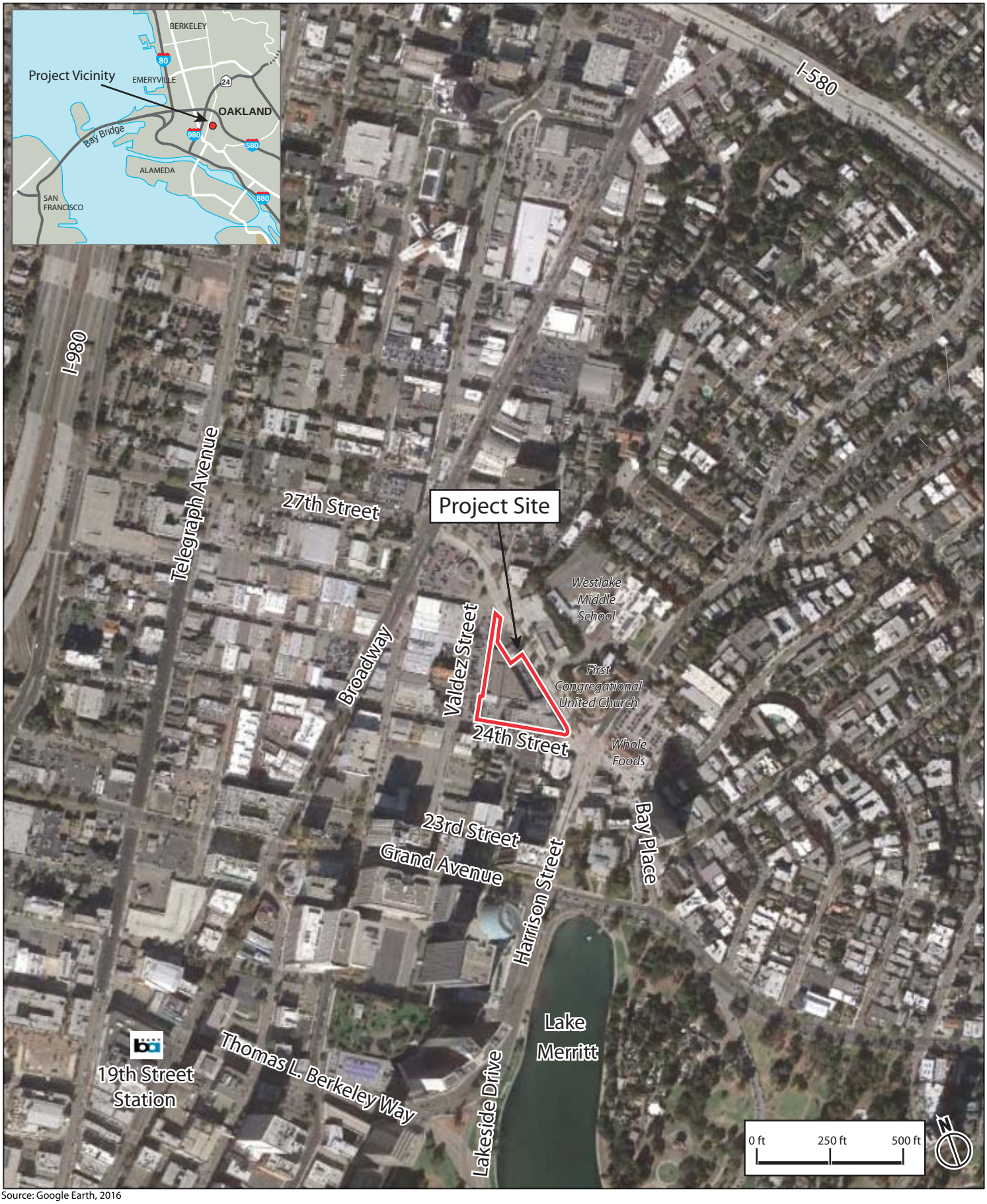
The project site is accessible from Interstate 580, approximately 0.6-mile to the north, and Interstate 980, approximately 0.5 mile to the west. Multiple transit routes serve the project site, including Alameda-Contra Costa County Transit District Routes 1, 1R, 11, 12, 51A, 58L, 651, 800, 805, 851, BSN, BSD, and NL. The 19th Street Bay Area Rapid Transit District (BART) station is approximately 0.5-mile south of the site, and the MacArthur BART station is approximately 1 mile northwest of the site.

Existing Conditions

The 2.28-acre site is predominantly flat and primarily occupied by an Acura automotive dealership (277 27th Street and 304 24th Street) including a showroom, service center, and parking lots. The site also includes Autotrends Collision Repair (300 24th Street), DAM Sport Fitness (302 24th Street), and paved surface lots. As shown in Table 2, the site consists of five parcels with the following Assessor's Parcel Numbers: 008-0671-020-01, 008-0671-023-03, 008-0671-024-00, 008-0671-025-00, and 008-0671-021-01. None of the existing properties are considered historic resources under CEQA.

The project site has approximately six existing curb cuts along 27th Street and four curb cuts along 24th Street. Three street trees are planted along the perimeter of the site; one Pine tree on 24th Street and two Brisbane box trees along 27th Street.

The project site occupies the majority of a triangular block and has frontage on both 27th Street and 24th Street, as shown in Figure 1. Adjacent to and surrounded by the project site on the north, there is a two-story commercial building (295 27th Street) and surface parking lot. Immediately to the west are several surface parking lots, which are accessed from Valdez Street. The proposed 2400 Valdez Street project is planned to replace those surface parking lots with a seven-story building including approximately 225 residential units and 23,500 square feet of commercial uses.



Source: Google Earth, 2016

24th & Harrison CEQA Analysis

Figure 1
Project Vicinity

Table 2 Existing Uses on the Project Site

APNs	Existing Uses	Building Description/ Year Constructed	Historic Resource Rating
277 27th Street			
008-0671-020-01	**Acura** – Car Dealership – includes automotive sales and showroom, and parts and service departments and a parking lot on 27th Street	27,200-square-foot, two-story masonry and concrete building. Built between 1925-1941.	OCHS *3 (not rated, not in a historic district, heavily modified since original evaluation). Revised down from original OCHS Rating of C3 due to extensive additions and modifications.
304 24th Street			
008-0671-023-03	**Acura** – Warehouse – used for storage of new vehicles, vehicle detailing, alignment and tire services and parking spaces	28,000 square feet, two-story concrete building with a wooden truss roofing system. Built in 1930.	--
	Orin Drive Gate – Existing entryway gate	Concrete white entrance gate. Built in 1930.	NRHP rating N/A, OCHS rating C3 (of secondary importance, not in a historic district)[a]
008-0671-024-00 and 008-0671-025-00	Parking Lot on 24th Street	--	--
300 and 302 24th Street			
008-0671-021-01	**Autotrends Collision Repair** – Auto Repair	3,250 square-foot, single-story building with brick façade with metal door and wooden signage near roof. Built in 1930.	NRHP rating 6Z, OCHS rating D3 (Found ineligible for National Register, California Register or Local designation through survey evaluation. Minor importance, not in a historic district)
	DAM Sport – Fitness Sports facility	3,250 square-foot, single-story, brick façade with glass windows. Built in 1930.	NRHP rating 6Z, OCHS rating D3. (Found ineligible for National Register, California Register or Local designation through survey evaluation. Minor importance, not in a historic district)

Notes: OCHS = Oakland Cultural Heritage Survey; NRHP = National Register of Historic Places
[a] These properties are considered Potential Designated Historic Properties (PDHPs). Regardless of whether a property is an historic resource per CEQA, the City considers any property with a rating of at least a contingency C or contributing or potentially contributing to a primary or secondary district to be considered for possible preservation.
Source: City of Oakland Parcel Information, 2016.

Land uses in the project vicinity include commercial and residential uses as well as institutional uses. Northeast of the project site along 27th Street, the uses are characterized by one- to two-story commercial buildings including a paper store and a label print shop. First Congregational United Church of Christ is across 27th Street to the east and Whole Foods Market is to the southeast across Harrison Street. Westlake Middle School is located just beyond 27th Street, along Oakland Avenue. To the south across 24th Street, there are several single-family residences and apartments, ranging in height from two to four stories and an 85-foot 196-unit multi-family residential development that is under construction.

West of the project site along Valdez Street, there are several two-story residences, single-story commercial buildings and a parking lot. Across Harrison Street and further southeast of the site, the approximately 20-story St. Paul's residential towers are located on Bay Place, and the Veterans' Memorial Building and Lake Merritt are located along Grand Avenue.

The General Plan land use designation for the project site is Central Business District; this classification is intended to encourage, support, and enhance the downtown area as a high-density, mixed-use urban center of regional importance, and a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation.

The project site is zoned D-BV-1 (Retail Priority Sites Commercial Zone 1). The intent of the D-BV-1 zone is to ensure that larger sites and opportunity areas are reserved primarily for new, larger retail development to accommodate consumer goods retail, at least on the ground floor. Residential uses are conditionally permitted if retail is proposed. Retail Priority Sites are also well served by transit, have excellent vehicular access, and are in areas of good visibility.

Project Characteristics

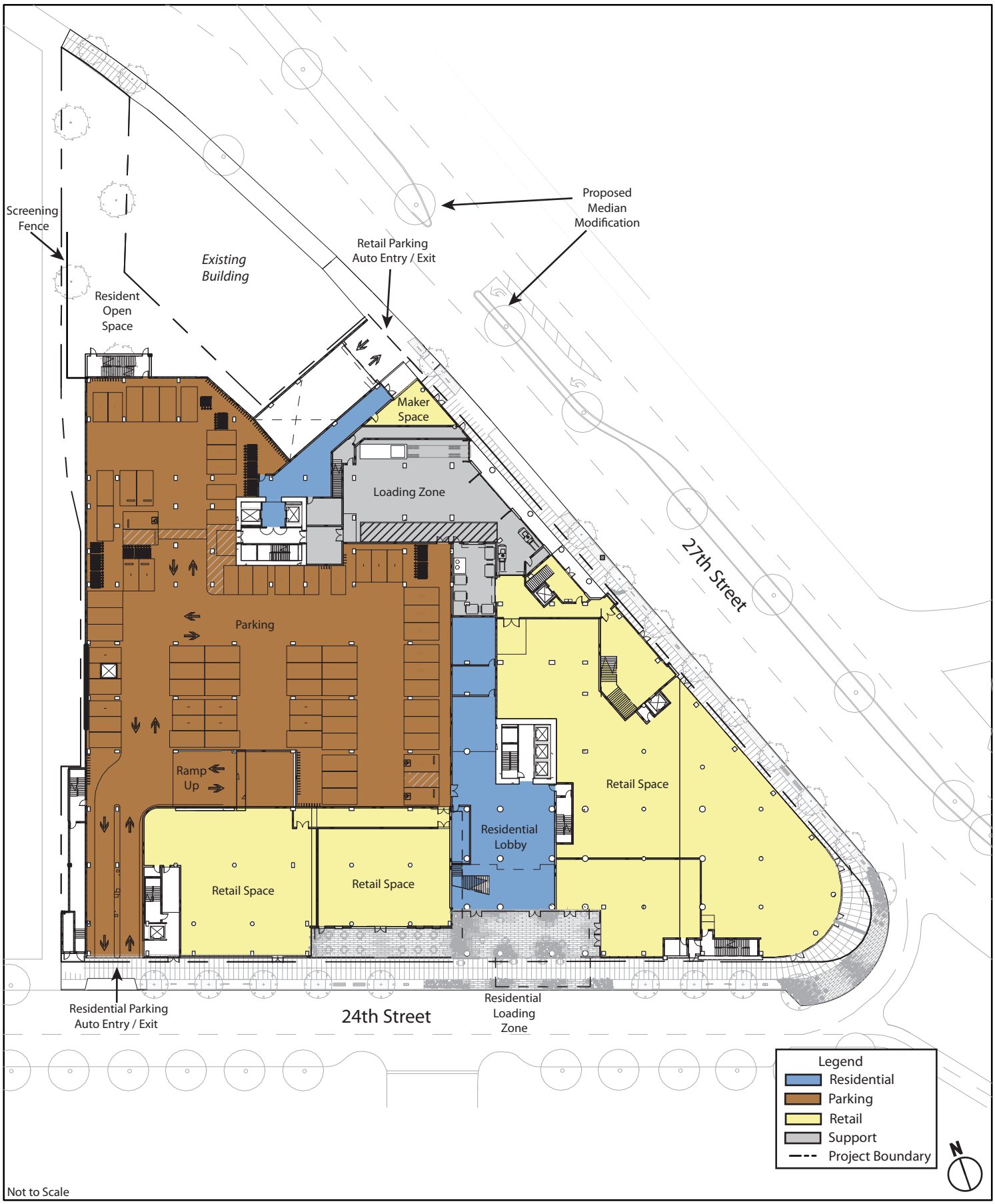
The proposed project would demolish the existing buildings and surface parking lots on the project site and would entail the construction of an approximately 730,655 square-foot mixed-use residential building up to 200 feet in height, with 18 stories and one basement level.

The project would include approximately 65,000 square feet of commercial space along 24th and 27th streets, and up to 355,645 square feet of residential uses with up to 448 residential units. The project would provide up to 181,848 square feet of parking in the podium structure, consisting of up to 465 vehicle parking spaces and approximately 302 bicycle parking spaces. The project characteristics are shown in Table 3 below. The project site plan, typical floor plans, typical building section, and building renderings are shown in Figures 2 through 6.

Table 3 Project Characteristics

Lot	**Dimensions**
Size	99,202 square feet (2.28 acres)
Proposed Uses	**Area (gsf)**
Commercial (Retail)	65,000*
Residential	355,645
Parking	181,848
Other (Support and Circulation)	110,829
Amenities	17,333
Total Uses	**730,655**
Proposed Residential Units	**Amount (Percent)**
Studio	60 (13%)
1-bedroom	263 (59%)
2-bedroom	121 (27%)
3-bedroom	4 (1%)
Total Units	**448 (100%)**
Proposed Parking	**Number of Spaces**
Vehicle Parking Spaces	465 (331 residential spaces/134 retail spaces)
Bicycle Parking Spaces	302 (264 residential spaces/38 retail spaces)
Open Space	**Area (sf)**
Ground Floor	6,130
Podium Courtyard	23,758
Terrace	10,715
Sky Deck	2,085
Total Open Space	**42,688**
Building Characteristics	
18 stories plus one basement parking level (total height up to 200 feet) • Two-story retail at corner of 27th and 24th streets • Three above-ground levels of podium parking and one below-grade parking level • Residential units on floors three through 18	

Notes: gsf = gross square feet
* Retail gsf also includes circulation and support areas.
Source: Holland Partner Group, 2016.



Source: HKS, July 12, 2016

24th & Harrison CEQA Analysis

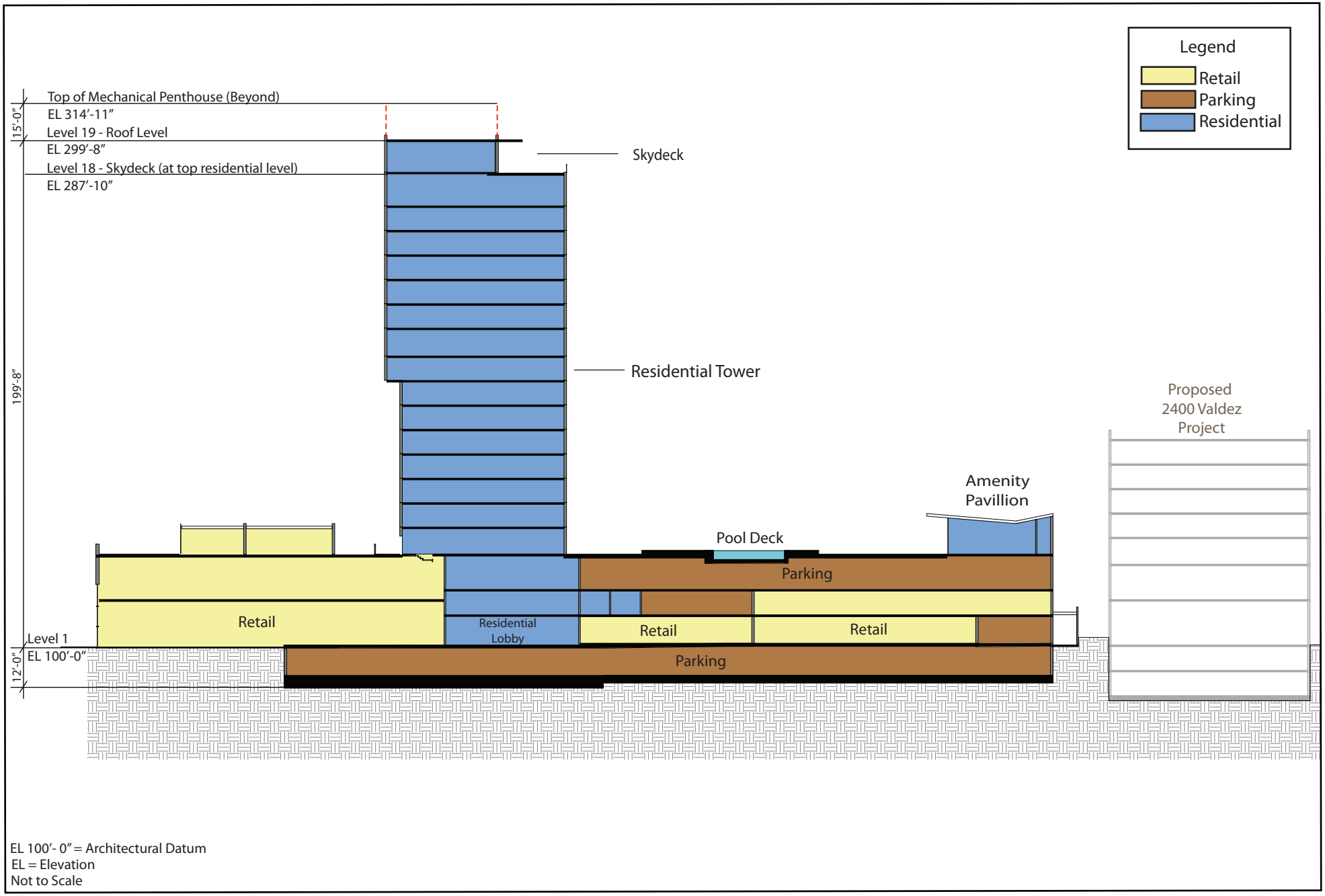
Figure 2
Site Plan

Not to Scale

Source: HKS, July 12, 2016

24th & Harrison CEQA Analysis

Figure 3
Podium and Residential Level Plans



Source: HKS, July 12, 2016

Figure 4
Section Looking South from 27th Street

Source: HKS, July 12, 2016

Figure 5
27th Street Elevation

Source: HKS, July 12, 2016

Figure 6
Aerial Perspective Looking North from 24th Street

Commercial Uses

The proposed project would include approximately 65,000 square feet of commercial uses on four building levels, with 32,010 square feet on the ground level, 6,599 square feet on the second level, 19,472 square feet on the mezzanine level, and 6,919 square feet on the third level. The primary commercial space would be at the corner of 27th and 24th streets. This space would be two stories, with ceiling heights up to 18 feet, and a retail pavilion above on the third floor. Two smaller retail spaces would be provided along 24th Street. A small makerspace would also be provided near the building vehicle entrance along 27th Street.[3]

Residential Uses

Approximately 355,645 square feet of residential uses would be constructed in an L-shaped tower on levels three through 18, above the podium parking structure. Up to 448 residential units be constructed, composed of approximately 60 studio units, 263 one-bedroom units, 121 two-bedroom units, and 4 three-bedroom units.

Access, Circulation, and Parking

The main residential lobby would be located along the middle of the project site on 24th Street, and an additional pedestrian lobby would be provided at the north of the site on 27th Street. Access to commercial spaces would be provided along the respective street frontages. Access to the retail parking garage would be at the north end of the project site, along 27th Street, and access to the residential garage would be at the southwest end, along 24th Street. Stairwells and elevators would connect the parking garage with the commercial and residential spaces.

Approximately 181,848 square feet of parking space would be provided in the basement level and three above-grade levels located in a podium structure. Approximately 465 vehicular parking spaces would be provided (331 residential spaces and 134 retail spaces). Approximately 302 bicycle parking spaces would be provided (264 residential spaces and 38 retail spaces).

One residential loading space and two retail loading spaces would be accessed from a designated loading driveway on 27th Street. Along 27th Street two driveways are proposed: one for the commercial vehicle ingress and egress into the parking structure; a combined driveway for residential loading, trash access to covered staging/loading area and retail

[3] Makerspace is a collaborative workspace where artists, inventors, and tinkerers are encouraged to invent, create, and explore.

access to the covered staging/loading area. Along 24th Street, only one driveway is proposed for ingress and egress into the parking structure.

Open Space

The project would provide approximately 42,688 square feet of common open space for the building residents on four levels. The ground floor would have approximately 6,130 square feet of open green space at the corner of Valdez and 27th streets. The third floor would include an approximately 23,758-square-foot open space on the top of the podium parking structure; amenities may include a courtyard with a lap pool, bocce court, BBQ and dining area, and an outdoor exercise area. The residential tower would have private outdoor terraces (approximately 10,715 square feet) and the eighteenth floor would have a sky deck (approximately 2,085 square feet).

Streetscape Improvements

Sidewalk and streetscape improvements would be installed as part of the project, consistent with the Broadway/Valdez District Specific Plan (BVDSP) Public Realm Design Guidelines for Streetscape Design. Streetscape improvements would also include new street trees along 24th and 27th streets, street furniture, and bike racks for retail parking.

Building Design

The proposed building would consist of a podium parking structure wrapped with commercial uses along much of the façade on 27th and 24th streets and a central L-shaped tower rising above the podium. The podium and commercial components of the building would extend up to approximately 36 feet above grade, and the tower would extend up to approximately 200 feet above grade.

At the intersection of 24th and 27th streets, the two-story commercial space would be prominent and the residential tower would be set back from this façade. Along 24th Street, the commercial space would also be prominent along the street, with the majority of the tower set back from the street, except at the residential building entrance, where the short end of the L-shaped tower would extend to the street frontage. If feasible, the Orin Drive Gate would be salvaged and relocated to the open space at the north end of the project site adjacent to 27th Street.

Activity/Employment

The proposed project would include a mix of residential and retail uses. Based on the generation rate established for the BVDSP area of 1.87 persons per household, the proposed project could generate approximately 838 new residents. In addition, the 65,000 square feet of retail uses could generate up to 130 jobs.[4]

Project Construction

Construction activities would consist of demolition of the existing buildings and surface parking lots, excavation and shoring, foundation and below-grade construction, and construction of the building and finishing interiors. Project construction is expected to occur over approximately 30 months, with construction scheduled to commence in fall 2017, and be completed by winter/spring 2020. Approximately 30 workers would be required in the early stages of construction and approximately 190 workers would be required at the peak of construction.

The site would be excavated up to approximately 13 feet below grade and approximately 49,000 cubic yards of soil would be excavated and off-hauled from the site. No soils are anticipated to be imported to the site. Groundwater on the site has been encountered between approximately 4 to 8 feet below ground surface and could fluctuate several feet depending on the season and rainfall;[5,6] therefore, dewatering would be required during construction as further explained in Section 8, Hydrology and Water Quality, below. The building foundation is anticipated to be an approximately 3-foot-thick mat-slab foundation supported on drilled displacement columns or torque-down piles. The displacement columns would be drilled to a depth of approximately 65 feet.

Project Approvals

The proposed project would require a number of discretionary actions and approvals, including without limitation:

[4] Using a standard generation rate of 500 square feet per employee.

[5] AECOM, 2015. Phase I Environmental Site Assessment, Acura of Oakland property, 277 27th Street, Oakland, CA, October 22.

[6] Rockridge Geotechnical, 2015. Preliminary Geotechnical Investigation to Support Due Diligence Evaluation, Oakland Acura Site, 24th and 27th Streets, Oakland, California. October 20. Prepared for Holland Partner Group.

Actions by the City of Oakland

- Planning Commission—Regular Design Review, CEQA determination, conditional use permit (CUP) and minor variance, and vesting tentative parcel map for lot merger and condominium purposes.
- Public Works Tree Division – Issuance of tree removal permit.
- Building Department—Grading permit and other related on- and off-site work permits (e.g., public right-of-way improvements, and tie backs) as well as encroachment permits.

Actions by Other Agencies

- Bay Area Air Quality Management District (BAAQMD) – Issuance of permits for installation and operation of the emergency generator. Permitting of asbestos abatement activities, if any.
- Regional Water Quality Control Board (RWQCB) – Acceptance of a Notice of Intent to obtain coverage under the General Construction Activity Storm Water Permit, and Notice of Termination after construction is complete.
- East Bay Municipal Utility District (EBMUD) – Grant a Special Discharge Permit to discharge construction dewatering to the sanitary sewer and/or approval of new service requests and new water meter installations.

III. BVDSP AND EIR

The BVDSP provides a framework for future growth and development in an approximately 95.5-acre area along Oakland's Broadway corridor between Grand Avenue and I-580. Although it does not propose specific private developments, the BVDSP establishes a Development Program to project the maximum level of feasible development that can reasonably be expected during the 25-year planning period (i.e., approximately 3.7 million square feet, including approximately 695,000 square feet of office space, 1,114,000 square feet of restaurant/retail space, 1,800 residential units, a new 180-room hotel, approximately 6,500 parking spaces, and approximately 4,500 new jobs). As described above, the BVDSP EIR analyzed the environmental impacts of adoption and implementation of the BVDSP, and where the level of detail available was adequate for analyzing potential environmental effects, the EIR provided project-level CEQA review for foreseeable and anticipated development.

On September 20, 2013, the City of Oakland released for public review the draft EIR for the BVDSP. The public review and comment period extended from September 20, 2013, through November 12, 2013. The Landmarks Preservation Advisory Board (LPAB) and the City of Oakland Planning Commission held hearings on the draft EIR, and comments received during the public review and comment period were addressed in the final EIR for the BVDSP. Prior to adoption of the final EIR, additional public hearings were held by both the LPAB and the Planning Commission. The final EIR was certified by the Planning Commission on May 21, 2014, and confirmed by the City Council on June 17, 2014.

The final EIR determined that impacts on the following resources would be less than significant, or would be reduced to a less-than-significant level with implementation of mitigation measures or compliance with City of Oakland SCAs: aesthetics; biology; geology, soils, and geohazards; hazardous materials; hydrology and water quality; land use, plans, and policies; population, housing, and employment; public services and recreational facilities; and utilities and service systems. The final EIR determined that implementation of the BVDSP would have significant unavoidable impacts related to the following environmental resources: wind and shadow, air quality, cultural resources, greenhouse gases (GHGs) and climate change, noise, and transportation. Because of the potential for significant unavoidable impacts, a Statement of Overriding Considerations with findings was adopted as part of BVDSP approval on May 21, 2014, and confirmed by the City Council on June 17, 2014. The City Council found that, for the significant and unavoidable impacts listed above, the BVDSP EIR provided the best balance between the City's goals and objectives and the BVDSP's benefits. In addition, the City Council made the following determinations:

- The BVDSP updates the goals and policies of the general plan and provides more detailed guidance for specific areas within the Broadway Valdez District;
- The BVDSP builds upon two retail enhancement studies, the Citywide Retail Enhancement Strategy and the companion Upper Broadway Strategy – A Component of

the Oakland Retail Enhancement Strategy, which identified the City's need to reestablish major destination retail in Oakland as being critical to stemming the retail leakage and associated loss of tax revenue that the City suffers from annually. These reports also identified the Broadway Valdez District as the City's best opportunity to reestablish a retail core with the type of comparison shopping that once served Oakland and nearby communities and that the City currently lacks;

- The BVDSP provides a policy and regulatory framework to achieve one of the primary objectives: to transform the Plan area into an attractive regional destination for retailers, shoppers, employers and visitors that serves, in part, the region's shopping needs and captures sales tax revenue for reinvestment in Oakland;
- The BVDSP could create employment opportunities (both short-term construction jobs as well as permanent jobs), increase revenues (sales, property, and other taxes), and promote spin-off activities (as Plan area workers spend some of their income on goods in the Plan area);
- The BVDSP Development Program promotes increased housing densities in proximity to employment-generating land uses that support City and regional objectives for achieving a jobs/housing balance and transit-oriented development;
- The BVDSP design guidelines will ensure that future development contributes to the creation of an attractive pedestrian-oriented district characterized by high-quality design and a distinctive sense of place; and
- The BVDSP identifies a series of needed and desired improvements related to transportation, affordable housing, historic resource preservation and enhancement, streetscape, plaza, parking, and utility infrastructure as well as regulatory tools, policies, and potential funding mechanisms to realize those improvements.

The Notice of Determination (NOD) for the BVDSP EIR was filed with the State Clearinghouse on June 18, 2014, and was not challenged. Therefore, the BVDSP EIR remains valid.

IV. SUMMARY OF FINDINGS

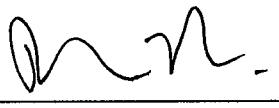
An evaluation of the proposed project is provided in the CEQA Checklist below. This evaluation concludes that the proposed project qualifies for an exemption/addendum from additional environmental review. The BVDSP EIR allows for the distribution of density and development types between categories and sub-areas, and accounted for the construction and operational impacts from the development proposed within the Plan Area. Any potential environmental impacts associated with the project's development were adequately analyzed and covered by the analysis in the BVDSP EIR. The proposed project would be required to comply with the applicable mitigation measures identified in the BVDSP EIR, as well as any applicable City of Oakland SCAs (see Attachment A, at the end of the CEQA Checklist). With implementation of the applicable mitigation measures and SCAs, the proposed project would not result in a substantial increase in the severity of significant impacts that were previously identified in the BVDSP EIR or any new significant impacts that were not previously identified in the BVDSP EIR.

In accordance with Public Resources Code Sections 21083.3, 21094.5, and 21166 and State CEQA Guidelines Sections 15183, 15183.3, and 15164, and as set forth in the CEQA Checklist below, the proposed project qualifies for an exemption/addendum because the following findings can be made:

- The proposed project would not result in significant impacts that (1) would be peculiar to the project or project site; (2) were not previously identified as significant project-level, cumulative, or off-site effects in the BVDSP EIR; or (3) were previously identified as significant but—as a result of substantial new information that was not known at the time the BVDSP EIR was certified—would increase in severity above the level described in the EIR. Therefore, the proposed project is exempt from further environmental review in accordance with Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183.
- The proposed project would not cause any new significant impacts on the environment that were not already analyzed in the BVDSP EIR or result in more significant impacts than those that were previously analyzed in the BVDSP EIR. The effects of the proposed project have been addressed in the BVDSP EIR, and no further environmental documents are required, in accordance with Public Resources Code Section 21094.5 and State CEQA Guidelines Section 15183.3.
- The analyses conducted and the conclusions reached in the BVDSP EIR that was certified by the Planning Commission on May 21, 2014, and confirmed by the City Council on June 17, 2014, remain valid, and no supplemental environmental review is required for the proposed project modifications. The proposed project would not cause new significant impacts that were not previously identified in the EIR or result in a substantial increase in the severity of previously identified significant impacts. No new mitigation measures would be necessary to reduce significant impacts. No changes have occurred with respect to the circumstances surrounding the original project that would cause significant

environmental impacts to which the proposed project would contribute considerably, and no new information has been put forward that shows that the proposed project would cause significant environmental impacts. Therefore, no supplemental environmental review is required beyond this addendum, in accordance with Public Resources Code Section 21166 and State CEQA Guidelines Section 15164.

Each of the above findings provides a separate and independent basis for CEQA compliance.



7/15/16

Darin Ranelletti
Environmental Review Officer

Date

V. CEQA CHECKLIST

Overview

This CEQA Checklist provides a summary of the potential environmental impacts that may result from adoption and implementation of the BVDSP, as evaluated in the BVDSP EIR. Potential environmental impacts of development under the BVDSP were analyzed and covered by the BVDSP EIR, and the EIR identified mitigation measures and Standard Conditions of Approval (SCAs)[7] to address these potential environmental impacts.

This CEQA Checklist hereby incorporates by reference the BVDSP EIR discussion and analysis of all potential environmental impact topics; only those environmental topics that could have a potential project-level environmental impact are included. The EIR significance criteria have been consolidated and abbreviated in this CEQA Checklist for administrative purposes; a complete list of the significance criteria can be found in the BVDSP EIR.

This CEQA Checklist provides a determination of whether the proposed project would result in:

- Equal or Less Severity of Impact Previously Identified in BVDSP EIR;
- Substantial Increase in Severity of Previously Identified Significant Impact in BVDSP EIR; or
- New Significant Impact.

Where the severity of the impacts of the proposed project would be the same as or less than the severity of the impacts described in the BVDSP EIR, the checkbox for Equal or Less Severity of Impact Previously Identified in BVDSP EIR is checked. Where the checkbox for Substantial Increase in Severity of Previously Identified Significant Impact in BVDSP EIR or New Significant Impact is checked, there are significant impacts that are:

- Peculiar to project or project site (per CEQA Guidelines Sections 15183 or 15183.3);

[7] These are Development Standards that are incorporated into projects as SCAs, regardless of a project's environmental determination, pursuant, in part, to CEQA Guidelines Section 15183. As applicable, the SCAs are adopted as requirements of an individual project when it is approved by the City, and are designed to, and will, substantially mitigate environmental effects. In reviewing project applications, the City determines which of the SCAs are applied, based on the zoning district, community plan, and the type(s) of permit(s)/approvals(s) required for the project. Depending on the specific characteristics of the project type and/or project site, the City will determine which SCA applies to each project.

- Not identified in the previous EIR (BVDSP EIR) (per CEQA Guidelines Sections 15183 or 15183.3), including off-site and cumulative impacts (per CEQA Guidelines Section 15183);
- Due to substantial changes in the project (per CEQA Guidelines Section 15162);
- Due to substantial changes in circumstances under which the project will be undertaken (per CEQA Guidelines Section 15162); or
- Due to substantial new information not known at the time the BVDSP EIR was certified (per CEQA Guidelines Sections 15162, 15183, or 15183.3).

The proposed project is required to comply with applicable mitigation measures identified in the BVDSP EIR, and with City of Oakland SCAs. The project sponsor has agreed to incorporate and/or implement the required mitigation measures and SCAs as part of the proposed project. This CEQA Checklist includes references to the applicable mitigation measures and SCAs.

A list of the mitigation measures and SCAs is included in Attachment A, and is incorporated by reference into the CEQA Checklist analysis. If the CEQA Checklist (including Attachment A) inaccurately identifies or fails to list a mitigation measure or SCA, the applicability of that mitigation measure or SCA to the proposed project is not affected. If the language describing a mitigation measure or SCA included in the CEQA Checklist (including Attachment A) is inaccurately transcribed, the language of the mitigation measure as set forth in the BVDSP EIR or City of Oakland SCAs shall control.

Consistent with the requirements of CEQA, a determination of whether the project would have a significant impact has occurred prior to the approval of the proposed project and, where applicable, standard conditions of approval and/or mitigation measures in the BVDSP EIR have been identified that will mitigate them. In some instances, exactly how the measures/conditions identified will be achieved awaits completion of future studies, an approach that is legally permissible where measures/conditions are known to be feasible for the impact identified, where subsequent compliance with identified federal, state or local regulations or requirements apply, where specific performance criteria is specified and required, and where the proposed project commits to developing measures that comply with the requirements and criteria identified.

Attachments

The following attachments are included at the end of this CEQA Checklist:

A. Standard Conditions of Approval and Mitigation Monitoring and Reporting Program;

B. Project Consistency with Community Plans or Zoning, per CEQA Guidelines Section 15183;

C. Infill Performance Standards, per CEQA Guidelines Section 15183.3;

D. Criteria for Use of Addendum, per CEQA Guidelines Sections 15164 and 15162;

E. Shadow Study for the 24th and Harrison Streets Project;

F. Wind Tunnel Study for the 24th and Harrison Streets Project;

G. Air Quality and Health Risk Screening Analysis for the 24th and Harrison Streets Project; and

H. Greenhouse Gases and Climate Change Screening Analysis for the 24th and Harrison Streets Project.

1. Aesthetics, Shadow, and Wind

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Have a substantial adverse effect on a public scenic vista; substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, located within a state or locally designated scenic highway; substantially degrade the existing visual character or quality of the site and its surroundings; or create a new source of substantial light or glare which would substantially and adversely affect day or nighttime views in the area;	☒	☐	☐
b. Introduce landscape that would now or in the future cast substantial shadows on existing solar collectors (in conflict with California Public Resource Code Sections 25980 through 25986); or 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;	☒	☐	☐
c. Cast shadow that substantially impairs the beneficial use of any public or quasi-public park, lawn, garden, or open space; or, cast shadow on an historical resource, as defined by CEQA Guidelines Section 15064.5(a), such that the shadow would materially impair the resource's historic significance;	☒	☐	☐
d. 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	☒	☐	☐

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
addressing the provision of adequate light related to appropriate uses; or			
e. Create winds that exceed 36 mph for more than one 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.	☒	☐	☐

Scenic Vistas, Scenic Resources, and Visual Character (Criterion 1a)

The BVDSP EIR determined that potential impacts to scenic vistas and resources, visual character, and lighting and glare from development under the BVDSP would be less than significant with implementation of SCAs, and that no mitigation measures were necessary. The Physical Height Model analyzed in the BVDSP EIR[8] represents the conceptual massing for projects to be developed under the BVDSP, and served as the basis for massing, view corridor, shadow, and wind analysis performed in the EIR. The EIR found that new structures would partially obstruct views of the sky, but that such changes would not represent a substantial adverse effect on views, because no views considered scenic or unique (as defined by CEQA) and no visual access to protected scenic resources (as defined by the General Plan) would be obstructed. Changes anticipated under the BVDSP would generally create a more pedestrian-oriented aesthetic in the Plan area, and the Design Guidelines would ensure that development under the BVDSP would be compatible with the existing built form and architectural character of the Plan area as a whole, and

[8] The Broadway Valdez Development Program represents the maximum feasible development that the City has projected can reasonably be expected to occur in the Plan Area over the next 25 years, and is therefore the level of development envisioned by the Specific Plan and analyzed in the BVDSP EIR. The Broadway Valdez Development Program, together with the Specific Plan height limits, maximum base heights, and step-back requirements inform the Physical Height Model, which provides the basis for analysis in the BVDSP EIR.

compatible with the distinctive visual character of individual areas. Development in the Plan area will be required to comply with SCAs related to landscaping, street frontages, landscape maintenance, utility undergrounding, public right-of-way improvements, and lighting plans.

Shadow (Criteria 1b through 1d)

The BVDSP EIR determined that development under the BVDSP would result in less-than-significant impacts from shading, with the exception of potential shading on Temple Sinai, which is considered a historical resource. Temple Sinai is at 356 28th Street near the intersection with Webster Street. Under the BVDSP EIR, Mitigation Measure AES-4: Shadow Analysis, applies to the area bounded by Webster Street, 29th Street, Broadway, and 28th Street to reduce shadow impacts. Even with implementation of Mitigation Measure AES-4, the EIR conservatively determined that impacts may remain significant and unavoidable. Development outside this area under the BVDSP was determined to result in less-than-significant shadow impacts. To address potential cumulative impacts, under the BVDSP EIR, Mitigation Measure AES-6, which requires implementation of Mitigation Measures AES-4 and AES-5 (described below), applies to projects bounded by the streets listed above to address significant cumulative aesthetics and wind impacts. The EIR conservatively concluded that, even with implementation of Mitigation Measure AES-6, cumulative shadow impacts may remain significant and unavoidable for some projects.

Wind (Criterion 1e)

The BVDSP EIR determined that development under the BVDSP that has a height of 100 feet or greater, and is in the portion of the Plan area designated as Central Business District (which extends north from downtown to 27th Street), could result in adverse wind conditions. Under the BVDSP EIR, Mitigation Measure AES-5: Wind Analysis, applies to those projects in the Central Business District portion of the Plan area that are over 100 feet in height. Even with implementation of Mitigation Measure AES-5, the EIR conservatively determined that impacts may remain significant and unavoidable. To address potential cumulative impacts, under the BVDSP EIR, Mitigation Measure AES-6, which requires implementation of Mitigation Measures AES-4 and AES-5, applies to those same projects and addresses significant cumulative wind and aesthetics impacts. Even with implementation of Mitigation Measure AES-6, the EIR conservatively determined that cumulative impacts may remain significant and unavoidable for some projects.

Project Analysis and Conclusion

Scenic Vistas, Scenic Resources, and Visual Character. Consistent with the findings of the BVDSP EIR, the project's potential impacts to scenic vistas, scenic resources, visual character, and light and glare would be less-than-significant with implementation of the SCAs, as the project is consistent with the BVDSP EIR.

Pursuant to the Design Guidelines, development within the Plan Area should contribute to the creation of a coherent, well-defined and active public realm that supports pedestrian activity and social interaction, and to the creation of a well-organized and functional private realm that supports the needs of tenant businesses. The proposed project meets this guideline by widening sidewalks and adding amenities such as street trees, planters, lighting, benches and bicycle parking on 24th Street. The proposed project requires design review approval, pursuant to Section 17.101C.020 of the City's Planning Code. As part of the design review process, the project will be reviewed by the City to ensure consistency with the applicable BVDSP Design Guidelines. The proposed project would be contemporary in design, utilizing a variety of materials, including, but not limited to aluminum doors, glass windows, composite concrete cladding, and metal wall panels. The design review process will ensure the project would be consistent with the BVDSP standards and guidelines related to aesthetics, compatible with the existing built form and architectural character of the Plan Area as a whole, and compatible with the distinctive visual character of individual areas.

Shadow. The project site is outside of the area identified in the BVDSP EIR as having potential shading impacts on Temple Sinai and therefore, BVDSP EIR Mitigation Measure AES-4 would not apply. However, because the height of the proposed project (i.e., up to 200 feet) would be above the 65-foot and 125-foot heights analyzed in the Physical Height Model for the southern portion and northern portion of the site, respectively, a separate shadow study was completed for the project. Consistent with the BVDSP EIR, the shadow study analyzed potential shading from the project, as well as potential cumulative shading impacts, on nearby CEQA Historic Resources, which were identified in the BVDSP EIR, and solar collectors. Past, present, and reasonably foreseeable future projects considered in the analysis include those projects proposed in the immediate vicinity which could create shadows that would combine with those from the proposed project and shade potential resources. These projects are the proposed 2630 Broadway project and the 2400 Valdez project. Consistent with the City's Threshold of Significance Guidelines (2013), the shadow study evaluated the following dates/times: 9:00 a.m., 12:00 p.m., and 3:00 p.m. for the Spring Equinox, Summer Solstice, Fall Equinox, and Winter Solstice.

As shown by the shadow study prepared for the project (Attachment E), the proposed project would shade the First Congregational Church, a CEQA historic resource located across 27th Street from the project site. The BVDSP EIR found that the stained glass windows on the southwestern façade of the First Congregational Church would incur new shadow in the winter months between 3:00 p.m. and sunset when new shadows from development under the Plan would extend northward across the street. The EIR found that the new shadows would be brief and at a time when the Plan Area is almost entirely

shaded by existing buildings. In addition, tall trees currently line the church's southwestern façade and cast additional shadow on the stained glass windows of this façade.[9] The shadow study shows that the proposed project would shade part of the southwest façade starting between 2:15 p.m. to 3:00 p.m., depending on the time of year. The shadow would occur after the morning (10:30 a.m. Sunday) services[10] and during a time when the church is not heavily used. While shadow would start to be cast less than an hour earlier than assumed in the BVDSP EIR during the fall, winter, and spring seasons, the impact on the First Congregational Church from any new shading would be consistent with the BVDSP EIR as the shading would occur later in the afternoon and would not occur during worship services.

The shadow study also shows that the proposed project would shade the First Presbyterian Church in the early mornings before 9:00 a.m. during the winter months, along the southern and eastern facades. The BVDSP EIR found that shadow from development would be cast on the First Presbyterian Church primarily in the winter months, with parcels across Broadway and 26th Street casting new shadow on the eastern façade of the church building during the early morning hours and on the southern façade of the church building during the late morning through afternoon hours. The BVDSP EIR found that the stained glass windows, which are located along the church's northern façade, would not incur new shadow as a result of development under the Plan. Any shadow cast by the proposed project would be consistent with the analysis in the BVDSP EIR and would not create a new impact.

The shadow study also shows that the solar collector located at Westlake Middle School on 2629 Harrison Street would be shaded by the project in the later afternoon, by approximately 2:50 p.m. in the winter months. The BVDSP EIR states that solar collectors primarily collect sun power in the winter months from 10:00 a.m. to 2:00 p.m. and finds that shading outside of this period would not compromise the effectiveness of solar collectors. Because any shading on the Westlake Middle School solar receptor would occur after the primary timeframe for solar collection, the project's impacts would be consistent with the shading identified in the BVDSP EIR and would not substantially increase the severity of the significant impacts identified, nor would it result in new significant impacts.

Wind. The proposed project is located in the Central Business District and would be up to 200 feet in height, therefore, BVDSP EIR Mitigation Measure AES-5: Wind Analysis would

[9] The shadow analysis in the EIR and that prepared for the project conservatively did not include trees or other landscaping.

[10] First Congregational Church of Oakland, 2016. Weekly Calendar. Online: firstoakland.org/?Calendar_of_Events:Weekly_Events. Accessed May 6, 2016.

apply. Consistent with the mitigation measure, a detailed wind study was prepared for the proposed project to evaluate its wind effects.

As shown in Attachment F, the wind study evaluated 63 locations in the project vicinity, primarily along sidewalks and pubic rights-of-way. Under existing conditions, none of these locations exceeded the City's hazard wind threshold of winds exceeding 36 miles per hour for more than one hour during daylight hours during the year. With implementation of the proposed project and landscaping, the wind study found that pedestrian wind levels would not exceed the hazard threshold. In addition, under cumulative conditions with nearby proposed projects and landscaping, wind conditions would not exceed the hazard threshold. For the purposes of the wind study, past, present, and reasonably foreseeable future projects considered in this analysis include buildings taller than 85 feet within an approximately 0.25-mile radius of the project site because these taller projects may have the potential to affect wind conditions within this radius, as well as proposed projects within the immediate vicinity, west of the project site, as this is generally the direction from which the wind approaches the site. These projects include: 2270 Broadway, 2400 Valdez Street, and 2630 Broadway.

Conclusion

Based on an examination of the analysis, findings, and conclusions in the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of the significant impacts identified in that report, nor would it result in new significant impacts related to aesthetics, shadows, or wind that were not identified in the BVDSP EIR. As described above, Mitigation Measures AES-5 and AES-6 (which applies to cumulative impacts) have been addressed by the wind study prepared for the project and are no longer applicable. In addition, Mitigation Measure AES-4 does not apply to the proposed project. The proposed project would be required to implement SCAs related to graffiti control, landscaping, landscape maintenance, street frontages, and lighting plans, as identified in Attachment A at the end of the CEQA Checklist (SCA-AES-1:*Graffiti Control*, SCA-AES-2: *Landscape Plan*, and SCA-AES-3: *Lighting*).

2. Air Quality

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. During project construction result in average daily emissions of 54 pounds per day of ROG, NO_x, or $PM_{2.5}$ or 82 pounds per day of PM_{10}; during project operation result in average daily emissions of 54 pounds per day of ROG, NO_x, or $PM_{2.5}$, or 82 pounds per day of PM_{10}; result in maximum annual emissions of 10 tons per year of ROG, NO_x, or $PM_{2.5}$, or 15 tons per year of PM_{10}; or	☒	☐	☐
b. For new sources of Toxic Air Contaminants (TACs), during either project construction or project operation expose sensitive receptors to substantial levels of TACs under project conditions resulting in (a) an increase in cancer risk level greater than 10 in one million, (b) a noncancer risk (chronic or acute) hazard index greater than 1.0, or (c) an increase of annual average $PM_{2.5}$ of greater than 0.3 microgram per cubic meter; or, under cumulative conditions, resulting in (a) a cancer risk level greater than 100 in a million, (b) a noncancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average $PM_{2.5}$ of greater than 0.8 microgram per cubic meter; or expose new sensitive receptors to substantial ambient levels of Toxic Air Contaminants (TACs) resulting in (a) a cancer risk level greater than 100 in a million, (b) a noncancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average $PM_{2.5}$ of greater than 0.8 microgram per cubic meter.	☒	☐	☐

Construction and Operational Emissions (Criterion 2a)

The BVDSP EIR determined that construction activities associated with development of projects under the BVDSP would generate air emissions from the use of heavy construction equipment; vehicle trips hauling materials, construction workers traveling to

and from the project sites, and application of architectural coatings, such as paints; and would result in significant impacts. An SCA related to construction air pollution controls (hereafter referred to as SCA-AIR-1: *Construction-Related Air Pollution Controls* [*Dust and Equipment Emissions*]), along with Recommended Measure AIR-1, would reduce emissions from construction equipment, control fugitive dust, and reduce emissions from architectural coatings. Even with implementation of the SCA and Recommended Measure AIR-1, the EIR conservatively estimated construction emissions would exceed the BAAQMD daily significance thresholds for reactive organic gases (ROG), resulting in a significant and unavoidable impact.

The BVDSP EIR also determined operational activities associated with development in the Plan Area would result in an increase in criteria air pollutant and precursor emissions from mobile on-road sources and on-site area sources, such as natural gas combustion for space and water heating and landscape maintenance, which would have a significant impact. Operational emissions of ROG, oxides of nitrogen (NO_x), and particulate matter less than or equal to 10 microns in diameter (PM_{10}) would exceed significance thresholds. An SCA that requires the implementation of Parking and Transportation Demand Management (TDM) would reduce vehicular trips and operational emissions. Recommended Measure AIR-2 includes additional measures that should be considered for larger projects that would also reduce emissions of criteria air pollutants. Even with implementation of the SCA and Recommended Measure AIR-2, the EIR concluded this impact would conservatively remain significant and unavoidable for emissions of ROG, NO_x, and PM_{10}.

Toxic Air Contaminants (Criterion 2b)

The BVDSP EIR determined that development under the BVDSP could generate substantial levels of Toxic Air Contaminants (TACs), resulting in significant impacts from construction activities and project operations. Implementation of the City's SCA for construction-related air pollution controls would reduce health risks to sensitive receptors from temporary construction emissions of diesel particulate matter in accordance with recommendations from the BAAQMD's *CEQA Air Quality Guidelines*.[11] As described under SCA-AIR-1: *Construction-Related Air Pollution Controls* [*Dust and Equipment Emissions*]), basic controls for construction emissions would be implemented for all projects, and enhanced controls would be implemented for projects that involve 114 or more single-family dwelling units, 240 or more multi-family units, nonresidential uses that exceed the applicable screening size listed in the BAAQMD's CEQA Guidelines, a demolition permit, simultaneous occurrence of more than two construction phases, extensive site

[11] BAAQMD, 2012. *CEQA Air Quality Guidelines*. Updated May.

preparation, or extensive soil transport. Even with implementation of the SCA for construction-related air pollution controls, the BVDSP EIR conservatively determined that impacts from TAC emissions during construction would remain significant and unavoidable.

New operational sources, such as backup diesel generators, could result in significant impacts on new and existing receptors. SCAs would reduce potential air quality impacts related to TACs by reducing construction source impacts on new and existing receptors, and requiring a Health Risk Assessment of surrounding off-site sources on new on-site sensitive receptors. The EIR also identified Mitigation Measure AIR-4: Risk Reduction Plan, which would reduce the impacts associated with new operational sources on existing sensitive receptors. Even with the SCA and Mitigation Measure AIR-4, the EIR conservatively determined that these impacts would remain significant and unavoidable.

Project Analysis and Conclusion

The proposed project would be up to 730,655 square feet in size, including up to 448 residential units and approximately 65,000 square feet of retail. The BVDSP EIR allows for the distribution of density and development type between categories and sub-areas as long as such development conforms to the general traffic generation parameters established by the Plan. The proposed project conforms to the traffic generation parameters analyzed in the BVDSP EIR, as described below in Section 13, Transportation and Circulation; therefore, the BVDSP EIR accounted for the construction and operational emissions from the development proposed on the project site within its analysis. The proposed project would be required to comply with applicable SCAs related to parking demand and construction and operation source emissions, and Recommended Measures AIR-1 (to reduce project construction emissions) and AIR-2 (to reduce project operations emissions) from the BVDSP EIR would also apply as conditions of approval, as described below.

Because the proposed project would include a demolition permit, extensive soil export (export greater than 19,000 cubic yards), and the potential simultaneous occurrence of construction phases (e.g., grading and building construction), it would be required to implement both the basic and enhanced controls for emissions of dust and equipment exhaust under SCA-AIR-1*: Construction-Related Air Pollution Controls (Dust and Equipment Emissions)* to reduce emissions of criteria air pollutants and TACs during construction. The proposed project would also implement BVDSP EIR Recommended Measure AIR-1 to further reduce construction emissions. In addition, because the proposed project is over 50,000 square feet in size and would have over 325 residential units, it would implement BVDSP EIR Recommended Measure AIR-2 to reduce operational emissions.

Construction emissions associated with the proposed project (and other projects in the BVDSP area) would not result in a more severe impact than what was previously disclosed in the BVDSP EIR. The BVDSP EIR does not indicate that an additional project-level analysis

of construction-related health risks is necessary. There is no evidence that the proposed project would have peculiar or unusual impacts or impacts that are new or more significant than previously analyzed in the BVDSP EIR. Moreover, the project site's proximity to sensitive receptors—the nearest sensitive receptor would be a resident located approximately 60 feet south of the project site across 24th Street (see Figure 1 of Attachment G)—is typical of other project sites in the BVDSP area and other urban areas. Therefore, there would be nothing unique or peculiar about the Project's proximity to sensitive receptors. Consequently, the analysis and conclusions of the BVDSP EIR are still valid for this project.

Furthermore, a project-level analysis of construction-related health risks would ultimately reach the same conclusion and identify the same control measures established in the BVDSP EIR. The proposed project's construction health risk has been adequately addressed by the planning-level review and the project's conditions of approval. Implementation of subsections (w) and (x) of SCA-AIR-1, which require equipment and diesel trucks to be equipped with Best Available Control Technology and meet the California Air Resources Board's most recent certification standard, would reduce emissions of diesel particulate matter during construction. In order to comply with subsections (w) and (x) of SCA-AIR-1, the project sponsor would be required to ensure that construction equipment meet Tier 4 emissions standards, which can reduce emissions of diesel particulate matter by at least 85 percent relative to equipment without emission control technologies installed.[12] SCA-AIR-1 also minimizes construction health risks by requiring the following: exposed surfaces be watered; trucks hauling sand, soil, and other loose materials be covered; visible dirt track-out be removed daily; new roads, driveways, sidewalks be paved within one month of grading or as soon as possible, stockpiles be enclosed, covered, and watered twice daily; vehicle speeds on unpaved roads be limited; and idling time be limited. SCA-AIR-1 also minimizes diesel emissions by minimizing idling under subsections (g) and (h); ensuring that construction equipment is running in proper condition under subsection (i); specifying that portable equipment would be powered by electricity if available under subjection (j); requiring that equipment meet emissions and performance requirements under subsection (u); requiring the use of low volatile organic compound coatings under subjection (v). Beyond SCA-AIR-1, there are no additional feasible control measures available to further reduce construction-related diesel particulate matter emissions.

The proposed project would introduce new sensitive receptors (residents) to the project site, and is within 1,000 feet of several major roadways with significant traffic (at least

[12] California Air Resources Board, 2015. *Frequently Asked Questions; Regulation for In-Use Off-Road Diesel-Fueled Fleets*. Revised December.

10,000 vehicles per day) and other sources of TACs (backup generators). The proposed project would also include an emergency backup generator, introducing a new stationary source of TACs.

To assess the impacts of nearby sources of TACs on the proposed project's new residential sensitive receptors, and the proposed project's stationary source emissions of TACs on adjacent sensitive receptors, a screening level analysis was conducted (see Attachment G). Using conservative assumptions, the screening level analysis found that that the cumulative health risks to the project's sensitive receptors from existing and reasonably foreseeable future sources of TACs would be less than the City's cumulative health risk thresholds (cancer risk of 100 in a million, chronic hazard index [HI] of 10, and fine particulate matter [$PM^{2.5}$] concentration of 0.8 micrograms per cubic meter). This is also below the City's threshold to prepare a Health Risk Assessment or adopt further risk reduction strategies to reduce the exposure of the project's sensitive receptors to TACs under SCA-AIR-2**:** *Exposure to Air Pollution (Toxic Air Contaminants)* (see Attachment G). The screening level analysis also found that the health risks to existing sensitive receptors from the project's stationary source, when combined with health risks from existing and reasonably foreseeable future sources of TACs, would be less than the City's cumulative health risk thresholds. This is also below the threshold to prepare a Health Risk Assessment or adopt further risk reduction strategies to reduce the exposure of existing sensitive receptors to TACs under SCA-AIR-3: *Stationary Sources of Air Pollution (Toxic Air Contaminants)* and Mitigation Measure AIR-4: *Risk Reduction Plan*.

To reduce potential exposure to TACs in accordance with SCA-AIR-4: *Truck-Related Risk Reduction Measures (Toxic Air Contaminants)*, the proposed project must locate the retail loading bay on the project site as far from nearby sensitive receptors as feasible and trucks must comply with all applicable California Air Resources Board requirements to control emissions from diesel engines. To address the possibility of asbestos materials in the existing structures on the site in accordance with SCA-AIR-5: *Asbestos in Structures,* the proposed project must comply with all applicable laws and regulations regarding demolition of existing structures. Naturally-occurring asbestos has not been mapped in the project vicinity; therefore, the dust mitigation measures described under the SCA pertaining to naturally-occurring asbestos would not apply to the project.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to air quality that were not identified in the BVDSP EIR. The proposed project would be required to implement SCAs related to construction-related emissions controls and development, and a TDM, as identified in Attachment A at the end of the CEQA Checklist (SCA-AIR-1: *Construction-Related Air Pollution Controls [Dust and Equipment Emissions]*, SCA-AIR-4: *Truck-Related Risk Reduction Measures [Toxic Air*

Contaminants], SCA-AIR-5: *Asbestos in Structures*, and SCA-AIR-6: *Transportation and Parking Demand Management [TDM] Plan Needed*).

SCA-AIR-2**:** *Exposure to Air Pollution (Toxic Air Contaminants),* SCA-AIR-3: *Stationary Sources of Air Pollution (Toxic Air Contaminants)*, and Mitigation Measure AIR-4: *Risk Reduction Plan*, could potentially apply to the project; however, as described above, the screening level analyses found that the proposed project would be below the applicable thresholds and no further action is required under these SCAs.

In addition, Recommended Measures AIR-1 and AIR-2 from the BVDSP EIR, listed below, would apply to the proposed project.

Recommended Measure AIR-1: During construction, the project applicant shall require the construction contractor to use prefinished materials and colored stucco, as feasible.

Recommended Measure AIR-2: The following measures identified in the 2012 BAAQMD CEQA Guidelines for specific development projects in excess of 50,000 square feet or 325 dwelling units are recommended to be considered and if determined feasible, implemented for those projects:

- Establish a dedicated employee transportation coordinator for each specific development as a condition of occupancy permit/tenancy contract;
- Increase building energy efficiency by 20 percent beyond 2008 Title 24 (reduces NOX related to natural gas combustion);
- Require use of electrically powered landscape equipment;
- Require only natural gas hearths in residential units as a condition of final building permit;
- Use low VOC architectural coatings in maintaining buildings;
- Require smart meters and programmable thermostats; and
- Install solar water heaters for all uses.

3. Biological Resources

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. 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 California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; Have a substantial adverse effect on federally protected wetlands (as defined by Section 404 of the Clean Water Act) or state protected wetlands, through direct removal, filling, hydrological interruption, or other means; Substantially interfere 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;	☒	☐	☐
b. Fundamentally conflict with the City of Oakland Tree Protection Ordinance (Oakland Municipal Code [OMC] Chapter 12.36) by removal of protected trees under certain circumstances; or Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect biological resources.	☒	☐	☐

Special-Status Species, Wildlife Corridors, Riparian and Sensitive Habitat, Wetlands, Tree and Creek Protection (Criteria 3a and 3b)

As described in the BVDSP EIR, the Plan area is in and is surrounded by a fully developed urban environment, and impacts of development on biological resources under the BVDSP would be less than significant. Few special-status animals are present in the Plan area, and no aquatic habitats that could support migratory fish or birds are present. In addition, very little natural vegetation exists; and because this vegetation is not connected to other nearby natural habitats, it would not constitute a wildlife corridor. There are no natural sensitive communities in the Plan area. The nearest riparian habitat is Glen Echo Creek near Adams Park, where the stream daylights for a short distance before flowing under Grand Avenue and into Lake Merritt. Potential increases in transmittal of hazardous materials from construction activities via runoff from the impermeable surfaces of the site could result in adverse impacts to Glen Echo Creek. The EIR identified landscape trees in the Plan area as potential nursery sites for nesting birds. In addition, projects developed under the BVDSP could cause harm to birds by increasing bird collisions with buildings.

Development in the Plan area will be required to comply with SCAs related to removal and replacement of trees, including trees on creekside properties; tree protection during construction; and protection of nesting birds during the breeding season, which would protect natural resources from potential degradation that could result from construction of development projects under the Plan area. Additionally, certain development in the Plan area will be required to comply with an SCA pertaining to reducing bird collisions with buildings, which will reduce potential impacts to birds by constructing features in compliance with Best Management Practice strategies to limit bird strikes. SCAs pertaining to landscaping and vegetation management on creekside properties; protection of creeks from construction vibration and dewatering; hazardous materials management; stormwater and erosion control, and construction measures to reduce bird collisions will ensure that development under the BVDSP is in compliance with all aspects of the Creek Protection Ordinance and reduce the potential impacts on water quality, reduce the potential for bird collisions, and minimize potential indirect impacts from pollution in Glen Echo Creek.

Project Analysis and Conclusion

The approximately 2.28-acre project site is located in an urban setting on a site that is fully developed with buildings and surface parking lots. The project site is covered entirely by impervious surfaces. Vegetation is limited to ruderal weeds that grow between the cracked pavement, and small shrubs as well as existing street trees along 24th and 27th streets. The project site is not located adjacent to a creek. Implementation of the proposed project would decrease the amount of impervious surfaces by providing approximately 6,130 square feet of open space along the northernmost portion of the site, as well as providing landscaping on the podium courtyard. The project would replace the existing street trees and plant additional trees along the street frontages. Stormwater

would be treated consistent with C.3 requirements for on-site treatment, including treatment and storage tanks within the proposed building. The project would be required to prepare a Bird Collision Reduction Plan, including all mandatory bird collision reduction measures provided in SCA-BIO-1: *Bird Collision Reduction Measures*. Implementation of a project-specific Bird Collision Reduction Plan would ensure that bird collision impacts would be consistent with the BVDSP EIR.

Based on an examination of the analysis, findings, and conclusions in the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of the significant impacts identified in that report, nor would it result in new significant impacts related to biological resources that were not identified in the BVDSP EIR. The BVDSP EIR did not identify any mitigation measures related to biological resources, and none would be needed for the proposed project. SCAs related to tree removal, tree permits, City of Oakland Tree Protection Ordinance, and construction activity and operations, identified in Attachment A at the end of the CEQA checklist, would apply to the project (SCA-BIO-1: *Bird Collision Reduction Measures*, SCA-BIO-2: *Tree Removal During Bird Breeding Season*, and SCA-BIO-3: *Tree Permit*).

4. Cultural Resources

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5. Specifically, a substantial adverse change includes physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical 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 of the resource that convey its historical significance **and** that justify its inclusion on, or eligibility for inclusion on an historical resource list (including the California Register of Historical Resources, the National Register of Historic Places, Local Register, or historical resources survey form (DPR Form 523) with a rating of 1-5);	☒	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5;	☒	☐	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or	☒	☐	☐
d. Disturb any human remains, including those interred outside of formal cemeteries.	☒	☐	☐

Historical Resources (Criterion 4a)

The BVDSP EIR found that development under the BVDSP could result in the physical demolition, destruction, relocation, or alteration of historical resources that are listed in or may be eligible for listing in the federal, state, or local registers of historical resources, which would be considered a significant impact. The Plan area contains 20 individual properties, including two in an Area of Primary Importance,[13] that are considered historical resources for CEQA purposes. There are also many older buildings that possess architectural merit, either in Areas of Secondary Importance (ASIs)[14] or standing alone, that contribute to the variety and texture of the Plan area.

The EIR identified Mitigation Measure CUL-1 to reduce the impacts to historical resources throughout the Plan area, as well as the site-specific impacts associated with the demolition of individual historical resources. In addition, the EIR concluded that incompatible new construction immediately adjacent to historical resources, as well as inappropriate reuse of such resources, could result in significant impacts in the Plan area. Specifically, development on parcels across Webster Street to the northeast of Temple Sinai could extend shadows far enough south to shade the temple's stained-glass windows during the early morning hours, resulting in significant impacts. Even with implementation of Mitigation Measure AES-4, Shadow Analysis, described in Section 1 above, Aesthetics, Shadow and Wind, the EIR conservatively determined shadow impacts may remain significant and unavoidable.

The BVDSP EIR determined that significant cumulative impacts to historical resources could result from development of projects under the BVDSP, and identified Mitigation Measure CUL-5, which would require implementation of Mitigation Measure CUL-1. However, even with implementation of Mitigation Measure CUL-5, the EIR determined that cumulative impacts would remain significant and unavoidable.

In addition to the mitigation measures described above, the BVDSP EIR identified Oakland Municipal Code Section 17.136.075, Regulations for Demolition or Removal of Designated Historic Properties and Potentially Designated Historic Properties, as well as SCAs related to property relocation instead of demolition, and protection of historic structures from vibration impacts during adjacent construction projects, which will also address impacts to historical resources.

[13] Area of Primary Importance is an area or district that appears eligible for the National Register of Historic Places, and is considered a historical resource under CEQA.

[14] Area of Secondary Importance is an area or district that is of local interest, but is not eligible for the National Register of Historic Places and is not considered a historical resource under CEQA.

Even with the above mitigation measures and SCAs, impacts to historical resources would remain significant and unavoidable.

Archaeological and Paleontological Resources (Criteria 4b and 4c)

No known archaeological resources have been recorded in the Plan area; however, the EIR revealed that the Plan area is potentially sensitive for archaeological and buried sites that are not visible due to urban development. The EIR determined that implementation of an SCA, which would ensure that resources are recovered and that appropriate procedures are followed in the event of accidental discovery, would minimize potential risk of impact to archaeological resources to a less-than-significant level.

The Plan area was also identified as having low to moderate paleontological sensitivity, and it is possible that fossils would be discovered during excavation in the Plan area. Implementation of an SCA, which would require a qualified paleontologist to document a discovery, and monitor that appropriate procedures be followed in the event of a discovery, would ensure that the potential impact to fossils discovered in the rock units would be less than significant.

Human Remains (Criterion 4d)

Although the BVDSP EIR did not identify any locations of buried human remains in the Plan area, the inadvertent discovery of human remains during ground-disturbing activities cannot be entirely discounted. In the event that human remains are discovered during excavation, implementation of an SCA, which would ensure that the appropriate procedures for handling and identifying the remains are followed, would reduce impacts to a less-than-significant level.

Project Analysis and Conclusion

Historic Architectural Resources. The existing buildings on the project site were evaluated in the 2009 BVDSP Historic Resources Inventory. The existing buildings were constructed between 1925 and 1950 and were over 50 years old at the time of the inventory. The inventory found that these buildings had an Oakland Cultural Heritage Survey (OCHS) rating of C3 or lower, as shown in Table 2 and were therefore not considered historic resources under CEQA, as indicated in Figure 4.4-2 of the BVDSP EIR.[15]

[15] Per the City of Oakland's Historic Preservation Element, Potential Designated Historic Properties that have a rating of "A" or "B" or are located within an Area of Primary Importance are considered on the Local Register of Historical Resources and are CEQA historic resources.

The Orin Drive Gate at 304 24th Street has a rating of C3 and is considered a Potentially Designated Historic Property as defined by Oakland Municipal Code 17.136.075. The main Acura dealership building at 277 27th Street (address sometimes noted as 266-272 24th Street) was originally rated C3 by the OCHS but was later downgraded to *3 by the 2009 BVDSP Historic Resources Inventory because it had been heavily modified since its original evaluation. In addition, the building at 300 and 302 24th Street has a D3 rating. Nothing of historical significance has occurred at these buildings since the inventory that would change the evaluation previously conducted.

The existing buildings on the site would be demolished to allow for construction of the proposed project. Consistent with SCA-CUL-3: *Property Relocation*, if feasible, the Orin Drive Gate would be salvaged and relocated to the open space at the north end of the site adjacent to 27th Street.

Based on the City's historic resource ratings for each existing building, demolition of the existing buildings would not result in a significant impact and Mitigation Measures CUL-1 and CUL-5, as outlined in the BVDSP EIR would not apply. SCA-CUL-3: *Property Relocation* would apply to the proposed project because of the Potentially Designated Historic Property (Orin Drive Gate).

Archaeological and Paleontological Resources and Human Remains. The proposed project would entail excavation to a depth of 13 feet below grade. The project site appears to be underlain by a fill layer that extends approximately 8 feet below existing grade, according to the Phase II Environmental Site Assessment prepared for the project site.[16] As shown in Figure 4.4-1 of the BVDSP EIR, the geology at the project site is primarily Artificial Fill over Bay Mud, as well as some Pleistocene bay terrace deposits and Pleistocene alluvium. The SCAs related to archaeological and paleontological resources and human remains would apply to the proposed project and, as outlined in the BVDSP EIR and reduce any potential impacts to a less-than-significant level.

An examination of the analysis, findings, and conclusions of the BVDSP EIR finds that implementation of the proposed project would not substantially increase the severity of the significant impacts that were identified in the BVDSP EIR, nor would it result in new significant impacts related to cultural resources that were not identified in the BVDSP EIR. The project would be required to implement SCAs related to the discovery of archaeological and paleontological resources during construction and the discovery of human remains during construction, as identified in Attachment A at the end of the CEQA

[16] AECOM. 2015. Phase II Environmental Site Assessment, Oakland Acura, 277 27th Street, Oakland, California. October 26.

Checklist (SCA-CUL-1*: Archaeological and Paleontological Resources – Discovery During Construction*, SCA-CUL-2: *Human Remains – Discovery During Construction*, and SCA-CUL-3: *Property Relocation*).

5. Geology, Soils, and Geohazards

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. 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; • Strong seismic ground shaking; • Seismic-related ground failure, including liquefaction, lateral spreading, subsidence, collapse; or • Landslides;	☒	☐	☐
b. Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007, as it may be revised), creating substantial risks to life or property; result in substantial soil erosion or loss of topsoil, creating substantial risks to life, property, or creeks/waterways.	☒	☐	☐

Seismic Hazards, Expansive Soils, and Soil Erosion (Criterion 5a and 5b)

The BVDSP EIR determined that very strong ground shaking and associated liquefaction in certain soils could expose people to injury or harm during earthquakes. In addition, the soils in the Plan area are largely composed of artificial fill material overlying natural deposits of Bay Mud. The northern half of the Plan area is primarily underlain by streambed deposits. The BVDSP identified the artificial fills and expansive soils underlying the Plan area as presenting a potential hazard, due to the possibility of shrink-swell behavior and soil compression.

Development proposed under the BVDSP would avoid and minimize potential geologic impacts through compliance with local and state regulations governing design and construction practices, such as the Seismic Hazards Mapping Act (in liquefaction hazard zones) and the California Building Code. Implementation of SCAs that require the preparation of soils and geotechnical reports specifying generally accepted and

appropriate engineering techniques would reduce potential impacts to less-than-significant levels.

The BVDSP EIR identified no impacts related to substantial soil erosion or loss of topsoil, because the Plan area is in a developed urban area that is paved or landscaped, and served by a storm drain system. In addition, SCAs would minimize erosion and sedimentation.

Project Analysis and Conclusion

The proposed project would require excavation of up to 49,000 cubic yards of soil to accommodate proposed underground parking levels. Projects within the City that propose to excavate more than 500 cubic yards of soil are required to obtain a grading permit. The grading permit would require the proposed project to comply with local and state construction requirements, including the California Building Code, in the design and building of the proposed project.

The site is not within a hazard zone for earthquake-induced landslides, but it is within a liquefaction hazard zone, as designated on a map prepared by the California Geological Survey.[17] According to the preliminary geotechnical study prepared for the proposed project, on-site structures could be subject to foundation settlement due to compression of the underlying weak and compressible marsh deposits and liquefaction-induced ground settlement (up to 5 inches) in part due to shallow groundwater.[18] The proposed project would be required to comply with the requirements of California Building Code, Seismic Hazards Mapping Act, and SCA-GEO-2: *Soils Report*, which ensures the implementation of the recommendations from an approved soil report to prevent exposure of people or structures to substantial risk of loss, injury, or death during a large regional earthquake.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to geology, soils, and geohazards that were not identified in the BVDSP EIR. The BVDSP EIR did not identify any mitigation measures related to geology, soils, and geohazards, and none would be needed for the proposed project. SCAs related to erosion, grading, and sedimentation control would apply, as identified in Attachment A at the end

[17] California Geologic Survey, 2003. State of California Seismic Hazard Zones, Oakland West Quadrangle Official Map. Released February 14.

[18] Rockridge Geotechnical, 2015. Preliminary Geotechnical Investigation to Support due Diligence Evaluation, Oakland Acura Site, 24th and 27th Streets, Oakland, California. Project No. 15-973. October 20.

of the CEQA Checklist (SCA-GEO-1: *Construction-Related Permit[s]*, SCA-GEO-2: *Soils Report*, and SCA-GEO-3: *Seismic Hazards Zone [Landslide/Liquefaction]*).

6. Greenhouse Gas and Climate Change

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, specifically: • For a project involving a stationary source, produce total emissions of more than 10,000 metric tons of CO_2e annually. • For a project involving a land use development, produce total emissions of more than 1,100 metric tons of CO_2e annually AND more than 4.6 metric tons of CO_2e per service population annually. The service population includes both the residents and the employees of the project. The project's impact would be considered significant if the emissions exceed BOTH the 1,100 metric tons threshold and the 4.6 metric tons threshold. Accordingly, the impact would be considered less than significant if the project's emissions are below EITHER of these thresholds.	☒	☐	☐
b. Fundamentally conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions.	☒	☐	☐

Greenhouse Gas Emissions (Criterion 6a)

The BVDSP EIR evaluated impacts related to GHG emissions from construction and operation anticipated under the BVDSP. The EIR identified motor vehicle use, water, gas, electrical use, loss of vegetation, and construction activities as contributing to generation of GHG emissions under the implementation of the BVDSP. Future projects and development implemented under the BVDSP would be required to be consistent with the City of Oakland Energy and Climate Action Plan, and with SCAs that would reduce GHG emissions during construction and operation of projects. Even with implementation of

SCAs, the BVDSP EIR conservatively determined that GHG impacts would remain significant and unavoidable.

Consistency with Applicable GHG Plans (Criterion 6b)

The BVDSP EIR determined that development under the Specific Plan would not conflict with any applicable plan, policy or regulation adopted with the intent to reduce GHG emissions. Therefore, the BVDSP EIR determined that the impact related to consistency with applicable plans, policies or regulations to reduce GHG emissions would be less than significant.

Project Analysis and Conclusion

The proposed project would generate GHG emissions that were previously analyzed under the BVDSP. While mitigation measures were not included in the BVDSP EIR, the proposed project would be required to comply with applicable SCAs that would reduce GHG emissions. These SCAs include, but are not limited to, preparation and implementation of a Transportation and Parking Demand Management Plan under SCA-TRANS-4 and a Construction and Demolition Waste Reduction and Recycling Plan under SCA-UTIL-1. The project would not be subject to a GHG reduction plan under the related SCA, as described below.

The City requires a GHG reduction plan for projects of a certain minimum size that produce total GHG emissions during operations that exceed one or both of the City's established thresholds of significance for land use developments, or involve a stationary source (e.g., backup generator) that produce total GHG emissions that exceed the City's established threshold of significance for stationary sources. A GHG screening analysis was prepared for the proposed project to determine whether a GHG reduction plan was required (see Attachment H). The project's GHG emissions during construction and operation were estimated using the most current version of the California Emissions Estimator Model. The project's GHG emissions from operation of a backup diesel generator were estimated in accordance with guidance from the California Air Resources Board. As shown in Tables 4 and 5, the screening analysis determined that GHG emissions from the proposed project would not exceed the City's established thresholds of significance and therefore the project is not required to prepare a GHG reduction plan. Based on the analysis conducted, because the proposed project does not meet the threshold requirements for a GHG reduction plan, it would be consistent with the City of Oakland's Energy and Climate Action Plan, as well as the BVDSP.

Table 4 Average Greenhouse Gas Emissions from Operation of the Project

Emissions Scenario	CO2e [a] (Metric Tons/Year)	CO2e [a] (Metric Tons/Year/ Service Population[b])
Construction	27	0.027
Operation – Area	6	0.006
Operation – Energy	842	0.866
Operation – Mobile	2	0.002
Operation – Waste	125	0.129
Operation – Water	60	0.062
Total Project Emissions	1,061	1.09
City of Oakland's Thresholds	1,100	4.6
Threshold Exceedance?	No	No

[a] CO2e – Carbon dioxide equivalents
[b] The service population is the total number of employees and residents of a proposed project.
Source: Baseline Environmental Consulting, 2016.

Table 5 Average Greenhouse Gas Emissions from the Project Backup Generator

Source	CO2e [a] (Metric Tons/Year)
Project Backup Generator	28.6
City of Oakland's Threshold	10,000
Threshold Exceedance?	No

[a] CO2e – Carbon dioxide equivalents
Source: Baseline Environmental Consulting, 2016.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to GHG and climate change that were not identified in the BVDSP EIR. The BVDSP EIR did not identify any mitigation measures related to GHGs, and none are required for the proposed project.

7. Hazards and Hazardous Materials

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. 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; Create a significant hazard to the public through the storage or use of acutely hazardous materials near sensitive receptors; Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (i.e., the "Cortese List") and, as a result, would create a significant hazard to the public or the environment;	☒	☐	☐
b. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;	☒	☐	☐
c. Result in less than two emergency access routes for streets exceeding 600 feet in length unless otherwise determined to be acceptable by the Fire Chief, or his/her designee, in specific instances due to climatic, geographic, topographic, or other conditions; or Fundamentally impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	☒	☐	☐

Hazardous Materials Use, Storage and Disposal and Hazardous Building Materials (Criterion 7a)

The BVDSP EIR determined that development under the BVDSP could result in construction activities that use hazardous materials, as well as ongoing commercial activities that involve the use of chemicals that are considered hazardous materials. Adoption and development under the BVDSP could therefore require the transportation, use, and storage of additional quantities of hazardous materials to new businesses and entities. In addition, the EIR determined that demolition under the BVDSP could result in disturbance of hazardous building materials, such as lead-based paint, asbestos, and polychlorinated biphenyls (PCBs). The transportation, use, and storage of all hazardous materials would be required to follow the applicable laws and regulations adopted to safeguard workers and the general public. In addition, development under the BVDSP would be subject to the City of Oakland's SCAs pertaining to best management practices for hazardous materials and removal of asbestos and lead-based paint.

Exposure to Hazardous Materials in the Subsurface (Criterion 7a)

The BVDSP EIR determined that development under the BVDSP could require excavation for installation of building foundations and underground utilities and that some of the development sites could have had past documented releases of hazardous materials that have contaminated subsurface soils and groundwater or previously unknown releases that may be discovered during excavation activities. Disturbed contaminated soils could expose construction workers and the public to contaminants potentially causing significant adverse health effects. The BVDSP EIR also indicated that a proposed land use change, such as changing a commercial building to a residential building, could require more stringent clean up levels even if the site had been considered remediated or closed based on complying with standards for its current land use. Development under the BVDSP would be subject to the City of Oakland's SCAs pertaining to hazardous materials in the subsurface, including conducting a Phase I Environmental Site Assessment (ESA) and a Phase II ESA, if warranted based on the results of the Phase I ESA; procedures for managing suspected contamination that is encountered unexpectedly during construction activities; preparation of a construction worker health and safety plan; and implementation of best management practices related to hazardous materials management. The BVDSP EIR determined that compliance with these SCAs would reduce the potential impacts related to hazardous materials in the subsurface to a less-than-significant level.

Hazardous Materials within a Quarter Mile of a School (Criterion 7b)

There are no schools in the Plan Area; however, there are five schools or daycare facilities within 0.25 mile of the Plan Area. Development under the BVDSP would be required to comply with the City of Oakland's Ordinances and General Plan Policies, which require hazardous material handlers within 1,000 feet of a school or other sensitive receptor to

prepare a Hazardous Materials Assessment Report and Remediation Plan. Additionally, those handling or storing hazardous materials would be required to prepare a Hazardous Materials Management Plan and Hazardous Materials Business Plan, as required by Alameda County and a City of Oakland SCA; preparation of these plans would reduce impacts to less-than-significant levels.

Emergency Access Routes (Criteria 7c)

The EIR determined that construction under the BVDSP that would result in temporary road closures, which would require traffic control plans to ensure at least two emergency access routes are available for streets exceeding 600 feet in length, per City of Oakland's Ordinances and General Plan Policies. Compliance with all applicable requirements would reduce potential impacts to a less-than-significant level.

Project Analysis and Conclusion

A portion of the project site was on the Cortese list as a Leaking Underground Storage Tank (LUST) cleanup site; the case was closed as of November 1994. In compliance with the City's SCA-HAZ-2: *Site Contamination*, Phase I Environmental Site Assessments (ESAs) and Phase II ESAs were completed for the site as described below.

A Phase I ESA was prepared for the portion of the project site located at 277 27th Street (Acura Dealership and parking lots) indicated that this portion of the project site has a history of land use including automotive service operations, a gasoline station, and an automobile dealership.[19] These operations handled common hazardous materials such as petroleum hydrocarbons, including gasoline, oil, waste oil, and degreasers and solvents. The Phase I ESA also summarized a prior Phase I ESA prepared for the 304 to 322 24th Street portion of the site, which indicated that the site was occupied by a warehouse in the early 1930's, with occupants that included United Parcel Service, a furniture company, and other uses including most recently the Acura dealership. A Phase I ESA prepared for 300 and 302 24th Street (Autotrends Collision Repair and DAM Sport) determined that these portions of the project site included residences in the early 1900s, a variety of automotive service operations from at least the 1930's through the present, and other commercial and retail operations including electronics, communications and engineering firms and a fitness center.[20]

[19] AECOM, 2015. Phase I Environmental Site Assessment, Acura of Oakland Property, 277 27th Street, Oakland, California, October 22.

[20] AECOM, 2016. Phase I Environmental Site Assessment, Acura of Oakland Property, VIP, DAM Sport & Autotrends, 300 & 302 24th Street & 293 27th Street, Oakland, California, June 6.

A Phase II ESA completed for the 277 27th Street parcel collected soil, and groundwater samples. No significant contamination was detected. Soil samples were collected from 15 soil borings.[21] These showed: no gasoline, low concentrations of petroleum hydrocarbons reported in the TPH-d (diesel) range, which is interpreted to be biogenic interference from naturally occurring organic materials, one low concentration of TPH-ho (heating oil), six samples detected TPH-mo (motor oil), and tetrachloroethylene (PCE) in shallow soil below 2016 Environmental Screening Levels (ESLs) published by the San Francisco Bay Region Regional Water Quality Control Board.[22] Three metals, arsenic, lead and thallium were found in a few samples in shallow soils slightly above their ESLs, but below naturally occurring background levels. Twelve groundwater samples were collected and tested for TPH-g (gasoline), TPH-d, TPH-mo and volatile organic compounds (VOCs). No gasoline or VOCs were detected. Diesel was detected below the ESL in six samples. Motor oil was detected at low concentrations in two samples. Heating oil was detected in one sample near the hydraulic lifts at a low concentration. The Phase II ESA's samples described above were down and cross gradient to the 300 and 302 24th Street parcels and did not report significant concentrations of petroleum hydrocarbons or VOCs, indicating that it is unlikely that a significant release to groundwater has occurred on these properties. A Phase II ESA conducted for the 304 to 322 24th Street portion of the site detected low concentrations of diesel and motor oil range petroleum hydrocarbons in soil samples and in a groundwater sample, all below ESLs.[23] As described above, currently known site conditions show contaminant concentrations that are below levels of concern.

However, because the project site is a formerly closed UST site with scattered low concentrations of petroleum hydrocarbons in shallow soil, the Phase II ESA recommended the preparation of a site management plan setting out procedures to ensure protection of workers and the environment. In addition, if new or more significant contamination is encountered during site redevelopment earthwork, the project sponsor shall confirm that any cleanup actions are performed consistent with applicable laws and local agency requirements as required.

Developments under the BVDSP including the proposed project, would be required to follow the applicable laws and regulations related to transportation, use, and storage of all hazardous materials and to safeguard workers and the general public. Development

[21] AECOM, 2015. Phase II Environmental Site Assessment Report, Oakland Acura, 277 27th Street, Oakland, California, October 26.

[22] San Francisco Regional Water Quality Control Board, 2016. Tier 1 Environmental Screening Levels. http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESL%20Workbook_ESLs_Interim%20Final_22Feb16_Rev3_PDF.pdf.

[23] AEI Consultants, 2011. Phase II Subsurface Investigation Report, 304 – 322 24th Street, Oakland, California, May 12.

under the BVDSP would be subject to the City of Oakland's SCA-AIR-5: *Asbestos in Structures* and SCA-HAZ-1: *Hazardous Materials Related to Construction,* pertaining to the removal of asbestos-containing materials from structures and implementation of best management practices for hazardous materials during construction, respectively.

SCA-HAZ-2 also applies to the project. The project sponsor is required to prepare and implement a Health and Safety Plan to protect project construction workers from risks associated with exposure to hazardous materials if encountered. The Health and Safety Plan would include, but is not limited to, measures related to personal protective equipment, exposure monitoring, emergency response plan, and a training program. In addition, SCA-HAZ-2 requires the implementation of best management practices for the handling of contaminated soil and groundwater discovered during construction activities to ensure their proper storage, treatment, transport, and disposal. Specifically, SCA-HAZ-2 would require that all suspect soil be stockpiled on-site in a secure and safe manner and adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility.

Additionally, this SCA would require implementation of specific sampling and handling and transport procedures for reuse or disposal in accordance with applicable local, state, and federal requirements. The exact method employed or plan to be implemented will be identified in a Site Management Plan, which will be prepared by the project sponsor, consistent with the Phase II ESA recommendations described above and will require compliance with identified federal, state or local regulations or requirements and specific performance criteria and the project sponsor has committed to developing measures that comply with the requirements and criteria identified. Implementation of SCA-HAZ-2 will be reviewed, approved, and overseen by the City, and any applicable regulatory agency, as required by law.

Consistent with the requirements of CEQA, a determination of whether the project would have a significant impact has occurred prior to the approval of the proposed project and, where applicable, standard conditions of approval and/or mitigation measures in the BVDSP EIR have been identified that will mitigate them. In some instances, exactly how the measures/conditions identified will be achieved awaits completion of future studies, an approach that is legally permissible where measures/conditions are known to be feasible for the impact identified, where subsequent compliance with identified federal, state or local regulations or requirements apply, where specific performance criteria is specified and required, and where the proposed project commits to developing measures that comply with the requirements and criteria identified.

The proposed project is located within 0.25 mile of Westlake Middle School, St. Paul's Episcopal School, and the Oakland Emiliano Zapata Street Academy. The BVDSP EIR determined that the potential risks related to hazardous materials use in the vicinity of schools would be less than significant given incorporation of SCAs and other existing regulatory requirements. The proposed project would not change the surrounding streets

or roadways, or limit emergency access or plans. Any temporary roadway closures required during construction of the proposed project would be subject to City of Oakland review and approval, to ensure consistency with City of Oakland requirements.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to hazards and hazardous materials that were not identified in the BVDSP EIR. The BVDSP EIR did not identify any mitigation measures related to hazards and hazardous materials, and none would be needed for the proposed project. SCAs related to asbestos removal; lead-based paint/coatings; PCBs; ESA reports and remediation; health and safety plans; groundwater and soil contamination; and hazardous materials business plans would apply to the proposed project, as identified in Attachment A at the end of the CEQA Checklist (SCA-AIR-5 *Asbestos in Structures*, SCA-HAZ-1: *Hazardous Materials Related to Construction*, SCA-HAZ-2: *Site Contamination*, and SCA-HAZ-3: *Hazardous Materials Business Plan*).

8. Hydrology and Water Quality

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Violate any water quality standards or waste discharge requirements; Result in substantial erosion or siltation on or off site that would affect the quality of receiving waters; Create or contribute substantial runoff which would be an additional source of polluted runoff; Otherwise substantially degrade water quality; Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect hydrologic resources.	☒	☐	☐
b. 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 which would not support existing land uses or proposed uses for which permits have been granted);	☒	☐	☐
c. Create or contribute substantial runoff which would exceed the capacity of existing or planned stormwater drainage systems; Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course, or 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 site.	☒	☐	☐

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
d. Result in substantial flooding on or off site; 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 which would impede or redirect flood flows; or Expose people or structures to a substantial risk of loss, injury, or death involving flooding.	☒	☐	☐

Water Quality, Stormwater, and Drainages and Drainage Patterns (Criteria 8a and 8c)

The BVDSP EIR determined that development in the Plan area would result in construction activities that would require ground disturbance, resulting in impacts to hydrology and water quality. The EIR identified several SCAs that would reduce impacts to a less-than-significant level by minimizing runoff and erosion, as well as sedimentation and contamination to stormwater and surface water during construction activities.

Use of Groundwater (Criterion 8b)

Potable water is supplied to the Plan area through imported surface water by the EBMUD, and groundwater is generally not used in the Plan area. The Plan area is primarily developed and covered in impervious surfaces, and the amount of water able to infiltrate the aquifer in the East Bay Plain groundwater basin would not substantially decrease with development under the BVDSP. Additionally, compliance with the C.3 provisions of the National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit for the Alameda County Clean Water Program would require that recharge rates at a project site be equivalent to the recharge rate at the site prior to development.

Flooding and Substantial Risks from Flooding (Criteria 8d)

The BVDSP EIR identified the easternmost part of the Plan area along Glen Echo Creek as being situated in the 100-year flood zone, with the rest of the Plan area lying outside of

the 100-year flood zone. SCAs that require regulatory permits prior to construction in a floodway or floodplain, along with preparation of hydrological calculations that ensure that structures will not interfere with the flow of water or increase flooding, would reduce impacts to less-than-significant levels.

Project Analysis and Conclusion

The project site is currently developed with buildings and paved surface parking lots; impervious surfaces generally cover the site, totaling 99,202 square feet (approximately 2.28 acres). The proposed project would reduce the impervious surface area on the project site to approximately 93,072 square feet, incorporating NPDES C.3 stormwater treatment features. In addition, runoff from sidewalks and walkways would be directed to vegetated pervious areas.[24] Currently, it is directed to the storm drain system. Because the site is relatively flat and the amount of impervious surface area would be decreased by the proposed project, the potential for the proposed project to substantially alter drainage patterns or increase the flow of runoff would be less-than-significant. The project site would be outside of the 100-year flood hazard zone.[25]

The project site is underlain by fill consisting of gravels, sands, and clays to a depth of at least 8 feet. Groundwater, which generally flows to the south, was encountered between approximately 4 to 8 feet below ground surface.[26] Based on the presence of shallow groundwater and proposed excavation of up to 49,000 cubic yards of soil to accommodate the proposed underground parking level, construction-period dewatering will be required. However, dewatering during construction would be temporary and have only a localized and short-term effect on groundwater levels. Post-construction dewatering would not be required because the foundation and wall systems below the groundwater table would be waterproofed to prevent infiltration.

As described in the BVDSP EIR, any groundwater dewatering would be limited in duration and would be subject to permits from EBMUD or the RWQCB, depending if the discharge were to the sanitary or storm sewer system. If the water is not suitable for discharge to the storm drain (receiving water), dewatering effluent may be discharged to EBMUD's sanitary sewer system if special discharge criteria are met. These include, but are not limited to, application of treatment technologies or Best Management Practices (BMPs) which will result in achieving compliance with the wastewater discharge limits. Discharges

[24] City of Oakland Stormwater Supplemental Form for 24+ Harrison, undated.
[25] Federal Emergency Management Agency, 2009. Flood Insurance Rate Map, Alameda County, California and Incorporated Areas, Panel 59 of 725, Map Number 06001C0059G. Effective August 3.
[26] AECOM, 2015. Phase I Environmental Site Assessment, Acura of Oakland property, 277 27th Street, Oakland, CA, October 22.

to EBMUD's facilities must occur under a Special Discharge Permit. In addition, per the EBMUD Wastewater Ordinance, "all dischargers, other than residential, whose wastewater requires special regulation or contains industrial wastes requiring source control shall secure a wastewater discharge permit" (Title IV, Section 1). EBMUD also operates its wastewater treatment facilities in accordance with Waste Discharge Requirements issued by the RWQCB, which require rigorous monitoring of effluent to ensure discharges do not adversely impact receiving water quality. Since proper management of dewatering effluent is covered by existing State and local regulations, and implementation of these regulations would protect receiving water quality, the project would be consistent with the BVDSP EIR.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to hydrology and water quality that were not identified in the BVDSP EIR. The BVDSP EIR identified no mitigation measures related to hydrology and water quality, and none would be required for the proposed project. The proposed project would be required to implement SCAs related to stormwater, drainages and drainage patterns, and water quality, as identified in Attachment A at the end of the CEQA Checklist (SCA-HYD-1: *Erosion and Sedimentation Control Plan for Construction*, SCA-HYD-2: *State Construction General Permit*, and SCA-HYD-3: *NPDES C.3 Stormwater Requirements for Regulated Projects*).

---

9. Land Use, Plans, and Policies

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Physically divide an established community;	☒	☐	☐
b. Result in a fundamental conflict between adjacent or nearby land uses; or	☒	☐	☐
c. Fundamentally conflict with any applicable land use plan, policy, 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 actually result in a physical change in the environment.	☒	☐	☐

Division of Existing Community, Conflict with Land Uses, or Land Use Plans (Criteria 9a through 9c)

The BVDSP EIR determined that adoption and implementation of the BVDSP would have less-than-significant land use impacts related to the division of an established community, potential conflicts with nearby land uses, or applicable land use plans, policies, and regulations. The Plan area is in Oakland's Central Business District, an area intended to promote a mixture of vibrant and unique uses with around-the-clock activity, continued expansion of job opportunities, and growing residential population.

Project Analysis and Conclusion

The project's General Plan land use classification is Central Business District which is intended to encourage, support, and enhance the downtown area as a high-density, mixed-use urban center of regional importance, and a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation. The proposed project is consistent with the General Plan land use designation because it will provide a mixed-use, residential high-rise building with a mix of commercial space.

The project site is located in Valdez Triangle subarea of the Plan area and zoned D-BV-1, Retail Priority Site 4B. The regulatory framework of D-BV-1 ensures that larger sites and

opportunity areas are reserved primarily for new large-scale retail development that is oriented toward consumer goods, at least on the ground floor. In the D-BV-1 zone, residential uses are conditionally permitted with the inclusion of retail uses in any development proposed. The project site is also within the 45* height area. In this area, height and density is limited by the amount of retail square footage being provided. Specifically, to exceed 45 feet in height, and to allow residential uses, projects must provide a minimum retail square footage of 50 percent of the lot area.

The proposed project would provide approximately 65,000 square feet of retail space, which exceeds 50 percent of Retail Priority Site 4B's lot area (54,567 square feet).[27] Therefore, the proposed project meets the Retail Priority Site criterion and a maximum building height of 200 feet is allowed. The proposed building would be 18 stories and would not exceed 200 feet. Therefore, the proposed project would be consistent with the land use plans and policies for the site.

Based on the above, the proposed project would be consistent with the land use regulations in the BVDSP. Based on an examination of the analysis, findings, and conclusions in the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of the significant impacts identified in that report, nor would it result in new significant impacts related to land uses, plans, or policies that were not identified in the BVDSP EIR. The BVDSP EIR did not identify any SCAs or mitigation measures related to land use, and none are necessary for the proposed project.

[27] Table 17.101C.05 of the Oakland Planning Code indicates 54,567 square feet of retail would achieve the 50 percent of retail Priority Site area for site 4B. This percentage applies even though the project site does not include all of site 4B.

10. Noise

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding construction noise, except if an acoustical analysis is performed that identifies recommend measures to reduce potential impacts. During the hours of 7:00 p.m. to 7:00 a.m. on weekdays and 8:00 p.m. to 9:00 a.m. on weekends and federal holidays, noise levels received by any land use from construction or demolition shall not exceed the applicable nighttime operational noise level standard; Generate noise in violation of the City of Oakland nuisance standards (Oakland Municipal Code Section 8.18.020) regarding persistent construction-related noise;	☒	☐	☐
b. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding operational noise;	☒	☐	☐
c. Generate noise resulting in a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or, if under a cumulative scenario where the cumulative increase results in a 5 dBA permanent increase in ambient noise levels in the project vicinity without the project (i.e., the cumulative condition including the project compared to the existing conditions) and a 3-dBA permanent increase is attributable to the project (i.e., the cumulative condition including the project compared to the cumulative baseline condition without the project);	☒	☐	☐

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
d. Expose persons to 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 (CCR Part 2, Title 24); Expose the project to community noise in conflict with the land use compatibility guidelines of the Oakland General Plan after incorporation of all applicable Standard Conditions of Approval (see Figure 1); Expose persons to or generate noise levels in excess of applicable standards established by a regulatory agency (e.g., occupational noise standards of the Occupational Safety and Health Administration [OSHA]); or	☒	☐	☐
e. During either project construction or project operation expose persons to or generate ground-borne vibration that exceeds the criteria established by the Federal Transit Administration (FTA).	☒	☐	☐

Construction and Operational Noise and Vibration, Exposure of Receptors to Noise (Criteria 10a, 10b, 10d, and 10e)

Overall, the BVDSP EIR determined that impacts related to construction and operations of development under the BVDSP would be less than significant. Construction-related activities associated with development under the BVDSP would temporarily increase ambient noise levels and vibration. Implementation of SCAs would minimize construction noise impacts by limiting hours of construction activities; require best available noise control technology; require vibration monitoring for activities adjacent to historic structures; and require a project applicant and/or its contractors to notify any local residents of construction activities, and to track and respond to noise complaints.

During operations, mechanical equipment used in projects developed under the BVDSP would generate noise; however, equipment would be standardized and would be required to comply with the City of Oakland Noise Ordinance. Potential impacts would be reduced with implementation of SCAs that would require project design to achieve acceptable interior noise levels for buildings; limit ground-borne vibration at the project site; and require mechanical equipment to comply with applicable noise performance standards.

As described in the BVDSP EIR, noise measurements taken at various locations in the Plan area indicate that the ambient noise environment in the Plan area would be in the conditionally acceptable category for residential uses, and in the normally acceptable category for commercial uses—except for 24th Street, 25th Street, and Brooks Street in the Plan area. At these three locations, the noise environment would be in the normally acceptable category for residential uses. The BVDSP EIR identified an SCA that would ensure that project components are appropriately sound-rated to meet land use compatibility requirements throughout the Plan area.

Traffic Noise (Criterion 10c)

The BVDSP EIR determined that development under the Specific Plan would increase noise levels adjacent to nearby roads due to additional vehicles traveling throughout the Plan area. The increase in traffic noise from the Existing Plus Project scenario as compared to existing conditions would increase peak-hour noise levels by less than 5 A-weighted decibels (dBA) at all studied roadway segments, with the exception of 24th Street east of Broadway and 26th Street east of Broadway, where the increase in roadside noise would be 6.4 and 5.1 dBA, respectively. In addition, the increase in traffic noise between the Cumulative No Project (2035) and Cumulative Plus Project (2035) scenarios would be 5.3 dBA along 24th Street east of Broadway, and 4.9 dBA along 26th Street east of Broadway. The cumulative increases in traffic-generated noise could also combine with stationary noise sources, such as rooftop mechanical equipment and back-up generators, to result in significant cumulative impacts. The EIR determined that no feasible mitigation measures are available, and that these impacts would remain significant and unavoidable.

Project Analysis and Conclusion

Construction activities for the proposed project are expected to occur over approximately 30 months, and would entail demolition, excavation and shoring, foundation and below-grade construction, and construction of the building and finishing interiors. The foundation of the proposed project would be constructed using drilled displacement columns or torque-down piles and no pile driving is anticipated. The proposed project is adjacent to the proposed 2400 Valdez project and in the vicinity of other proposed projects including 2630 Broadway, as well as 2302 Valdez Street and 2315 Valdez Street/2330 Webster Street. Construction schedules of these projects are currently unknown and construction activities for the proposed project and these other projects may occur simultaneously. However, the proposed project conforms to the traffic

generation parameters analyzed in the BVDSP EIR, as described below in Section 13, Transportation and Circulation. As such, the proposed project is within the envelope of the Development Program analyzed in the BVDSP and would not be anticipated to substantially increase the level of significance of the construction noise impact identified in the BVDSP EIR or result in a new significant construction noise impact. In addition, the proposed project would be required to implement SCA-NOI-1: *Construction Days/Hours* to limit the days and hours of construction, SCA-NOI-2: *Construction Noise* and SCA-NOI-3: *Extreme Construction Noise* to ensure the application of noise reduction measures to reduce noise impacts and extreme construction noise, and SCA-NOI-4: *Construction Noise Complaints* to provide measures to respond to and track construction noise complaints (if any). The SCA pertaining to effects of vibration during construction on adjacent historic structures (*Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities*) would not apply to the proposed project because the remaining adjacent building is not a designated historic building.

During operation of the proposed project, noise from mechanical equipment, including a backup generator, increased traffic from additional trips associated with the residential and retail components of the project, including truck deliveries, and potential audio warning devices at the driveway on 24th Street would be generated. The proposed project would be located along 24th Street east of Broadway where the impact from increased traffic noise and cumulative noise associated with traffic noise in the Plan area was identified as significant and unavoidable in the BVDSP EIR. However, the proposed project would not be anticipated to substantially increase the severity of significant impacts identified in the BVDSP EIR or result in new significant impacts since the proposed project is consistent with the Plan Area development anticipated. In addition, the proposed project would be required to implement SCA-NOI-5: *Operational Noise,* which would require all operational noise to comply with the performance standards of Chapter 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. In addition, the project site has substantial frontage along 27th Street, which has noise levels in the conditionally acceptable range for residential uses, as described in the BVDSP EIR. Therefore, SCA-NOI-6: *Exposure to Community Noise* would apply to the project and would require a noise reduction plan prepared by a qualified acoustical engineer that contains noise reduction measures (e.g., sound-rated window, wall, and door assemblies) to achieve an acceptable interior noise level in accordance with the land use compatibility guidelines of the Noise Element of the Oakland General Plan. The proposed project is not located adjacent to any active rail line and, therefore, the SCA pertaining to exposure of new dwelling units to vibration (*Exposure to Vibration*) would not apply to the proposed project.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, and since the proposed project is consistent with Plan Area development anticipated in the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to noise that were not identified in the BVDSP EIR. The BVDSP

EIR did not identify any mitigation measures related to noise, and none would be necessary for the proposed project. The proposed project would be required to implement SCAs to reduce construction noise and vibration, achieve interior noise standards, and require mechanical equipment to meet applicable noise performance standards presented on page 4.10-12 in BVDSP EIR. Related SCAs are provided in Attachment A at the end of the CEQA Checklist (SCA-NOI-1: *Construction Days/Hours*, SCA-NOI-2: *Construction Noise*, SCA-NOI-3: *Extreme Construction Noise*, SCA-NOI-4: *Construction Noise Complaints*, and SCA-NOI-5: *Operational Noise,* SCA-NOI-6: *Exposure to Community Noise*).

11. Population and Housing

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. 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 extensions of roads or other infrastructure), such that additional infrastructure is required but the impacts of such were not previously considered or analyzed;	☒	☐	☐
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element; or Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element.	☒	☐	☐

Population Growth and Displacement of Housing and People (Criteria 11a and 11b)

The BVDSP EIR determined that impacts related to population growth and displacement of housing and people would be less than significant. Development under the BVDSP would add up to 1,800 housing units and 3,230 residents to the Plan area.[28] This would represent approximately 2 percent of the total population growth projected for Oakland through 2035, and would not be considered substantial. Although adoption and development under the BVDSP could require the demolition of existing housing units,

[28] As shown in Table 6, there are 2,573 net new housing units and approximately 214,900 gross square feet of net new commercial uses constructed and/or proposed for development under the BVDSP to date. The BVDSP EIR allows for the distribution of density and development type between categories and sub-areas as long as such development conforms to the general traffic generation parameters established by the Plan.

existing regulations such as Housing Element policies, the Ellis Act (Government Code Sections 7060 through 7060.7), and the City of Oakland's Ellis Act Ordinance (Oakland Municipal Code Sections 8.22.400 through 8.22.480) would prevent significant impacts.

Project Analysis and Conclusion

The proposed project would demolish the existing buildings and surface parking lots including the Acura showroom and warehouse, automobile repair shops and fitness center, and construct a new mixed-use building with up to 448 residential units and approximately 65,000 square feet of retail space. The proposed project would not demolish or displace any existing housing units.

The proposed project would result in an increase of approximately 838 new residents and approximately 130 jobs.[29] While the proposed project, in combination with other proposed and approved projects in the Plan Area, could result in more than 1,800 dwelling units being built, the BVDSP allows for flexibility with respect to the quantity and type of future development as long as such development conforms to the general traffic generation parameters established by the BVDSP EIR. As such, the proposed project is within the envelope of the Development Program analyzed in the BVDSP EIR.

Based on an examination of the analysis, findings, and conclusions in the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of the significant impacts identified in that report, nor would it result in new significant impacts related to population and housing that were not identified in the BVDSP EIR. The BVDSP EIR did not identify any mitigation measures or SCAs related to population and housing, and none would be required for the proposed project.

[29] The BVDSP EIR assumed approximately 1.87 residents per dwelling unit. Jobs are calculated using a standard generation rate of 500 square feet per employee.

12. Public Services, Parks, and Recreation Facilities

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 times, or other performance objectives for any of the following public services: • Fire protection; • Police protection; • Schools; or • Other public facilities.	☒	☐	☐
b. Increase the use of existing neighborhood or 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 a substantial adverse physical effect on the environment.	☒	☐	☐

Public Services and Parks and Recreation (Criteria 12a and 12b)

The BVDSP EIR determined that impacts related to fire and police protection, schools, and other public facilities would be less than significant. Although development under the BVDSP would increase density and population in the Plan area, any corresponding increase in crime and need for police protection would likely be counteracted by the revitalization of the area, as envisioned by the BVDSP. The EIR identified SCAs that would reduce the potential impacts related to the increased need for fire protection by requiring all projects to implement safety features, and to comply with all applicable codes and regulations. Adherence to the General Plan's Open Space, Conservation and Recreation Element policies 3.1, 3.3, and 3.10 would reduce potential impacts to recreational facilities. In

addition, any increases in need for police protection, fire protection, schools, or other public facilities would be mitigated by adherence to General Plan policies N.12.1, N.12.2, N.12.5, FI-1, and FI-2. No additions or expansions of parks or recreational facilities are proposed under the BVDSP, and no new parks or recreational facilities, or expansion of existing parks or recreational facilities, were determined to be required under the BVDSP.

Project Analysis and Conclusion

The proposed project would add 448 residential units and 65,000 square feet of commercial uses. This development program and intensity, while not specified in the Illustrative Development Program Map, is consistent with the BVDSP, which did not prescribe or assume exact land uses on a site-by-site basis and instead established a maximum density based on trip generation and traffic capacity. The proposed project is within that capacity and the residential units and commercial square footage proposed for the project, was analyzed in the BVDSP EIR, and the proposed project's increase in demand for public services is consistent with that analysis.

The proposed project would increase student enrollment at local schools. Pursuant to Senate Bill 50, the project sponsor would be required to pay school impact fees, which are established to offset potential impacts from new development on school facilities. This would be deemed full and complete mitigation. The proposed project could also cause a minor increase in demand for police and fire protection services; however, as described in the BVDSP EIR, adherence to General Plan policies N.12.1, N.12.2, N.12.5, FI-1, and FI-2 would mitigate potential impacts.

As described above, no new parks or recreational facilities, nor expansion of existing parks or recreational facilities, would be required as a result of adoption and development under the BVDSP. However, the proposed project would provide approximately 6,130 square feet of public open space along the ground floor, as described in the Project Description. In total, approximately 42,688 square feet of private and common open space, would be included in the proposed project for residents. The open space that would be provided is consistent with the requirements of the BVDSP and the Planning Code to meet recreational demands associated with development of residential units.

Based on an examination of the analysis, findings, and conclusions in the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of the significant impacts identified in that report, nor would it result in new significant impacts related to the provision of public services or park and recreational facilities that were not identified in the BVDSP EIR. The BVDSP EIR did not identify any mitigation measures or SCAs related to public services or park and recreational facilities, and none would be required for the proposed project.

13. Transportation and Circulation

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit, specifically:			
Traffic Load and Capacity Thresholds a. At a study, signalized intersection which is located **outside the Downtown area and that does not provide direct access to Downtown**, the project would cause the motor vehicle level of service (LOS) to degrade to worse than LOS D (i.e., LOS E or F) and cause the total intersection average vehicle delay to increase by four (4) or more seconds;	☒	☐	☐
b. At a study, signalized intersection which is located **within the Downtown area or that provides direct access to Downtown**, the project would cause the motor vehicle LOS to degrade to worse than LOS E (i.e., LOS F) and cause the total intersection average vehicle delay to increase by four (4) or more seconds;	☒	☐	☐
c. At a study, signalized intersection **outside the Downtown area and that does not provide direct access to Downtown** where the motor vehicle level of service is LOS E, the project would cause the total intersection average vehicle delay to increase by four (4) or more seconds;	☒	☐	☐

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
d. At a study, signalized intersection **outside the Downtown area and that does not provide direct access to Downtown** where the motor vehicle level of service is LOS E, the project would cause an increase in the average delay for any of the critical movements of six (6) seconds or more;	☒	☐	☐
e. At a study, signalized intersection for all areas where the level of service is LOS F, the project would cause (a) the overall volume-to-capacity ("V/C") ratio to increase 0.03 or more or (b) the critical movement V/C ratio to increase 0.05 or more;	☒	☐	☐
f. At a study, unsignalized intersection the project would add ten (10) or more vehicles to the critical movement and after project completion satisfy the California Manual on Uniform Traffic Control Devices (MUTCD) peak-hour volume traffic signal warrant;	☒	☐	☐
g. For a roadway segment of the Congestion Management Program (CMP) Network, the project would cause (a) the LOS to degrade from LOS E or better to LOS F or (b) the V/C ratio to increase 0.03 or more for a roadway segment that would operate at LOS F without the project; or	☒	☐	☐
h. Cause congestion of regional significance on a roadway segment on the Metropolitan Transportation System (MTS) evaluated per the requirements of the Land Use Analysis Program of the CMP.	☒	☐	☐

Criteria 13a through 13h

This section of the CEQA Checklist summarizes the findings of the transportation analysis completed for the proposed project. The analysis is provided in two parts below, as follows: the first part describes the BVDSP EIR analysis related to transportation and circulation

impacts; the second part compares the proposed project's impacts to those analyzed in the EIR, provides additional analysis of project study intersections to supplement the analysis in the EIR, and identifies EIR impacts and mitigation measures that would be triggered by the proposed project combined with other planned developments.

BVDSP EIR Analysis

The BVDSP EIR analyzed transportation and circulation conditions in and around the Plan area under six different scenarios, which represent three time periods (existing conditions, Year 2020, and Year 2035) with and without the BVDSP Development Program and transportation improvements. For the purposes of this analysis, these scenarios are referred to as: 1) existing conditions; 2) existing conditions plus full Development Program (full buildout of the Broadway Valdez Development Program); 3) Year 2020 no project; 4) Year 2020 plus Phase 1 of Development Program (partial buildout of the Development Program); 5) Year 2035 no project; and 6) Year 2035 plus full Development Program (full buildout of the Development Program).

The BVDSP EIR determined that no significant impacts to transit, pedestrian, bicycle, and other related topics would occur under any of the scenarios; therefore, these topics are not further discussed herein. As noted in the EIR, the Development Program represents the reasonably foreseeable development expected to occur in the next 20 to 25 years in the Plan area. The Specific Plan and the EIR intend to provide flexibility in the location, amount, and type of development. Therefore, the traffic impact analysis in the EIR does not assign land uses to individual parcels; rather, land uses are distributed to five subdistricts within the Plan area. Thus, as long as the trip generation for each subdistrict and the overall Plan area remain below the levels estimated in the EIR, the traffic impact analysis presented in the EIR continues to remain valid.

The EIR identified 28 significant impacts on Level of Service (LOS) at intersections serving the Plan area. For each impact and associated mitigation measure(s), the EIR identified specific triggers based on the level of development in the entire Plan area or specific subdistrict(s). Several of these impacts and mitigation measures would be triggered by the proposed project combined with other planned developments. These impacts and mitigation measures are further described below.

The BVDSP EIR identified SCAs that require city review and approval of all improvements in the public right-of-way, reduction of vehicle traffic and parking demand generated by development projects, and construction traffic and parking management, which will also address transportation and circulation impacts.

Project Analysis and Conclusion

As shown in Table 6, accounting for trips generated by the existing uses that the proposed project would eliminate, the proposed project would generate approximately

128 net new vehicle trips during the weekday AM peak hour (six fewer inbound and 134 additional outbound) and approximately 275 net new vehicle trips during the weekday PM peak hour (175 additional inbound and 100 additional outbound).

Analysis of Proposed Project and Other Projects that are in Development under the Development Program Analyzed in the BVDSP EIR. Table 7 lists the development projects within BVDSP Plan Area that have been constructed, are currently under construction, approved, and/or proposed, including the proposed project. Existing uses on each site are accounted for in Table 7.

Table 8 compares the total amount of development constructed, currently under construction, approved, and/or proposed with the Development Program Buildout assumptions used in the BVSP Draft EIR for the Plan Area (Subdistricts 1 through 5), the Valdez Triangle subarea (Subdistricts 1 through 3) and Subdistrict 2. The project site is in Subdistrict 2 of the Valdez Triangle subarea of the Plan Area. Table 9 compares the trip generation associated with the proposed project to trip generation in the Plan Area (Subdistricts 1 through 5), the Valdez Triangle subarea (Subdistricts 1 through 3), and Subdistrict 2.

Trips generated by the proposed project, together with trips generated by other projects that are constructed, currently under construction, approved, or proposed for development in the Plan Area, would represent approximately 39 percent of the AM and 44 percent of the PM peak-hour trips anticipated in the BVDSP EIR, 63 percent of the AM and 60 percent of the PM peak-hour trips anticipated in the BVDSP EIR for the Valdez Triangle subarea, and 78 percent of the AM and 60 percent of the PM peak-hour trips anticipated in the BVDSP EIR for Subdistrict 2.

In general, the trip generation numbers are less than the BVDSP EIR estimates for the Development Program. Although the amount of residential development in the Plan Area, Valdez Triangle, and Subdistrict 2 is currently more than what was assumed under the Development Program Buildout in the BVDSP EIR, their trip generation is below the trip generation estimated in the BVDSP EIR because the amount of retail and office uses currently proposed are well below the BVDSP EIR assumptions. The outbound trip generation during the weekday AM peak hour exceeds the outbound AM peak hour trip generation estimated for the Development Program in the BVDSP EIR, but the total AM peak hour trip generation would continue to remain below the BVDSP EIR trip generation estimate. Because the overall AM peak hour trip generation is below the BVDSP EIR, none of the BVDSP EIR impacts are triggered during the AM peak hour, and the AM peak hour trip generation is much less than the PM peak hour trip generation, this exceedance will not result in additional impacts based on the analysis completed for the BVDSP EIR.

Table 6 Project Vehicle Trip Generation

Land Use	ITE Code	Daily	Weekday AM Peak Hour In	Weekday AM Peak Hour Out	Weekday AM Peak Hour Total	Weekday PM Peak Hour In	Weekday PM Peak Hour Out	Weekday PM Peak Hour Total
PROPOSED PROJECT								
Multi-Family Residential								
450 Units	220[a]	2,850	45	179	224	172	93	265
Retail								
65.0 KSF	820[b]	2,780	38	24	62	116	125	241
	Subtotal	*5,630*	*83*	*203*	*286*	*288*	*218*	*506*
Non-Auto Reduction (-21%)[c]		-1,200	-18	-43	-61	-61	-47	-108
Total New Project Vehicle Trips		4,430	65	160	225	227	171	398
EXISTING PROJECT								
Auto Dealership								
55.2 KSF	841[d]	-1,780	-80	-26	-106	-52	-77	-129
Auto Repair								
5.3 KSF	942[e]	-302	-8	-4	-12	-8	-8	-16
Fitness Center								
3.25 KSF	492[f]	-110	-2	-3	-5	-6	-5	-11
	Subtotal	-2,060	-90	-33	-123	-66	-90	-156
Non-Auto Reduction (-21%)[c]		440	19	7	26	14	19	33
Total Existing Trips		**-1,620**	**-71**	**-26**	**-97**	**-52**	**-71**	**-123**
Net New Project Vehicle Trips		**2,810**	**-6**	**134**	**128**	**175**	**100**	**275**

[a]Weekday daily rate = 6.06(X) + 123.56; AM peak rate = 0.49(X) + 3.73 (20 percent in, 80 percent out); PM peak rate = 0.55(X) + 17.65 (65 percent in, 35 percent out).
[b]Weekday daily rate = 42.7(X); AM peak rate = 0.96(X) (88 percent in, 12 percent out); PM peak rate = 3.71(X) (17 percent in, 83 percent out).
[c]Reduction of 21.4 percent assumed. Based on City of Oakland *Transportation Impact Study Guidelines* using BATS 2000 data for development in an urban environment between 0.5 to 1.0 miles of a BART station.
[d]Weekday daily rate = 32.30(X); AM peak rate = 1.92(X) (75 percent in, 25 percent out); PM peak rate = 1.91(X) + 23.74 (40 percent in, 60 percent out).
[e]Weekday daily rate = 32.30(X); AM peak rate = 2.25(X) (66 percent in, 34 percent out); PM peak rate = 3.11(X) (48 percent in, 52 percent out).
[f]Weekday daily rate = 32.93(X); AM peak rate = 1.41(X) (50 percent in, 50 percent out); PM peak rate = 3.53(X) (57 percent in, 43 percent out).
Source: Fehr & Peers, 2016.

Table 7 Developments in the Broadway Valdez District Specific Plan

			Proposed Development[a]				Net Development[a,c]		
Development	BVDSP Subdistrict	Status	Residential (DU)	Commercial (KSF)	Other (KSF)	Active Existing Uses[b]	Residential (DU)	Commercial (KSF)	Other (KSF)
3001 Broadway (Sprouts)	5	Constructed	0	36.0	0	Parking Lot	0	36.0	0
2345 Broadway (HIVE)	1	Constructed	105	94.3	0	11.4 KSF Auto Repair and 30.2 KSF Warehouse	105	94.3	-41.6
2425 Valdez St.	3	Under Construction	70	0	0	Parking Lot	70	0	0
3093 Broadway	5	Under Construction	435	24.0	0	40.2 KSF Auto Dealership	435	-16.2	0
2302 Valdez St.	2	Under Construction	196	31.5	0	3.6 KSF Auto Repair	196	31.5	-3.6
2270 Broadway	1	Approved	223	5.0	0	Parking Lot	223	5.0	0
2315 Valdez/ 2330 Webster St.	1	Approved	265	18.0	0	Parking Lot	265	18.0	0
2630 Broadway	3	Approved	255	37.7	0	Parking Lot/ Vacant	255	37.7	0
3416 Piedmont Ave.	5	Proposed	6	1.5	0	Vacant Lot	6	1.5	0
2400 Valdez St.	2	Proposed	225	23.5	0	Parking Lot	225	23.5	0
3000 Broadway	5	Proposed	128	10.0	0	3 Dwelling Units, 8.8 KSF Restaurant, and 10.2 KSF Auto Repair	125	1.2	-10.2
2820 Broadway	4	Proposed	218	18.0	0	42.2 KSF Auto Dealership	218	-24.2	0
24th and Harrison	2	Proposed	450	65.0	0	55.2 KSF Auto Dealership, 5.3 KSF Auto Repair, and 3.25 KSF Fitness	450	6.6	-5.3
Total			**2,576**	**364.5**	**0**		**2,573**	**214.9**	**-60.7**

[a] DU = dwelling units, ksf = 1,000 square feet
[b] Consists of active uses at the time the BVDSP EIR was prepared.
[c] Retail and non-retail uses (such as auto repair and warehouses) are presented separately because the non-retail uses generate fewer trips than typical retail uses.
Source: City of Oakland, April 2016.

Table 8 Development Comparison within the Plan Area, Valdez Triangle, and Subdistrict 2

	Residential (DU)	Retail (KSF)	Office (KSF)	Hotel (Rooms)
Plan Area (Subdistricts 1 through 5)				
Constructed, Under Construction, Approved, and Proposed Development Projects[a]	2,573	214.9	0	0
Development Program Buildout[b]	1,797	1,114.1	694.9	180
Percent Completed	143%	19%	0%	0%
Valdez Triangle (Subdistricts 1 through 3)				
Constructed, Under Construction, Approved, and Proposed Development Projects[a]	1,789	216.6	0	0
Development Program Buildout[b]	965	793.5	116.1	180
Percent Completed	185%	27%	0%	0%
Subdistrict 2				
Constructed, Under Construction, Approved, and Proposed Development Projects[a]	871	61.6	0	0
Development Program Buildout[b]	487	388.2	0	0
Percent Completed	179%	16%	0%	0%

Notes: DU = dwelling units, KSF = 1,000 square feet.
[a] Information from City of Oakland, April 2016. Accounts for existing active uses that would be eliminated.
[b] Based on Table 4.13-7 on page 4.13-37 of BVSP Draft EIR.
Source: Fehr & Peers, 2016.

The exceedance in the AM peak hour would not affect intersection operations beyond the ones identified as having a significant impact and discussed in the next section. Furthermore, considering that the BVDSP EIR analyzed the impacts of the Development Program at signalized intersections in the immediate vicinity of the project site, the project would not cause additional impacts beyond those analyzed in the BVDSP EIR, nor would it increase the magnitude of the impacts identified in the BVDSP EIR.

Traffic Impacts at BVDSP EIR Intersections. The BVDSP EIR identifies 28 significant impacts at intersections that serve the Plan Area. It also identifies the specific level of development in the Plan Area and/or each subdistrict that would trigger each impact and its associated mitigation measure(s). Impacts are triggered when a certain percentage of overall project buildout is met. The impacts, the reason for triggering the impacts, and the mitigation measures are described below.

Table 9 Trip Generation Comparison

	Weekday AM Peak Hour			Weekday PM Peak Hour		
	In	**Out**	**Total**	**In**	**Out**	**Total**
Plan Area (Subdistricts 1 through 5)						
Constructed, Development Projects Approved, Proposed, or Under Construction[a]	176	614	780	947	691	1,638
Development Program Buildout[b]	1,152	829	1,981	1,702	2,007	3,709
Percent Completed	15%	74%	39%	56%	34%	44%
Valdez Triangle (Subdistricts 1 through 3)						
Constructed, Development Projects Approved, Proposed, or Under Construction[a]	135	434	568	693	514	1,206
Development Program Buildout[b]	457	442	899	1,013	993	2,006
Percent Completed	30%	98%	63%	68%	52%	60%
Subdistrict 2						
Constructed, Development Projects Under Construction, Approved, or Proposed	37	243	280	329	213	542
Development Program Buildout[b]	161	200	361	475	435	910
Percent Completed	23%	122%	78%	69%	49%	60%

[a] Based on application of the BVDSP trip generation model with the developments shown in Table 7, and accounting for the trips generated by existing uses that would be eliminated.
[b] Based on Table 4.13-10 on page 4.13-43 of the BVDSP EIR.
Source: Fehr & Peers, 2016.

1. The proposed project, combined with other projects that are under construction, approved, or proposed for development in the Plan Area, would trigger **Impact TRANS-2** under existing plus-project conditions (and also **Impact TRANS-7** under 2020 plus-project conditions and **Impact TRANS-17** under 2035 plus-project conditions) at the Perry Place/I-580 eastbound ramps/Oakland Avenue intersection because these projects, when combined, would generate more than 15 percent of the total traffic generated by the Development Program.

   Mitigation Measure TRANS-2 in the BVDSP EIR includes the following improvements at this intersection:

   - Optimize signal timing (i.e., change the amount of green time assigned to each lane of traffic) for the PM peak hour, and
   - Coordinate signal timing changes at this intersection with adjacent intersections that are in the same signal coordination group. This intersection is under the jurisdiction of the California Department of Transportation (Caltrans), so any equipment or facility upgrades must be approved by Caltrans prior to installation.

The BVDSP EIR determined that, if implemented, the mitigation measure would mitigate the significant impact at this intersection. However, it is not certain whether this mitigation measure could be implemented because the intersection is under the jurisdiction of Caltrans. The City of Oakland, as lead agency, does not have jurisdiction at this intersection; the mitigation would need to be approved and implemented by Caltrans. Therefore, the BVDSP EIR considered the impact significant and unavoidable.

2. The proposed project, combined with other projects that are under construction, approved, or proposed for development in the Plan Area, would trigger **Impact TRANS-10** under 2020 plus-project conditions (and also **Impact TRANS-24** under 2035 plus-project conditions) at the 27th Street/24th Street/Bay Place/Harrison Street intersection because these projects, when combined, would generate more than 10 percent of the total traffic generated by the Development Program.

   Mitigation Measure TRANS-10 in the BVDSP EIR includes the following improvements at this intersection:

   - Reconfigure the 24th Street approach at the intersection to restrict access (i.e., right turns only from 27th Street to 24th Street) and create a pedestrian plaza at the intersection approach;
   - Convert 24th Street between Valdez and Harrison Streets to two-way circulation and allow right turns from 24th Street to southbound Harrison Street south of the intersection, which would require acquisition of private property in the southwest corner of the intersection;
   - Modify the eastbound 27th Street approach from the current configuration (i.e., one right-turn lane, two through lanes, and one left-turn lane) to provide one right-turn lane, one through lane, and two left-turn lanes;
   - Realign pedestrian crosswalks to shorten pedestrian crossing distances;
   - Reduce the length of the signal cycle from 160 to 120 seconds and optimize signal timing (i.e., change the amount of green time assigned to each lane of traffic); and
   - Coordinate signal timing changes at this intersection with adjacent intersections that are in the same signal coordination group.

   The BVDSP EIR determined that, if implemented, the mitigation measure would reduce the magnitude of the impact but would not mitigate the impact to a less-than-significant level. Therefore, the BVDSP EIR considered the impact significant and unavoidable.

3. The proposed project, combined with other projects that are under construction, approved, or proposed for development in the Plan Area, would trigger **Impact TRANS-22** under 2035 plus-project conditions at the 27th Street/Broadway

intersection because these projects, when combined, would generate more than 30 percent of the total traffic generated by the Development Program.

Mitigation Measure TRANS-22 in the BVDSP EIR includes the following improvements at this intersection:

- Upgrade traffic signal operations at the intersection to actuated coordinated;
- Reconfigure the westbound 27th Street approach to provide a 150-foot left-turn pocket, one through lane, and one shared through/right-turn lane;
- Provide protected left-turn phases for the northbound and southbound approaches;
- Optimize signal timing (i.e., change the amount of green time assigned to each lane of traffic); and
- Coordinate signal timing changes at this intersection with adjacent intersections that are in the same signal coordination group.

The BVDSP EIR determined that, if implemented, the mitigation measure would reduce the magnitude of the impact but would not mitigate the impact to a less-than-significant level. Therefore, the BVDSP EIR considered the impact significant and unavoidable.

According to the BVDSP EIR, the project sponsor would fund the cost of preparing and funding these mitigation measures. Alternatively, if the City of Oakland adopted the BVDSP or the citywide Transportation Impact Fee (TIF) program, the applicant could pay the applicable TIF to mitigate project impacts, as identified above. On May 3, 2016, the City of Oakland adopted a citywide TIF program. It goes into effect on September 1, 2016. The applicant may elect to pay the applicable TIF to mitigate project impacts.

Additional Study Intersections. The *City of Oakland Transportation Impact Study Guidelines* require analysis of project impacts at intersections adjacent to the project site, signalized and all-way stop-controlled intersections where the project would add 50 or more peak hour trips, and side-street stop-controlled intersections where the project would add ten or more trips to the stop-controlled approach. The BVDSP EIR evaluated two of the four intersections adjacent to the project site: 26th Street/27th Street/Valdez Street and 27th Street/24th Street/Bay Place/Harrison Street intersections. The BVDSP EIR did not analyze the all-way stop-controlled 24th Street/Valdez Street which is to the southwest corner of the project site, and the side-street stop-controlled 24th Street/Waverly Street intersection which is adjacent and to the south of the project site.

The proposed project would not cause a significant impact at these intersections because:

- 24th Street/Valdez Street intersection – The proposed project would add more than 50 peak hour trips at this intersection. It would not cause a significant impact at this

intersection, based on the *2315 Valdez Street/2330 Webster Street – Final Transportation Assessment* (June 14, 2015), which concluded the intersection would operate at LOS A during both AM and PM peak hours. The additional traffic generated by the proposed project at this intersection, combined with traffic generated by other projects that are constructed, currently under construction, approved, or proposed for development in the Plan Area, would not satisfy the peak hour signal warrant, which is based on specific volume thresholds for each intersection approach, after the completion of the proposed project.

- 24th Street/Waverly Street intersection – The City's significance threshold for unsignalized intersections (item f in the checklist above) requires that a project add 10 or more trips to the critical movement at the intersection. Considering that the proposed project would add fewer than 10 peak hour trips to the side-street stop-controlled Waverly Street approach of this intersection, the proposed project would not cause a significant impact at this intersection. Furthermore, while there are no recent analyses at this side-street stop-controlled intersection, since both 24th and Waverly streets serve only adjacent uses, and considering current and expected developments on both streets, the intersection would continue to operate at an acceptable LOS, and the intersection would not satisfy the peak hour signal warrant after the completion of the proposed project.

Based on the above, the proposed project would not cause a significant impact at these intersections.

Beyond the intersections discussed above, the proposed project is not expected to add 50 or more peak hour trips to signalized or all-way stop-controlled intersections, or add ten or more peak hour trips to the stop-controlled approach of side-street stop-controlled intersections in the vicinity that were not analyzed in BVDSP EIR. Therefore, analysis of additional intersections beyond the ones analyzed in the BVDSP EIR is not needed. Overall, the proposed project would not result in impacts on traffic operations at the intersections beyond the ones identified in the BVDSP EIR. In addition, the proposed project also would not increase the magnitude of the impacts identified in the BVDSP EIR.

Conclusion

The combined trip generation for projects that are currently approved, proposed, or under construction in the Plan Area and the Valdez Triangle including the proposed project, remains lower than the estimated trip generation in the BVDSP EIR under the Development Program for those areas. Although the outbound trip generation during the weekday AM peak hour for Subdistrict 2 would exceed the estimate for the Development Program in the BVDSP EIR, the exceedance is not expected to cause additional significant impacts beyond the ones identified in the BVDSP EIR.

Additionally, the proposed project would not result in significant impacts to the unsignalized intersection not analyzed in the BVDSP EIR. Therefore, the project would not cause additional impacts beyond the locations analyzed in the EIR; nor would the project increase the magnitude of the impacts identified in the EIR. In addition, this transportation analysis determined that the project would not result in any significant impacts to vehicle access and circulation, bicycle access and bicycle parking, pedestrian access and circulation, and transit access, consistent with the findings of the BVDSP EIR.

Based on an examination of the analysis, findings, and conclusions of the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the BVDSP EIR, nor would it result in new significant impacts related to transportation and circulation that were not identified in the BVDSP EIR. The proposed project combined with other projects under construction, approved, and proposed for development in the Plan Area, would trigger and be required to implement **Mitigation Measures TRANS-2, TRANS-10, and TRANS-22,** as described in the EIR. The proposed project would also be required to implement SCAs related to city review and approval of all improvements proposed in the public right-of-way, reduction of vehicle traffic and parking demand generated by development projects, and construction traffic and parking management, as identified in Attachment A, at the end of the CEQA Checklist (SCA-TRANS-1: *Construction Activity in the Public Right-of-Way*, SCA-TRANS-2: *Bicycle Parking*, SCA-TRANS-3: *Transportation Improvements*, and SCA-TRANS-4: *Transportation and Parking Demand Management*).

In addition, the proposed project would implement the following recommended improvement measure related to vehicle, bicycle, pedestrian, and bus rider access and circulation and bicycle parking, although the improvement measures are not required to address CEQA impacts.

> **Recommended Improvement #1:** Although not required to address a CEQA impact, the following should be considered as part of the final design and/or conditions of approval of the project:
>
> - Prohibit left-turns out of the proposed mid-block garage driveway on 27th Street. The proposed median break on 27th Street should only accommodate left-turns into the driveway.

- Ensure that the project driveway on 24th Street would provide adequate sight distance[30] between motorists exiting the driveway and pedestrians on the adjacent sidewalks. This may require redesigning and/or widening the driveway. If adequate sight distance cannot be provided, consider providing audio and/or visual warning devices at the driveway.
- To ensure adequate sight distance for motorists entering and exiting the garage driveways, prohibit on-street parking within 20 feet on either side of the garage driveways on 24th Street and within 30 feet on the west side of the garage driveway on 27th street. Coordinate the design of the garage driveway and the median break with the City of Oakland's ongoing bicycle facility design on 27th Street to ensure adequate sight distance between cyclists on 27th Street and motorists entering and exiting the garage driveway.
- Consistent with Section 6.5.8 of the BVDSP and **Mitigation Measure TRANS-10** of the EIR, reconfigure the 24th Street approach at the 27th Street/24th Street/Bay Place/Harrison Street intersection to restrict access to 24th Street to right-turns only from 27th Street, create a pedestrian plaza at the intersection approach, convert 24th Street between Valdez and Harrison Streets to two-way circulation and accommodate right-turns from 24th Street to southbound Harrison Street south of the intersection. Although the ultimate configuration will require acquisition of private property in the southwest corner of the intersection to accommodate the right-turn from 24th Street to southbound Harrison Street, the right-turn can be accommodated within the existing right-of-way in an interim basis. Coordinate with City of Oakland staff to determine when ultimate improvements at the intersection can be implemented and if additional interim improvements would be necessary, and to ensure that the improvements would not conflict with the City's planned 27th Street bicycle facility. This measure is subject to review and approval by the Transportation Services Division.
- Minimize large truck deliveries that back into the loading dock during peak commute and pedestrian activity periods. In order to minimize disruptions to pedestrian, bicycle, and automobile flow along 27th Street, provide a flagger to guide trucks backing into the loading area during the peak periods.

[30] Sight distance is dependent on each specific location; typically, adequate sight distance is defined as a clear line-of-sight between a motorist ten feet back from the sidewalk and a pedestrian ten feet away on each sides of the driveway.

14. Utilities and Service Systems

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
a. Exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board; Require or result in construction of new storm water drainage 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;	☒	☐	☐
b. 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;	☒	☐	☐
c. 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;	☒	☐	☐

Would the project:	Equal or Less Severity of Impact Previously Identified in BVDSP EIR	Substantial Increase in Severity of Previously Identified Significant Impact in EIR	New Significant Impact
d. Violate applicable federal, state and local statutes and regulations relating to energy standards; or Result in a determination by the energy 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 energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects.	☒	☐	☐

Water, Wastewater, and Stormwater (Criteria 14a and 14b)

As described in the BVDSP EIR, EBMUD has accounted for the water demand projections associated with development under the BVDSP; and the BVDSP EIR determined that development under the BVDSP would not require new water supply entitlements, resources, facilities, or expansion of existing facilities beyond those already planned, and that impacts related to water supplies would be less than significant.

The BVDSP EIR also determined that development under the BVDSP would have less-than-significant impacts related to stormwater and wastewater facilities. Much of the Plan area is composed of impervious surfaces, and new development would likely decrease storm-drain runoff, because proposed projects would be required to incorporate additional pervious areas through landscaping, in compliance with City of Oakland requirements.

On the other hand, development projects may increase sewer capacity demand. Implementation of SCAs requiring stormwater control during and after construction would address potential impacts on stormwater treatment and sanitary sewer infrastructure.

Solid Waste Services (Criterion 14c)

As described in the BVDSP EIR, impacts associated with solid waste would be less than significant. Nonhazardous solid waste in the Plan area is ultimately hauled to the Altamont Landfill and Resource Facility. The Altamont Landfill would have sufficient capacity to accept waste generated by development under the BVDSP. In addition, implementation of

an SCA pertaining to waste reduction and recycling would reduce waste through compliance with the City of Oakland's Recycling Space Allocation Ordinance (Oakland Municipal Code, Chapter 17.118).

Energy (Criterion 14d)

Development under the BVDSP would result in less-than-significant impacts related to energy standards and use. Developments would be required to comply with the standards of Title 24 of the California Code of Regulations. SCAs pertaining to compliance with the green building ordinance would require construction projects to incorporate energy-conserving design measures.

Project Analysis and Conclusion

The BVDSP allows for flexibility with respect to the quantity and profile of future development within each subarea and between subareas as long as such development conforms to the general traffic generation parameters established by the Plan. The Development Program is not intended to be a cap that restricts development. As shown in Table 1 of Appendix D, the proposed project would provide more dwelling units on the site (i.e., 448 units instead of none) but less square footage for commercial uses (65,000 square feet instead of approximately 127,733 square feet). This difference, however, represents minor net changes in the Development Program in terms of environmental impacts because the proposed project conforms to the traffic generation parameters analyzed in the BVDSP EIR, as described above in Section 13, Transportation and Circulation. As such, the proposed project is within the envelope of the Development Program analyzed in the BVDSP EIR.

The water and sanitary sewer demand and stormwater facilities, as well as solid waste and energy associated with the proposed project, are consistent with the Development Program analyzed in the BVDSP EIR. All on-site utilities would be designed in accordance with applicable codes and current engineering practices. However, the proposed project would pay a sewer mitigation fee, which would either contribute to the cost of replacing pipes for the local collection system to increase capacity or be used to perform inflow and infiltration rehabilitation projects outside of the Plan area, as described in the BVDSP EIR.

Based on an examination of the analysis, findings, and conclusions in the BVDSP EIR, implementation of the proposed project would not substantially increase the severity of the significant impacts identified in that report, nor would it result in new significant impacts related to utilities and service systems that were not identified in the BVDSP EIR. The BVDSP EIR did not identify any mitigation measures related to utilities and service systems, and none would be required for the proposed project. The proposed project would be required to implement SCAs related to construction and demolition waste reductions and recycling, underground utilities, recycling collection and storage space, "green" building requirements, a sanitary sewer system, and the storm drain system, as

identified in Attachment A at the end of the CEQA checklist (SCA-UTIL-1: *Construction and Demolition Waste Reduction and Recycling*, SCA-UTIL-2: *Underground Utilities*, SCA-UTIL-3: *Recycling Collection and Storage Space*, SCA-UTIL-4: *Green Building Requirements*, and SCA-UTIL-5: *Sanitary Sewer System*, SCA-UTIL-6: *Storm Drain System*).

Attachment A: Standard Conditions of Approval and Mitigation Monitoring and Reporting Program

This Standard Conditions of Approval and Mitigation Monitoring and Reporting Program (SCAMMRP) is based on the CEQA Analysis prepared for the 24th and Harrison mixed-use residential development.

This SCAMMRP is in compliance with Section 15097 of the CEQA Guidelines, which requires that the Lead Agency "adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects." The SCAMMRP lists mitigation measures ("MM") recommended in the EIR and identifies mitigation monitoring requirements, as well as the City's Standard Conditions of Approval ("SCA") identified in the EIR as measures that would minimize potential adverse effects that could result from implementation of the project, to ensure the conditions are implemented and monitored.

All MMs and SCAs identified in the CEQA Analysis, which is consistent with the measures and conditions presented in the BVDSP EIR, are included herein. To the extent that there is any inconsistency between the SCA and MM, the more restrictive conditions shall govern; to the extent any MM and/or SCA identified in the CEQA Analysis were inadvertently omitted, they are automatically incorporated herein by reference.

- The first column identifies the SCA and MM applicable to that topic in the CEQA Analysis.
- The second column identifies the monitoring schedule or timing applicable to the Project.
- The third column names the party responsible for monitoring the required action for the Project.

The project sponsor is responsible for compliance with any recommendations in approved technical reports, all applicable mitigation measures adopted and with all conditions of approval set forth herein at its sole cost and expense, unless otherwise expressly provided in a specific mitigation measure or condition of approval, and subject to the review and approval of the City of Oakland. Overall monitoring and compliance with the mitigation measures will be the responsibility of the Planning and Zoning Division. Prior to the issuance of a demolition, grading, and/or construction permit, the project sponsor shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule.

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
Aesthetics, Shadow and Wind			
SCA-AES-1 *Graffiti Control.* a. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation: i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces. ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces. iii. Use of paint with anti-graffiti coating. iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED). v. Other practices approved by the City to deter, protect, or reduce the potential for graffiti defacement. b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include: i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system. ii. Covering with new paint to match the color of the surrounding surface. . Replacing with new surfacing (with City permits if required).	Ongoing	N/A	Bureau of Building
SCA-AES-2: *Landscape Plan.* a. *Landscape Plan Required* The project applicant shall submit a final Landscape Plan for City review and approval that is consistent with the approved Landscape Plan. The Landscape Plan shall be included with the set of drawings submitted for the construction-related permit and shall comply with the landscape requirements of chapter 17.124 of the Planning Code. b. *Landscape Installation* The project applicant shall implement the approved Landscape Plan unless a bond, cash deposit, letter of credit, or other equivalent instrument acceptable to the Director of City Planning, is provided. The financial instrument shall equal the greater of	Prior to approval of construction-related permit Prior to building permit final Ongoing	Bureau of Planning Bureau of Planning N/A	N/A Bureau of Building Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
\$2,500 or the estimated cost of implementing the Landscape Plan based on a licensed contractor's bid. c. *Landscape Maintenance* All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements. The property owner shall be responsible for maintaining planting in adjacent public rights-of-way. All required fences, walls, and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.			
SCA-AES-3: *Lighting.* Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector to prevent unnecessary glare onto adjacent properties.	Prior to building permit final	N/A	Bureau of Building
Air Quality			
SCA-AIR-1: *Construction-Related Air Pollution Controls (Dust and Equipment Emissions).* The project applicant shall implement all of the following applicable air pollution control measures during construction of the project: a. Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible. b. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. d. Pave all roadways, driveways, sidewalks, etc. within one month of site grading or as soon as feasible. In addition, building pads should be laid within one month of grading or as soon as feasible unless seeding or soil binders are used. e. Enclose, cover, water twice daily, or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).	During construction	N/A	Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
f. Limit vehicle speeds on unpaved roads to 15 miles per hour. g. Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points. h. Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations"). i. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. j. Portable equipment shall be powered by electricity if available. If electricity is not available, propane or natural gas shall be used if feasible. Diesel engines shall only be used if electricity is not available and it is not feasible to use propane or natural gas. k. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe. l. All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph. m. Install sandbags or other erosion control measures to prevent silt runoff to public roadways. n. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more). o. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust off-site. Their duties shall include holidays and weekend periods when work may not be in progress. p. Install appropriate wind breaks (e.g., trees, fences)			

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
on the windward side(s) of actively disturbed areas of the construction site to minimize wind-blown dust. Wind breaks must have a maximum 50 percent air porosity. q. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. r. Activities such as excavation, grading, and other ground-disturbing construction activities shall be phased to minimize the amount of disturbed surface area at any one time. s. All trucks and equipment, including tires, shall be washed off prior to leaving the site. t. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel. u. All equipment to be used on the construction site and subject to the requirements of Title 13, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations") must meet emissions and performance requirements one year in advance of any fleet deadlines. Upon request by the City, the project applicant shall provide written documentation that fleet requirements have been met. v. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings). w. All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM. x. Off-road heavy diesel engines shall meet the California Air Resources Board's most recent certification standard. y. Post a publicly-visible large on-site sign that includes the contact name and phone number for the project complaint manager responsible for responding to dust complaints and the telephone numbers of the City's Code Enforcement unit and the Bay Area Air Quality Management District. When contacted, the project complaint manager shall respond and take corrective action within 48 hours.			
Note: Screening analysis demonstrated that the proposed project would be below the applicable threshold. No further action is required under this SCA. **SCA-AIR-2:** *Exposure to Air Pollution (Toxic Air*	Ongoing	N/A	Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
Contaminants). a. Health Risk Reduction Measures The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants. b. Maintenance of Health Risk Reduction Measures The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.			
Note: Screening analysis demonstrated that the proposed project would be below the applicable threshold. No further action is required under this SCA. **SCA-AIR-3:** *Stationary Sources of Air Pollution (Toxic Air Contaminants).* The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to on-site stationary sources of toxic air contaminants.	Prior to approval of construction-related permit	Bureau of Planning	Bureau of Building
SCA-AIR-4: *Truck-Related Risk Reduction Measures (Toxic Air Contaminants).* a) Truck Loading Docks The project applicant shall locate proposed truck loading docks as far from nearby sensitive receptors as feasible. b) Truck Fleet Emission Standards The project applicant shall comply with all applicable California Air Resources Board (CARB) requirements to control emissions from diesel engines and demonstrate compliance to the satisfaction of the City. Methods to comply include, but are not limited to, new clean diesel trucks, lower-tier diesel engine trucks with added Particulate Matter (PM) filters, hybrid trucks, alternative energy trucks, or other methods that achieve the applicable CARB emission standard. Compliance with this requirement shall be verified through CARB's Verification Procedures for In-Use Strategies to Control Emissions from Diesel Engines.	Prior to approval of construction-related permit Prior to building permit final; ongoing	Bureau of Planning	Bureau of Building
SCA-AIR-5: *Asbestos in Structures.* The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8;	Prior to approval of construction-related permit	Applicable regulatory agency with jurisdiction	Applicable regulatory agency with jurisdiction

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
California Business and Professions Code, Division 3; California Health and Safety Code sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request.			
SCA-AIR-6: *Transportation and Parking Demand Management (TDM) Plan Required.* Refer to SCA-TRANS-4 under Transportation.	See below.	See below.	See below.
Note: Screening analysis demonstrated that the proposed project would be below the applicable threshold. No further action is required under this SCA. **Mitigation Measure AIR-4:** *Risk Reduction Plan.* Applicants for projects that would include backup generators shall prepare and submit to the City, a Risk Reduction Plan for City review and approval. The applicant shall implement the approved plan. This Plan shall reduce cumulative localized cancer risks to the maximum feasible extent. The Risk Reduction Plan may contain, but is not limited to the following strategies: • Demonstration using screening analysis or a health risk assessment that project sources, when combined with local cancer risks from cumulative sources with 1,000 feet would be less than 100 in one million. • Installation of non-diesel fueled generators. • Installation of diesel generators with an EPA-certified Tier 4 engine or Engines that are retrofitted with an ARB Level 3 Verified Diesel Emissions Control Strategy.	Prior to issuance of a demolition, grading, or building permit	N/A	Bureau of Building Building Services Division, Zoning Inspection
Biological Resources			
SCA-BIO-1: *Bird Collision Reduction Measures.* The project applicant shall submit a Bird Collision Reduction Plan for City review and approval to reduce potential bird collisions to the maximum feasible extent. The Plan shall include all of the following mandatory measures, as well as applicable and specific project Best Management Practice (BMP) strategies to reduce bird strike impacts to the maximum feasible extent. The project applicant shall implement the approved Plan. Mandatory measures include all of the following: 1. For large buildings subject to federal aviation safety regulations, install minimum intensity white strobe lighting with three second flash instead of solid red or rotating lights. 2. Minimize the number of and co-locate rooftop-antennas and other rooftop structures. 3. Monopole structures or antennas shall not include guy wires.	Prior to approval of construction-related permit	Bureau of Planning	Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
4. Avoid the use of mirrors in landscape design. 5. Avoid placement of bird-friendly attractants (i.e., landscaped areas, vegetated roofs, water features) near glass unless shielded by architectural features taller than the attractant that incorporate bird friendly treatments no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule), as explained below. 6. Apply bird-friendly glazing treatments to no less than 90 percent of all windows and glass between the ground and 60 feet above ground or to the height of existing adjacent landscape or the height of the proposed landscape. Examples of bird-friendly glazing treatments include the following: • Use opaque glass in window panes instead of reflective glass. • Uniformly cover the interior or exterior of clear glass surface with patterns (e.g., dots, stripes, decals, images, abstract patterns). Patterns can be etched, fritted, or on films and shall have a density of no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule). • Install paned glass with fenestration patterns with vertical and horizontal mullions no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule). • Install external screens over non-reflective glass (as close to the glass as possible) for birds to perceive windows as solid objects. • Install UV-pattern reflective glass, laminated glass with a patterned UV-reflective coating, or UV-absorbing and UV-reflecting film on the glass since most birds can see ultraviolet light, which is invisible to humans. • Install decorative grilles, screens, netting, or louvers, with openings no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule). • Install awnings, overhangs, sunshades, or light shelves directly adjacent to clear glass which is recessed on all sides. • Install opaque window film or window film with a pattern/design which also adheres to the "two-by-four" rule for coverage. 7. Reduce light pollution. Examples include the following: • Extinguish night-time architectural illumination treatments during bird migration season			

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
(February 15 to May 15 and August 15 to November 30). • Install time switch control devices or occupancy sensors on non-emergency interior lights that can be programmed to turn off during non-work hours and between 11:00 p.m. and sunrise. • Reduce perimeter lighting whenever possible. • Install full cut-off, shielded, or directional lighting to minimize light spillage, glare, or light trespass. • Do not use beams of lights during the spring (February 15 to May 15) or fall (August 15 to November 30) migration. 8. Develop and implement a building operation and management manual that promotes bird safety. Example measures in the manual include the following: • Donation of discovered dead bird specimens to an authorized bird conservation organization or museums (e.g., UC Berkeley Museum of Vertebrate Zoology) to aid in species identification and to benefit scientific study, as per all federal, state and local laws. • Distribution of educational materials on bird-safe practices for the building occupants. Contact Golden Gate Audubon Society or American Bird Conservancy for materials. • Asking employees to turn off task lighting at their work stations and draw office blinds, shades, curtains, or other window coverings at end of work day. • Install interior blinds, shades, or other window coverings in windows above the ground floor visible from the exterior as part of the construction contract, lease agreement, or CC&Rs. • Schedule nightly maintenance during the day or to conclude before 11:00 p.m., if possible.			
SCA-BIO-2: *Tree Removal During Bird Breeding Season.* To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February 1 to August 15 (or during December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days	Prior to removal of trees	Bureau of Building.	Bureau of Building.

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.			
SCA-BIO-3: *Tree Permit.* Tree Permit required. Tree Protection during construction. Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist: 1. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree. 2. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree. 3. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the	Prior to approval of construction-related permit During construction	Permit approval by Public Works Department, Tree Division; evidence of approval submitted to Bureau of Building Public Works Department, Tree Division	Bureau of Building Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree. 4. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration. 5. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed. 6. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.			
Cultural Resources			
SCA-CUL-1: *Archaeological and Paleontological Resources – Discovery During Construction.* Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate	During construction	N/A	Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration 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, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented. In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense. In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.			
SCA-CUL-2: *Human Remains – Discovery During Construction.* Pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda	During construction	N/A	Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event 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 California Health and Safety Code. 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 and at the expense of the project applicant.			
SCA-CUL-3: *Property Relocation.* Pursuant to Policy 3.7 of the Historic Preservation Element of the Oakland General Plan, the project applicant shall make a good faith effort to relocate the historic resource to a site acceptable to the City. A good faith effort includes, at a minimum, all of the following: a. Advertising the availability of the building by: (1) posting of large visible signs (such as banners, at a minimum of 3' x 6' size or larger) at the site; (2) placement of advertisements in Bay Area news media acceptable to the City; and (3) contacting neighborhood associations and for-profit and not-for-profit housing and preservation organizations; b. Maintaining a log of all the good faith efforts and submitting that along with photos of the subject building showing the large signs (banners) to the City; c. Maintaining the signs and advertising in place for a minimum of 90 days; and d. Making the building available at no or nominal cost (the amount to be reviewed by the Oakland Cultural Heritage Survey) until removal is necessary for construction of a replacement project, but in no case for less than a period of 90 days after such advertisement.	Prior to approval of construction-related permit	Bureau of Planning (including Oakland Cultural Resource Survey)	N/A
Geology, Soils and Geohazards			
SCA-GEO-1: *Construction-Related Permit(s).* The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction.	Prior to approval of construction-related permit	Bureau of Building	Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
SCA-GEO-2: *Soils Report.* The project applicant shall submit a soils report prepared by a registered geotechnical engineer for City review and approval. The soils report shall contain, at a minimum, field test results and observations regarding the nature, distribution and strength of existing soils, and recommendations for appropriate grading practices and project design. The project applicant shall implement the recommendations contained in the approved report during project design and construction.	Prior to approval of construction-related permit	Bureau of Building	Bureau of Building
SCA-GEO-3: *Seismic Hazards Zone (Landslide/Liquefaction.* The project applicant shall submit a site-specific geotechnical report, consistent with California Geological Survey Special Publication 117 (as amended), prepared by a registered geotechnical engineer for City review and approval containing at a minimum a description of the geological and geotechnical conditions at the site, an evaluation of site-specific seismic hazards based on geological and geotechnical conditions, and recommended measures to reduce potential impacts related to liquefaction and/or slope stability hazards. The project applicant shall implement the recommendations contained in the approved report during project design and construction.	Prior to approval of construction-related permit	Bureau of Building	Bureau of Building
Hazards and Hazardous Materials			
SCA-HAZ-1: *Hazardous Materials Related to Construction.* The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following: a. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction; b. Avoid overtopping construction equipment fuel gas tanks; c. During routine maintenance of construction equipment, properly contain and remove grease and oils; d. Properly dispose of discarded containers of fuels and other chemicals; e. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and f. If soil, groundwater, or other environmental	During construction	N/A	Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the project applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.			
SCA-HAZ-2: *Site Contamination.* *a. Environmental Site Assessment Required* The project applicant shall submit a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report if warranted by the Phase I report, for the project site for review and approval by the City. The report(s) shall be prepared by a qualified environmental assessment professional and include recommendations for remedial action, as appropriate, for hazardous materials. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency. Consistent with the Phase II ESA prepared for the project, a site management plan shall be prepared by the project sponsor, and shall set out procedures to ensure protection of workers and the environment. In addition, if new or more significant contamination is encountered during site redevelopment earthwork, the project sponsor shall confirm that any cleanup actions are performed consistent with applicable laws and local agency requirements as required. *b. Health and Safety Plan Required* The project applicant shall submit a Health and Safety Plan for review and approval by the City to	Prior to approval of construction-related permit Prior to approval of construction-related permit During construction	Oakland Fire Department Bureau of Building N/A	Oakland Fire Department Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
protect project construction workers from risks associated with hazardous materials. The project applicant shall implement the approved Plan. *c. Best Management Practices Required for Contaminated Sites* The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential soil and groundwater hazards. These shall include the following: i. Soil generated by construction activities shall be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state, and federal requirements. ii. Groundwater pumped from the subsurface shall be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building.			
SCA-HAZ-3: *Hazardous Materials Business Plan.* The project applicant shall submit a Hazardous Materials Business Plan for review and approval by the City, and shall implement the approved Plan. The approved Plan shall be kept on file with the City and the project applicant shall update the Plan as applicable. The purpose of the Hazardous Materials Business Plan is to ensure that employees are adequately trained to handle hazardous materials and provides information to the Fire Department should emergency response be required. Hazardous materials shall be handled in accordance with all applicable local, state, and federal requirements. The Hazardous Materials Business Plan shall include the following: a. The types of hazardous materials or chemicals stored and/or used on-site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids. b. The location of such hazardous materials. c. An emergency response plan including employee training information. d. A plan that describes the manner in which these	Prior to building permit final	Oakland Fire Department	Oakland Fire Department

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
materials are handled, transported, and disposed.			
Hydrology and Water Quality			
SCA-HYD-1: *Erosion and Sedimentation Control Plan for Construction.* *a. Erosion and Sedimentation Control Plan Required* The project applicant shall submit an Erosion and Sedimentation Control Plan to the City for review and approval. The Erosion and Sedimentation Control Plan shall include all necessary measures to be taken to prevent excessive stormwater runoff or carrying by stormwater runoff of solid materials on to lands of adjacent property owners, public streets, or to creeks as a result of conditions created by grading and/or construction operations. The Plan shall include, but not be limited to, such measures as short-term erosion control planting, waterproof slope covering, check dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, devices to trap, store and filter out sediment, and stormwater retention basins. Off-site work by the project applicant may be necessary. The project applicant shall obtain permission or easements necessary for off-site work. There shall be a clear notation that the plan is subject to changes as changing conditions occur. Calculations of anticipated stormwater runoff and sediment volumes shall be included, if required by the City. The Plan shall specify that, after construction is complete, the project applicant shall ensure that the storm drain system shall be inspected and that the project applicant shall clear the system of any debris or sediment. *b. Erosion and Sedimentation Control During Construction* The project applicant shall implement the approved Erosion and Sedimentation Control Plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Bureau of Building.	Prior to approval of construction-related permit During construction	Bureau of Building N/A	N/A Bureau of Building
SCA-HYD-2*: State Construction General Permit.* The project applicant shall comply with the requirements of the Construction General Permit issued by the State Water Resources Control Board (SWRCB). The project applicant shall submit a Notice of Intent (NOI), Stormwater Pollution Prevention Plan (SWPPP), and other required Permit Registration Documents to SWRCB. The project applicant shall submit evidence of compliance with Permit requirements to the City.	Prior to approval of construction-related permit	State Water Resources Control Board; evidence of compliance submitted to Bureau of Building	State Water Resources Control Board

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
SCA-HYD-3: *NPDES C.3 Stormwater Requirements for Regulated Projects.* *a. Post-Construction Stormwater Management Plan Required* The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction. The Post-Construction Stormwater Management Plan shall include and identify the following: i. Location and size of new and replaced impervious surface; ii. Directional surface flow of stormwater runoff; iii. Location of proposed on-site storm drain lines; iv. Site design measures to reduce the amount of impervious surface area; v. Source control measures to limit stormwater pollution; vi. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and vii. Hydromodification management measures, if required by Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff. *b. Maintenance Agreement Required* The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following: i. The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and ii. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board,	Prior to approval of construction-related permit Prior to building permit final	Bureau of Planning; Bureau of Building Bureau of Building	Bureau of Building Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary. The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense.			
Noise			
SCA-NOI-1: *Construction Days/Hours.* The project applicant shall comply with the following restrictions concerning construction days and hours: a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday. c. No construction is allowed on Sunday or federal holidays. Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area. Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to	During construction	N/A	Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
distribution of the public notice.			
SCA-NOI-2: *Construction Noise.* The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following: a. Equipment and trucks used for project construction shall utilize 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. b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, 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, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. c. Applicant shall use temporary power poles instead of generators where feasible. d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction. e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.	During construction	N/A	Bureau of Building
SCA-NOI-3: *Extreme Construction Noise.* *a. Construction Noise Management Plan Required* Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts	Prior to approval of construction-related permit During construction	Bureau of Building Bureau of Building	Bureau of Building Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following: i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings; ii. Implement "quiet" pile driving technology (such as pre-drilling of piles, 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; iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site; iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and v. Monitor the effectiveness of noise attenuation measures by taking noise measurements. *b. Public Notification Required* The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented.			
SCA-NOI-4: *Construction Noise Complaints.* The project applicant shall submit to the City for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include: a. Designation of an on-site construction complaint and enforcement manager for the project; b. A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the	Prior to approval of construction-related permit	Bureau of Building	Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
project complaint manager and City Code Enforcement unit; c. Protocols for receiving, responding to, and tracking received complaints; and d. Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request.			
SCA-NOI-5: *Operational Noise.* Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City.	Ongoing	N/A	Bureau of Building
SCA-NOI-6: *Exposure to Community Noise.* The project applicant shall submit a Noise Reduction Plan prepared by a qualified acoustical engineer for City review and approval that contains noise reduction measures (e.g., sound-rated window, wall, and door assemblies) to achieve an acceptable interior noise level in accordance with the land use compatibility guidelines of the Noise Element of the Oakland General Plan. The applicant shall implement the approved Plan during construction. To the maximum extent practicable, interior noise levels shall not exceed the following: a. 45 dBA: Residential activities, civic activities, hotels b. 50 dBA: Administrative offices; group assembly activities c. 55 dBA: Commercial activities d. 65 dBA: Industrial activities	Prior to approval of construction-related permit	Bureau of Planning	Bureau of Building
Transportation and Circulation			
Mitigation Measure TRANS-2: Implement the following measures at the Perry Place / I 580 Eastbound Ramps/Oakland Avenue intersection: • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection) for the PM peak hour • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group. This intersection is under the jurisdiction of Caltrans so any equipment or facility upgrades must be approved by Caltrans prior to installation. • To implement this measure, the project sponsor shall submit the following to City of Oakland's	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, at the time when about 15 percent of the Development Program is		City of Oakland Planning and Building Department City of Oakland – Building Services Division, Zoning Inspection City of Oakland

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection

Transportation Services Division and Caltrans for review and approval:
• Plans, Specifications, and Estimates (PS&E) to modify intersection. All elements shall be designed to City and Caltrans standards in effect at the time of construction and all new or upgraded signals should include these enhancements. All other facilities supporting vehicle travel and alternative modes through the intersection should be brought up to both City standards and Americans with Disabilities Act (ADA) standards (according to Federal and State Access Board guidelines) at the time of construction. Current City Standards call for the elements listed below:
  • 2070L Type Controller with cabinet assembly
  • GPS communications (clock)
  • Accessible pedestrian crosswalks according to Federal and State Access Board guidelines with signals (audible and tactile)
  • Countdown pedestrian head module switch out
  • City standard ADA wheelchair ramps
  • Video detection on existing (or new, if required)
  • Mast arm poles, full actuation (where applicable)
  • Polara push buttons (full actuation)
  • Bicycle detection (full actuation)
  • Pull boxes
  • Signal interconnect and communication with trenching (where applicable), or through (E) conduit (where applicable) – 600 feet maximum
  • Conduit replacement contingency
  • Fiber Switch
  • PTZ Camera (where applicable)
  • Transit Signal Priority (TSP) equipment consistent with other signals along corridor
• Signal timing plans for the signals in the coordination group.
 	
The project sponsor shall fund the cost of preparing and implementing these plans. However, if the City adopts a transportation impact fee program prior to implementation of this mitigation measure, the project sponsor shall have the option to pay the applicable fee in lieu of implementing this mitigation measure and payment of the fee shall be considered the equivalent of implementing the mitigation measure, which would still result in significant unavoidable impacts.
 	
A straight line interpolation of intersection traffic volume between Existing and Existing Plus Project conditions indicates that mitigation at this intersection may be required when about 15 percent of the Development Program is developed. Investigation of the need for this mitigation shall be studied at the time when this threshold is reached and every three years
	operational and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.
	
	The City of Oakland will notify the Project Sponsor when this threshold is reached.
	
	If investigations at the required intervals show this mitigation is still required, the Project Sponsor will submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation.
			Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.			
Mitigation Measure TRANS-10: Implement the following measures at the 27th Street/24th Street/Bay Place/Harrison Street intersection: • Reconfigure the 24th Street approach at the intersection to restrict access to 24th Street to right turns only from 27th Street and create a pedestrian plaza at the intersection approach. • Convert 24th Street between Valdez and Harrison Streets to two-way circulation and allow right turns from 24th Street to southbound Harrison Street south of the intersection, which would require acquisition of private property in the southwest corner of the intersection. • Modify eastbound 27th Street approach from the current configuration (one right-turn lane, two through lanes, and one left-turn lane) to provide one right-turn lane, one through lane, and two left-turn lanes. • Realign pedestrian crosswalks to shorten pedestrian crossing distances. • Reduce signal cycle length from 160 to 120 seconds, and optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group. To implement this measure, the project sponsor shall submit the following to City of Oakland's Transportation Services Division for review and approval: • PS&E to modify intersection as detailed in Mitigation Measure TRANS-2. • Signal timing plans for the signals in the coordination group. The project sponsor shall fund the cost of preparing and implementing these plans. However, if the City adopts a transportation impact fee program prior to implementation of this mitigation measure, the project sponsor shall have the option to pay the applicable fee in lieu of implementing this mitigation measure and payment of the fee shall be considered the equivalent of implementing the mitigation measure, which would still result in significant unavoidable impacts. A straight line interpolation of intersection traffic volume between Existing and 2020 Plus Project conditions indicates that mitigation at this intersection may be required by 2017. Investigation of the need for	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2016 (one year prior to the horizon date) and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. If investigations in 2016, or subsequent years, as stipulated above, show this mitigation is still required, submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably determined by		City of Oakland Planning and Building Department City of Oakland – Building Services Division, Zoning Inspection City of Oakland Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
this mitigation shall be studied at that time and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.	the City.		
Mitigation Measure TRANS-22: Implement the following measures at the 27th Street/Broadway intersection: • Upgrade traffic signal operations at the intersection to actuated-coordinated operations • Reconfigure westbound 27th Street approach to provide a 150-foot left-turn pocket, one through lane, and one shared through/right-turn lane. • Provide protected left-turn phase(s) for the northbound and southbound approaches. • Optimize signal timing (i.e., changing the amount of green time assigned to each lane of traffic approaching the intersection). • Coordinate the signal timing changes at this intersection with the adjacent intersections that are in the same signal coordination group. To implement this measure, the project sponsor shall submit the following to City of Oakland's Transportation Services Division for review and approval: • PS&E to modify intersection as detailed in Mitigation Measure TRANS-2. Signal timing plans for the signals in the coordination group. The project sponsor shall fund the cost of preparing and implementing these plans. However, if the City adopts a transportation impact fee program prior to implementation of this mitigation measure, the project sponsor shall have the option to pay the applicable fee in lieu of implementing this mitigation measure and payment of the fee shall be considered the equivalent of implementing the mitigation measure, which would still result in significant unavoidable impacts. A straight line interpolation of intersection traffic volume between Existing and 2035 Plus Project conditions indicates that mitigation at this intersection may be required by 2024. Investigation of the need for this mitigation shall be studied at that time and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first.	Investigation of the need for this mitigation shall be studied and submitted for review and approval to the City of Oakland, in 2023 (one year prior to the horizon date),and every three years thereafter until 2035 or until the mitigation measure is implemented, whichever occurs first. If investigations in 2023, or subsequent years as stipulated above, show this mitigation is still required, submit Plans, Specifications, and Estimates (PS&E) for review and approval by the City for implementation of this mitigation. This requirement may be requested at an earlier date than listed if the improvements are needed as reasonably		City of Oakland Planning and Building Department City of Oakland – Building Services Division, Zoning Inspection City of Oakland Transportation Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
	determined by the City.		
SCA-TRANS-1: *Construction Activity in the Public Right-of-Way.* a. Obstruction Permit Required The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets and sidewalks. b. Traffic Control Plan Required In the event of obstructions to vehicle or bicycle travel lanes, the project applicant shall submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit. The project applicant shall submit evidence of City approval of the Traffic Control Plan with the application for an obstruction permit. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle, and pedestrian detours, including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The project applicant shall implement the approved Plan during construction. c. Repair of City Streets The project applicant shall repair any damage to the public right-of way, including streets and sidewalks caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately.	Prior to approval of construction-related permit Prior to approval of construction-related permit Prior to building permit final	Bureau of Building Public Works Department, Transportation Services Division N/A	Bureau of Building Bureau of Building Bureau of Building
SCA-TRANS-2: *Bicycle Parking.* The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements.	Prior to approval of construction-related permit	Bureau of Planning	Bureau of Building
SCA-TRANS-3: *Transportation Improvements.* The project applicant shall implement the recommended on- and off-site transportation-related improvements contained within the Transportation Impact Study for the project (e.g., signal timing adjustments, restriping, signalization, traffic control devices, roadway reconfigurations, and pedestrian and bicyclist amenities). The project applicant is responsible for funding and installing the improvements, and shall obtain all necessary permits and approvals from the City and/or other applicable regulatory agencies such as, but not limited to, Caltrans (for improvements	Prior to building permit final or as otherwise specified	Bureau of Building; Public Works Department, Transportation Services Division	Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
related to Caltrans facilities) and the California Public Utilities Commission (for improvements related to railroad crossings), prior to installing the improvements. To implement this measure for intersection modifications, the project applicant shall submit Plans, Specifications, and Estimates (PS&E) to the City for review and approval. All elements shall be designed to applicable City standards in effect at the time of construction and all new or upgraded signals shall include these enhancements as required by the City. All other facilities supporting vehicle travel and alternative modes through the intersection shall be brought up to both City standards and ADA standards (according to Federal and State Access Board guidelines) at the time of construction. Current City Standards call for, among other items, the elements listed below: a. 2070L Type Controller with cabinet accessory b. GPS communication (clock) c. Accessible pedestrian crosswalks according to Federal and State Access Board guidelines with signals (audible and tactile) d. Countdown pedestrian head module switch out e. City Standard ADA wheelchair ramps f. Video detection on existing (or new, if required) g. Mast arm poles, full activation (where applicable) h. Polara Push buttons (full activation) i. Bicycle detection (full activation) j. Pull boxes k. Signal interconnect and communication with trenching (where applicable), or through existing conduit (where applicable), 600 feet maximum l. Conduit replacement contingency m. Fiber switch n. PTZ camera (where applicable) o. Transit Signal Priority (TSP) equipment consistent with other signals along corridor p. Signal timing plans for the signals in the coordination group			
SCA-TRANS-4: *Transportation and Parking Demand Management.* a. Transportation and Parking Demand Management (TDM) Plan Required The project applicant shall submit a Transportation and Parking Demand Management (TDM) Plan for review and approval by the City. i. The goals of the TDM Plan shall be the following: • Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable, consistent with the potential traffic and parking impacts of the	Prior to approval of construction-related permit Prior to building permit final Ongoing	Bureau of Planning Bureau of Building Bureau of Planning	N/A Bureau of Building Bureau of Planning

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
project. • Achieve the following project vehicle trip reductions (VTR): o Projects generating 50-99 net new AM or PM peak hour vehicle trips: 10 percent VTR o Projects generating 100 or more net new AM or PM peak hour vehicle trips: 20 percent VTR • Increase pedestrian, bicycle, transit, and carpool/vanpool modes of travel. All four modes of travel shall be considered, as appropriate. • Enhance the City's transportation system, consistent with City policies and programs. ii. TDM strategies to consider include, but are not limited to, the following: • Inclusion of additional long-term and short-term bicycle parking that meets the design standards set forth in chapter five of the Bicycle Master Plan and the Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement. • Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority bikeways, on-site signage and bike lane striping. • Installation of safety elements per the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.) to encourage convenient and safe crossing at arterials, in addition to safety elements required to address safety impacts of the project. • Installation of amenities such as lighting, street trees, and trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan. • Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements. • Direct on-site sales of transit passes purchased and sold at a bulk group rate (through programs such as AC Transit Easy Pass or a similar program through another transit agency). • Provision of a transit subsidy to employees or residents, determined by the project			

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
applicant and subject to review by the City, if employees or residents use transit or commute by other alternative modes. • Provision of an ongoing contribution to transit service to the area between the project and nearest mass transit station prioritized as follows: 1) Contribution to AC Transit bus service; 2) Contribution to an existing area shuttle service; and 3) Establishment of new shuttle service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario 3). • Guaranteed ride home program for employees, either through 511.org or through separate program. • Pre-tax commuter benefits (commuter checks) for employees. • Free designated parking spaces for on-site car-sharing program (such as City Car Share, Zip Car, etc.) and/or car-share membership for employees or tenants. • On-site carpooling and/or vanpool program that includes preferential (discounted or free) parking for carpools and vanpools. • Distribution of information concerning alternative transportation options. • Parking spaces sold/leased separately for residential units. Charge employees for parking, or provide a cash incentive or transit pass alternative to a free parking space in commercial properties. • Parking management strategies including attendant/valet parking and shared parking spaces. • Requiring tenants to provide opportunities and the ability to work off-site. • Allow employees or residents to adjust their work schedule in order to complete the basic work requirement of five eight-hour workdays by adjusting their schedule to reduce vehicle trips to the worksite (e.g., working four, ten-hour days; allowing employees to work from home two days per week). • Provide or require tenants to provide employees with staggered work hours involving a shift in the set work hours of all employees at the workplace or flexible work hours involving individually determined work hours.			

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
The TDM Plan shall indicate the estimated VTR for each strategy, based on published research or guidelines where feasible. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report. b. TDM Implementation – Physical Improvements For VTR strategies involving physical improvements, the project applicant shall obtain the necessary permits/approvals from the City and install the improvements prior to the completion of the project. c. TDM Implementation – Operational Strategies For projects that generate 100 or more net new AM or PM peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR achieved by the project during operation. If deemed necessary, the City may elect to have a peer review consultant, paid for by the project applicant, review the annual report. If timely reports are not submitted and/or the annual reports indicate that the project applicant has failed to implement the TDM Plan, the project will be considered in violation of the Conditions of Approval and the City may initiate enforcement action as provided for in these Conditions of Approval. The project shall not be considered in violation of this Condition if the TDM Plan is implemented but the VTR goal is not achieved.			
Utilities and Service Systems			
SCA-UTIL-1*: Construction and Demolition Waste Reduction and Recycling.* The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new	Prior to approval of construction-related permit	Public Works Department, Environmental Services Division	Public Works Department, Environmental Services Division

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
construction, renovations/alterations/modifications with construction values of $50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center.			
SCA-UTIL-2: *Underground Utilities.* The project applicant shall place underground all new utilities serving the project and under the control of the project applicant and the City, including all new gas, electric, cable, and telephone facilities, fire alarm conduits, street light wiring, and other wiring, conduits, and similar facilities. The new facilities shall be placed underground along the project's street frontage and from the project structures to the point of service. Utilities under the control of other agencies, such as PG&E, shall be placed underground if feasible. All utilities shall be installed in accordance with standard specifications of the serving utilities.	During construction	N/A	Bureau of Building
SCA-UTIL-3: *Recycling Collection and Storage Space.* The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two cubic feet of storage and collection space per residential unit is required, with a minimum of ten cubic feet. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten cubic feet.	Prior to approval of construction-related permit	Bureau of Planning	Bureau of Building
SCA-UTIL-4: *Green Building Requirements.* *a. Compliance with Green Building Requirements During Plan-Check* The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code). i. The following information shall be submitted to the City for review and approval with the	Prior to approval of construction-related permit During construction After project completion as specified	Bureau of Building N/A Bureau of Planning	N/A Bureau of Building Bureau of Building

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
application for a building permit: • Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards. • Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit. • Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit. • Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below. • Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance. • Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit. • Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. ii. The set of plans in subsection (i) shall demonstrate compliance with the following: • CALGreen mandatory measures. • All pre-requisites per the green building checklist approved during the review of the Planning and Zoning permit, or, if applicable, all the green building measures approved as part of the Unreasonable Hardship Exemption granted during the review of the Planning and Zoning permit. • Minimum of 23 points per the appropriate checklist approved during the Planning entitlement process. • All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously			

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
approved points that will be eliminated or substituted. • The required green building point minimums in the appropriate credit categories. *b. Compliance with Green Building Requirements During Construction* The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project. The following information shall be submitted to the City for review and approval: i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit. ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance. iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. *c. Compliance with Green Building Requirements After Construction* Within sixty (60) days of the final inspection of the building permit for the project, the Green Building Certifier shall submit the appropriate documentation to Build It Green and attain the minimum required certification/point level. Within one year of the final inspection of the building permit for the project, the applicant shall submit to the Bureau of Planning the Certificate from the organization listed above demonstrating certification and compliance with the minimum point/certification level noted above.			
SCA-UTIL-5: *Sanitary Sewer System.* The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule	Prior to approval of construction-related permit	Public Works Department, Department of Engineering and Construction	N/A

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring		
	When Required	Initial Approval	Monitoring/ Inspection
for funding improvements to the sanitary sewer system.			
SCA-UTIL-6: *Storm Drain System.* The project storm drainage system shall be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition.	Prior to approval of construction-related permit	Bureau of Building	Bureau of Building

Attachment B: Project Consistency with Community Plans or Zoning, Per CEQA Guidelines Section 15183

Section 15183(a) of the California Environmental Quality Act (CEQA) Guidelines states that "…projects which are consistent with the development density established by the existing zoning, community plan, or general plan policies for which an Environmental Impact Report (EIR) was certified shall not require additional environmental review, except as may be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site."

Proposed Project. The proposed project would be located in the Broadway Valdez District Specific Plan (BVDSP)[1] area (Plan area). It would demolish existing buildings and surface parking lots and construct a new mixed-use building of approximately 730,655 gross square feet, with 18 stories and up to 200 feet in height. The project would include up to 448 residential units and up to 65,000 square feet of retail.

Project Consistency. The BVDSP EIR was prepared for the BVDSP; it was certified by the Planning Commission on May 21, 2014, and confirmed by the City Council on June 17, 2014. As determined by the City of Oakland Bureau of Planning, the proposed project is permitted in the zoning district in which it is located, and is consistent with the bulk, density, and land uses envisioned in the Plan area, as outlined below.

- The land use designation for the site is Central Business District. This classification is intended to encourage, support, and enhance the downtown area as a high-density mixed-use urban center of regional importance, and a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation. The proposed mixed-use project would be consistent with this designation.
- The project site is zoned Broadway Valdez District Retail Priority Sites Commercial Zone 1 (D-BV-1), Retail Priority Site 4B. The regulatory framework of D-BV-1 ensures that larger sites and opportunity areas are reserved primarily for new large-scale retail development that is oriented toward consumer goods, at least on the ground floor. A property that is zoned as D-BV-1 Retail Priority Site is allowed to include residential uses only if a project were to include a retail component of a certain size and type as further described below. The proposed project would be consistent with the regulatory framework of D-BV-1, as it would provide large-scale retail oriented toward consumer goods along the ground and second floors along 27th and 24th streets. The proposed

[1] City of Oakland, 2014. Broadway Valdez District Specific Plan. Adopted June.

project would include approximately 65,000 square feet of commercial uses on four levels, with 32,010 square feet on the ground level, 6,599 square feet on the second level, 19,472 square feet on the mezzanine level, and 6,919 square feet on the third level.

- The project site is also within the 45* height area. In this area, height and density is limited by the amount of retail square footage provided by the proposed project. To exceed 45 feet in height, and to allow residential uses, projects must provide a minimum retail square footage of 50 percent of the lot area. Residential uses are conditionally permitted once the 50 percent retail uses threshold is met.
- The project site is approximately 2.28 acres (99,202 square feet). Retail Priority Site 4B, which includes the project site as well as adjacent parcels, requires 54,567 square feet of retail to meet the 50 percent threshold.[2] The proposed project would provide approximately 65,000 square feet of retail space and would exceed the 50 percent Retail Priority Site area threshold. Therefore, in accordance with Section 15183.3 of the CEQA Guidelines, the proposed project is consistent with the BVDSP EIR.
- Because the project achieves the 50 percent Retail Priority Site area threshold, the permitted FAR is 8.0 for the non-residential areas of the project site. The project site is approximately 99,202 square feet, and therefore the maximum non-residential FAR allowed would be 793,616 square feet. The proposed project could provide approximately 65,000 square feet of retail space and is well below the maximum FAR. Therefore, the proposed project would comply with the amount of non-residential FAR allowed under the Planning Code.
- Projects that satisfy the criteria for the Retail Priority Site area, as described above, are allowed a maximum base height of 85 feet and a maximum height of 200 feet. Because the proposed project would meet the Retail Priority Site area criterion, a maximum height of 200 feet would be allowed at the site. The proposed project would be 18 stories tall and would not exceed 200 feet (i.e., at the top of the roof structure), as measured by the Building Department. Consequently, in accordance with Section 15183.3 of the CEQA Guidelines, the proposed project is consistent with the BVDSP.
- With respect to residential density, the 45* height area allows for 1 dwelling unit per 125 square feet of retail use with a conditional use permit.[3] As noted above, the proposed project would provide up to 65,000 square feet of retail space. As such, the maximum residential density on the project site would be 475 dwelling units. The

[2] Table 17.101C.05 of the Oakland Planning Code indicates 54,567 square feet of retail would achieve the 50 percent of retail Priority Site area for site 4B. This percentage applies even though the project site does not include all of site 4B.

[3] Per Table 17.101C.05 and Table 17.101C.06 of the Oakland Planning Code.

proposed project would construct up to 448 dwelling units. Therefore, the proposed project would comply with the amount of residential density allowed under the Planning Code and fits within the residential assumptions of the BVDSP EIR. Consequently, in accordance with Section 15183.3 of the CEQA Guidelines, the proposed project is consistent with the BVDSP EIR.

Therefore, the proposed project is eligible for consideration of an exemption under California Public Resources Code Section 21083.3, and Section 15183 of the CEQA Guidelines.

Attachment C: Infill Performance Standards, Per CEQA Guidelines Section 15183.3

California Environmental Quality Act (CEQA) Guidelines Section 15183.3(b) and CEQA Guidelines Appendix M establish eligibility requirements for projects to qualify as infill projects. Table C-1, on the pages following, shows how the proposed project satisfies each of the applicable requirements.

Table C-1
Project Infill Eligibility

CEQA Eligibility Criteria		Eligible?/Notes for Proposed Project
1.	Be located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least 75 percent of the site's perimeter. For the purpose of this subdivision, "adjoin" means the infill project is immediately adjacent to qualified urban uses, or is only separated from such uses by an improved right-of-way. (CEQA Guidelines Section 15183.3[b][1])	Yes The project site has been previously developed with commercial uses and surface parking lots, and adjoins existing urban uses, as described in the Project Description, above.
2.	Satisfy the performance Standards provided in Appendix M (CEQA Guidelines Section 15183.3[b][2]) as presented in 2a and 2b below:	—
	2a. *Performance Standards Related to Project Design.* All projects must implement **all** of the following:	—
	Renewable Energy. *Non-Residential Projects.* All nonresidential projects shall include on-site renewable power generation, such as solar photovoltaic, solar thermal, and wind power generation, or clean back-up power supplies, where feasible. *Residential Projects.* Residential projects are also encouraged to include such on-site renewable power generation.	Not Applicable According to Section IV (G) of CEQA Appendix M, for mixed-use projects "…the performance standards in this section that apply to the predominant use shall govern the entire project." Because the predominant use is residential, the proposed project is not required to include on-site renewable power generation.
	Soil and Water Remediation. If the project site is included on any list compiled pursuant to Section 65962.5 of the Government Code, the project shall document how it has remediated the site, if remediation is completed. Alternatively, the project shall implement the recommendations provided in a preliminary endangerment assessment or comparable document that identifies remediation appropriate for the site.	Yes As stated in Section 7, Hazards and Hazardous Materials, of the CEQA Checklist, a review of available environmental databases was conducted for the proposed project. The Acura Dealership (site address 294 27th Street) was on the Cortese list as a closed Leaking Underground Storage Tank (LUST) cleanup site. The case was closed as of November 1994. The Phase I ESA and Phase II ESA prepared for the project site included recommendations for the site, and consistent with SCA-HAZ-2, the project applicant shall implement the [City] approved [Phase I/II]

Table C-1
Project Infill Eligibility

	CEQA Eligibility Criteria	Eligible?/Notes for Proposed Project
		recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency. See Section 7 for additional information.
	Residential Units Near High-Volume Roadways and Stationary Sources. If a project includes residential units located within 500 feet, or other distance determined to be appropriate by the local agency or air district based on local conditions, of a high volume roadway or other significant sources of air pollution, the project shall comply with any policies and standards identified in the local general plan, specific plan, zoning code, or community risk reduction plan for the protection of public health from such sources of air pollution. If the local government has not adopted such plans or policies, the project shall include measures, such as enhanced air filtration and project design, that the lead agency finds, based on substantial evidence, will promote the protection of public health from sources of air pollution. Those measures may include, among others, the recommendations of the California Air Resources Board, air districts, and the California Air Pollution Control Officers Association.	Yes Per the findings of the Broadway Valdez District Specific Plan Environmental Impact Report, an air quality screening was prepared for the proposed project.[1] As described therein, no "high-volume roadways" with 100,000 vehicles per day, as defined by Section II of CEQA Appendix M, are located within 1,000 feet of the proposed project. As summarized in the air quality screening prepared for the proposed project, no air pollution standards are required to be implemented for the proposed project.
	2b. *Additional Performance Standards by Project Type.* In addition to implementing all the features described in criterion 2a above, the project must meet eligibility requirements provided below by project type.[a]	
	Residential. A residential project must meet **one** of the following: A. *Projects achieving below average regional per capita vehicle miles traveled.* A residential project is eligible if it is located in a "low vehicle travel area" within the	Yes The proposed project is eligible under Section (B). The project site is well-served by multiple transit providers, including numerous Alameda-Contra Costa County Transit District (AC Transit) routes. The project site is also approximately 0.5 mile

[1] BASELINE Environmental Consulting, 2016. Air Quality Health Risk Screening Analysis – 24th and Harrison, per the Broadway Valdez District Specific Plan Environmental Impact Report. May.

Table C-1
Project Infill Eligibility

CEQA Eligibility Criteria		Eligible?/Notes for Proposed Project
	region; B. *Projects located within ½ mile of an Existing Major Transit Stop or High Quality Transit Corridor.* A residential project is eligible if it is located within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor; **or** C. *Low – Income Housing.* A residential or mixed-use project consisting of 300 or fewer residential units all of which are affordable to low income households is eligible if the developer of the development project provides sufficient legal commitments to the lead agency to ensure the continued availability and use of the housing units for lower income households, as defined in Section 50079.5 of the Health and Safety Code, for a period of at least 30 years, at monthly housing costs, as determined pursuant to Section 50053 of the Health and Safety Code.	north of the 19th Street Oakland Bay Area Rapid Transit (BART) station. Broadway qualifies as a "High Quality Transit Corridor," as defined by Section II of CEQA, with fixed route bus service at intervals no longer than 15 minutes during peak commute hours. The AC Transit Line 51A runs along Broadway near the project site, and has service intervals no longer than 15 minutes during peak commute hours. Other bus routes in the project vicinity further satisfy this criterion.
	Commercial/Retail. A commercial/retail project must meet **one** of the following: A. *Regional Location.* A commercial project with no single-building floor-plate greater than 50,000 square feet is eligible if it locates in a "low vehicle travel area"; **or** B. *Proximity to Households.* A project with no single-building floor-plate greater than 50,000 square feet located within ½ mile of 1,800 households is eligible.	Not Applicable According to Section IV (G) of CEQA Appendix M, for mixed-use projects "…the performance standards in this Section that apply to the predominant use shall govern the entire project." Because the predominant use is residential, the requirements for commercial/retail projects do not apply.
	Office Building. An office building project must meeting **one** of the following: A. *Regional Location.* Office buildings, both commercial and public, are eligible if they locate in a low vehicle travel area; **or** B. *Proximity to a Major Transit Stop.* Office buildings, both commercial and public, within ½ mile of an existing major transit stop, or ¼ mile of an existing stop along a high quality transit corridor, are eligible.	Not Applicable
	Schools. Elementary schools within 1 mile of 50 percent of the projected student population are eligible. Middle schools and high schools within 2 miles of 50 percent of the projected student population are eligible. Alternatively, any school within ½ mile of an existing major transit stop or	Not Applicable

Table C-1
Project Infill Eligibility

CEQA Eligibility Criteria		Eligible?/Notes for Proposed Project
	an existing stop along a high quality transit corridor is eligible. Additionally, to be eligible, all schools shall provide parking and storage for bicycles and scooters, and shall comply with the requirements of Sections 17213, 17213.1, and 17213.2 of the California Education Code.	
	Transit. Transit stations, as defined in Section 15183.3(e)(1), are eligible.	Not Applicable
	Small Walkable Community Projects. Small walkable community projects, as defined in Section 15183.3, subdivision (e)(6), that implement the project features in 2a above are eligible.	Not Applicable
3.	Be consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy, **except** as provided in CEQA Guidelines Sections 15183.3(b)(3)(A) or (b)(3)(B) below: (b)(3)(A). Only where an infill project is proposed within the boundaries of a metropolitan planning organization for which a sustainable communities strategy or an alternative planning strategy will be, but is not yet in effect, a residential infill project must have a density of at least 20 units per acre, and a retail or commercial infill project must have a floor area ratio of at least 0.75; **or** (b)(3)(B). Where an infill project is proposed outside of the boundaries of a metropolitan planning organization, the infill project must meet the definition of a "small walkable community project" in CEQA Guidelines §15183.3(f)(5). (CEQA Guidelines Section 15183.3[b][3])	Yes (see explanation below table)

[a] Where a project includes some combination of residential, commercial and retail, office building, transit station, and/or schools, the performance standards in this section that apply to the predominant use shall govern the entire project.

Explanation for Eligibility Criteria 3 – The adopted Plan Bay Area (2013)[2] serves as the sustainable communities strategy for the Bay Area, per Senate Bill 375. As defined by the Plan, Priority Development Areas (PDAs) are areas where new development will support the needs of residents and workers in a pedestrian-friendly environment served by transit. As stated in the BVDSP, the Broadway Valdez District is considered a PDA. The proposed project is consistent with the general land use designation, density, building intensity, and applicable policies specified in the BVDSP and described further below.

The General Plan land use designation for the site is Central Business District; this classification is intended to encourage, support, and enhance the downtown area as a high-density mixed-use urban center of regional importance, and a primary hub for business, communications, office, government, high technology, retail, entertainment, and transportation. The proposed mixed-use project would be consistent with this designation.

Under the adopted BVDSP, the project site is zoned Broadway Valdez District Retail Priority Sites Commercial Zone 1 (D-BV-1), Retail Priority Site 4B. The proposed project would be consistent with the regulatory framework of D-BV-1, which ensures that larger sites and opportunity areas are reserved primarily for new, large-scale retail development that is oriented toward consumer goods, at least on the ground floor. A property that is zoned as D-BV-1 Retail Priority Sites is allowed to include residential uses only if a project were to include a retail component of a certain size and type.

The project site is located within the 45* height area, which generally limits building heights to 45 feet, but does allow increased building heights if applicable retail criteria are met. The base height for the project site would be 85 feet if the project provides 50 percent of the Retail Priority Site area with retail, with a maximum height of 200 feet. Because the proposed project would provide 50 percent of the Retail Priority Site area with retail,[3] the project can be up to 200 feet in height, in conformance with the height limit on the site. The proposed building would be 18 stories tall and would not exceed 200 feet (i.e., at the top of the roof structure), as measured by the Building Department. The proposed project would be up to 200 feet in height, and would be compliant with the 200-foot height limit gained through the residential bonus, as measured at grade.

Under the adopted BVDSP, the maximum residential density (i.e., square feet of lot area required per dwelling unit) is based on the zoning height area. The 45* height area allows

[2] Metropolitan Transportation Commission and Association of Bay Area Governments, 2013. Plan Bay Area, Strategy for a Sustainable Region. Adopted July 18, 2013.

[3] Total requirement to meet residential bonus threshold for Retail Priority Site 4B is 50 percent of retail priority site area (54,567 square feet) per Table 17.101C.06 of the Oakland Planning Code.

for 1 dwelling unit per 125 square feet of retail use with a conditional use permit. The proposed project would provide up to 65,000 square feet of retail space. As such, the maximum residential density on the project site would be 475 dwelling units. The proposed project would construct up to 448 dwelling units.

For mixed use projects, the maximum non-residential floor area ratio (FAR) is based on the total lot area, and any square footage allotted or occupied by residential uses is included in the lot area calculation. The permitted FAR is 8.0 for the non-residential areas of the project site. The project site is approximately 99,202 square feet, and therefore the maximum nonresidential FAR allowed would be 793,616 square feet. The proposed project could provide approximately 65,000 square feet of retail space. Therefore, the proposed project would comply with the amount of non-residential FAR allowed under the Planning Code.

Attachment D: Criteria for Use of Addendum, per CEQA Guidelines Sections 15164 and 15162

Section 15164(a) of the California Environmental Quality Act (CEQA) Guidelines states that "a lead agency or responsible agency shall prepare an addendum to a previously certified EIR [Environmental Impact Report] if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred." Section 15164(e) states that "a brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR."

Project Modifications. The Broadway Valdez District Specific Plan (BVDSP) EIR analyzed the Broadway Valdez Development Program (Development Program), which represents the maximum feasible development that the City of Oakland has projected can reasonably be expected to occur in the BVDSP area (Plan area) over a 25-year planning period.[1] Appendix D of the BVDSP identified the Illustrative Development Program Map at the project site (designated as a portion of Project Site #11 in the BVDSP), which included 0 residential units and 127,733 square feet of retail. The proposed project differs from the Illustrative Development Program Map for the project site, and would construct up to 448 residential units and up to 65,000 square feet of retail space.

The EIR indicates that the CEQA analysis was based on the maximum development quantities set forth in the Development Program. The intent of the BVDSP is to provide as much flexibility as is feasible in terms of precise mix of newly developed land uses and their location in the Plan area, while conforming to the CEQA analysis and thresholds established in the EIR. Traffic capacity was identified in the BVDSP EIR as the key environmental factor constraining development. The City of Oakland is tracking and measuring vehicle trip generation created by projects proposed under the BVDSP, not land uses, to monitor when thresholds established have been met. Thus, it is traffic capacity that caps development under the BVDSP, not uses, which were contemplated to evolve and, as long as impacts fall within the maximum development analyzed in the BVDSP EIR, additional CEQA analysis is unnecessary.

[1] In total, the Broadway Valdez Development Program includes approximately 3.7 million square feet of development, including approximately 695,000 square feet of office space, 1,114,000 square feet of restaurant/retail space, 1,800 residential units, a new 180-room hotel, approximately 6,500 parking spaces provided by the development program, and approximately 4,500 new jobs.

As described in Section 13, Transportation and Circulation, of this CEQA Checklist, the proposed project would generate 128 AM and 275 PM peak-hour vehicle trips. Trips generated by the proposed project, together with the trips generated by other projects that are currently under construction, approved, and proposed for development in the Plan Area, would represent approximately 39 percent of the AM peak-hour trips and 44 percent of the PM peak-hour trips anticipated in the BVDSP EIR for the entire Plan Area. Although the proposed project would result in the total residential units for the Valdez Triangle Subarea to exceed the envelope of the Development Program analyzed in the BVDSP EIR, the combined trip generation for the projects under construction, approved, and proposed within the Valdez Triangle Subarea would represent approximately 63 percent of the AM peak-hour trips and 60 percent of the PM peak-hour trips anticipated in the BVDSP EIR for the Valdez Triangle Subarea because the non-residential development would continue to remain within the envelope of the Development Program analyzed in the BVDSP EIR. Trips generated by the proposed project, together with the trips generated by other projects that are currently under construction, approved, and proposed for development in Subdistrict 2 would represent approximately 78 percent of the AM peak-hour trips and 60 percent of the PM peak-hour trips anticipated in the BVDSP EIR for Subdistrict 2. The traffic impact analysis presented in the EIR continues to remain valid, and the trip generation from the proposed project combined with other projects currently being developed under the BVDSP would be within the program analyzed under the BVDSP EIR for the Plan area, the Valdez Triangle, and Subdistrict 2.

Therefore, the proposed project would represent a minor change in the Development Program, and such changes are anticipated in the EIR.

Conditions for Addendum. None of the following conditions for preparation of a subsequent EIR per Section 15162(a) apply to the proposed project:

(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.

Project Consistency with Section 15162 of the CEQA Guidelines. Since certification of the Final EIR, no changes have occurred in the circumstances under which the revised project would be implemented, that would change the severity of the proposed project's physical impacts as explained in the CEQA Checklist above, and no new information has emerged that would materially change the analyses or conclusions set forth in the Final EIR.

Furthermore, as demonstrated in the CEQA Checklist, the proposed modifications to the Development Program would not result in any new significant environmental impacts, result in any substantial increases in the significance of previously identified effects, or necessitate implementation of additional or considerably different mitigation measures than those identified in the EIR, nor render any mitigation measures or alternatives found not to be feasible, feasible. The effects of the proposed project would be substantially the same as those reported for the Development Program in the EIR.

The analysis presented in this CEQA Checklist, combined with the prior EIR analysis, demonstrates that the proposed project would not result in significant impacts that were not previously identified in the EIR. The proposed project would not result in a substantial increase in the significance of impacts, nor would the proposed project contribute considerably to cumulative effects that were not already accounted for in the certified EIR. Overall, the proposed project's impacts are similar to those identified and discussed in the EIR, as described in the CEQA Checklist, and the findings reached in the EIR are applicable.

Attachment E: Shadow Study for the 24th and Harrison Streets Project

PREVISION DESIGN

ACURA TOWER

Shading diagrams on the Summer Solstice

E.1-A1

PREVISION DESIGN

ACURA TOWER

Cumulative shading diagrams on the Summer Solstice

E.1-B1

PREVISION DESIGN

ACURA TOWER

Shading diagrams on the Summer Solstice

E.1-A2

SUMMER SOLSTICE
JUNE 21

12:00 PM

PREVISION DESIGN

ACURA TOWER

Cumulative shading diagrams on the Summer Solstice

E.1-B2

SUMMER SOLSTICE
JUNE 21

12:00 PM

PREVISION DESIGN

ACURA TOWER

Shading diagrams on the Summer Solstice

E.1-A3

SUMMER SOLSTICE
JUNE 21

3:00 PM

PREVISION DESIGN

ACURA TOWER

Cumulative shading diagrams on the Summer Solstice

E.1-B3

SUMMER SOLSTICE
JUNE 21

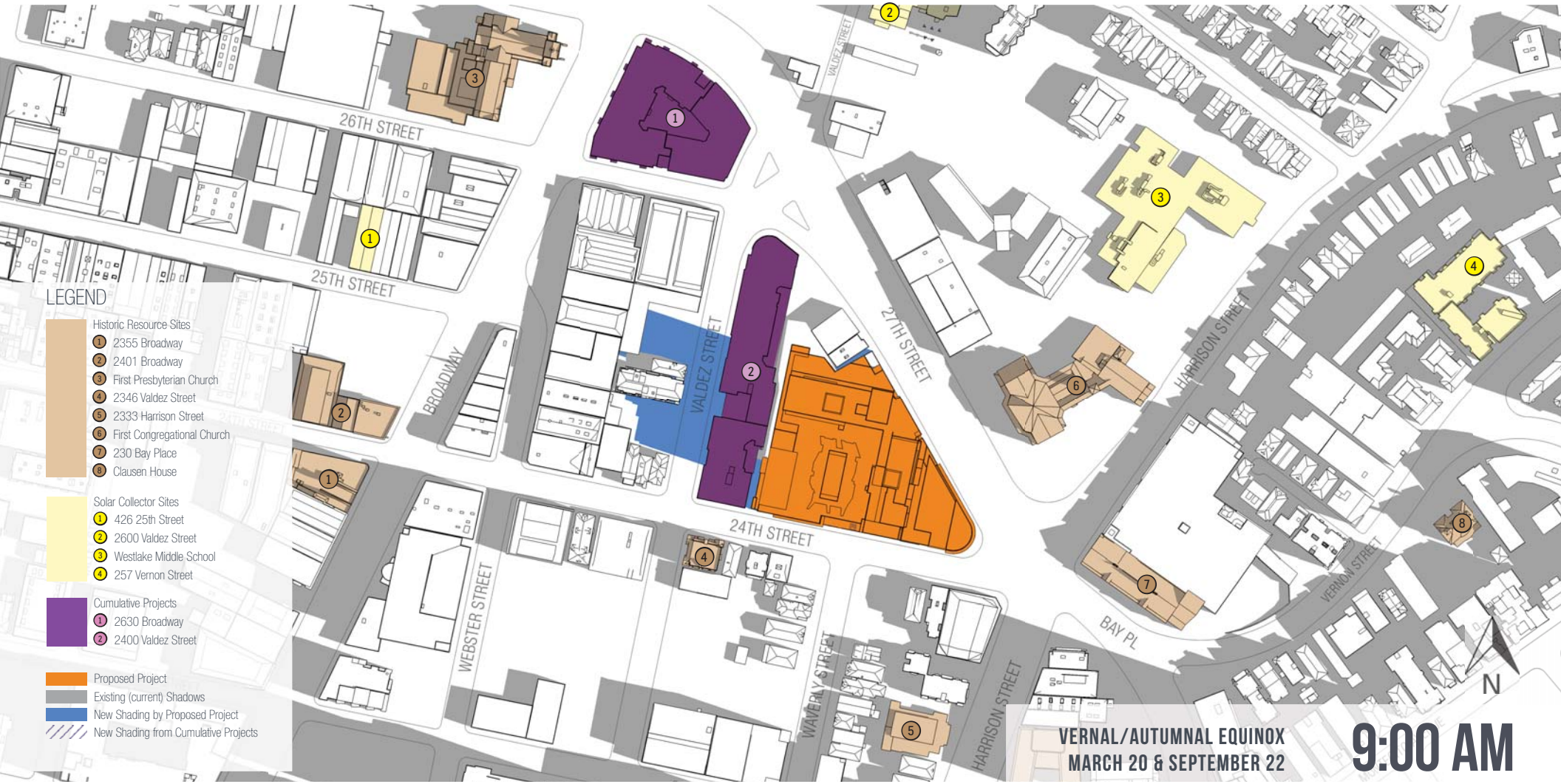
3:00 PM

PREVISION DESIGN

ACURA TOWER

Shading diagrams on the Vernal/Autumnal Equinoxes

E.2-A1



VERNAL/AUTUMNAL EQUINOX
MARCH 20 & SEPTEMBER 22

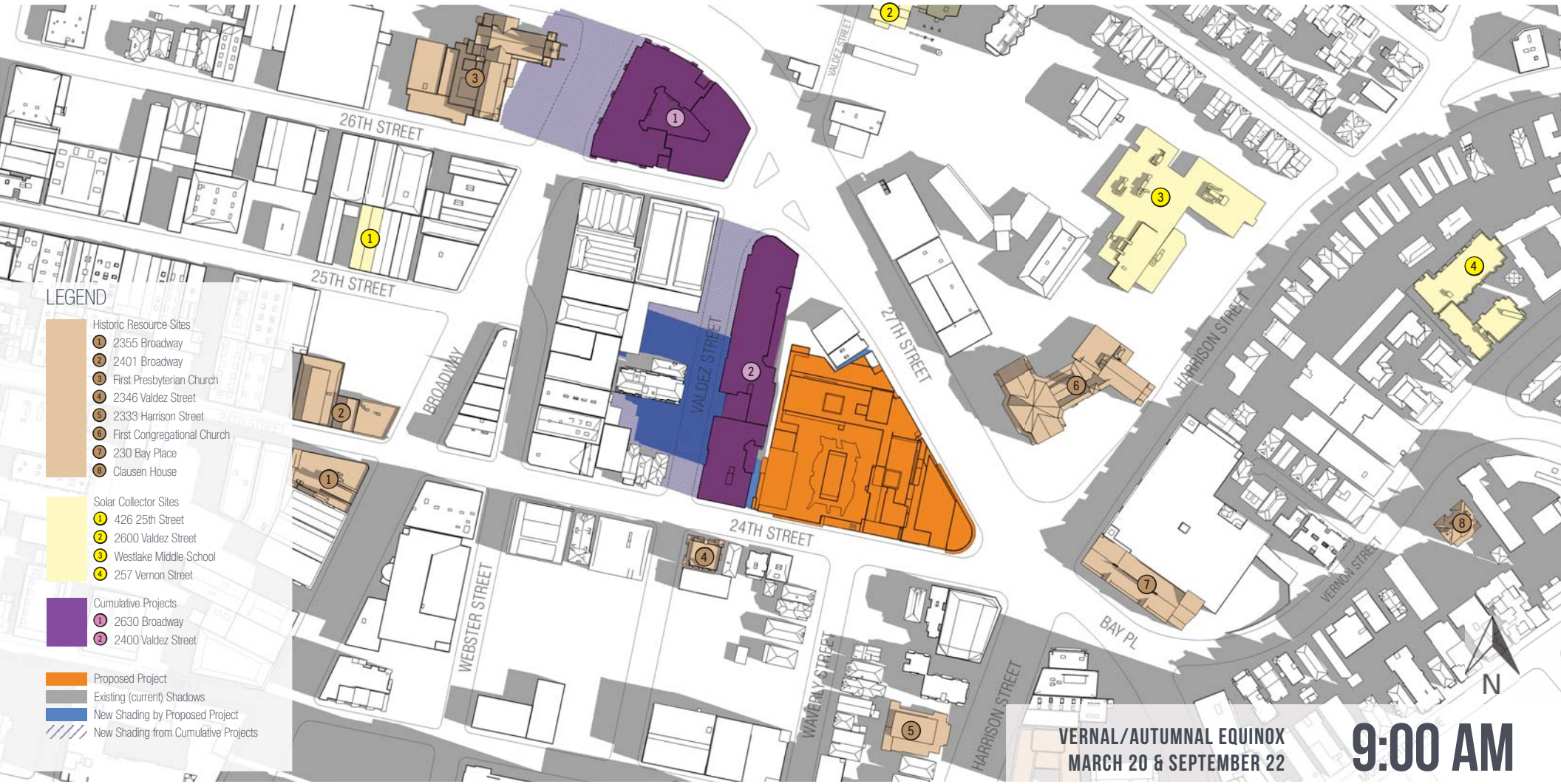
9:00 AM

PREVISION DESIGN

ACURA TOWER

Cumulative shading diagrams on the Vernal/Autumnal Equinoxes

E.2-B1



VERNAL/AUTUMNAL EQUINOX
MARCH 20 & SEPTEMBER 22

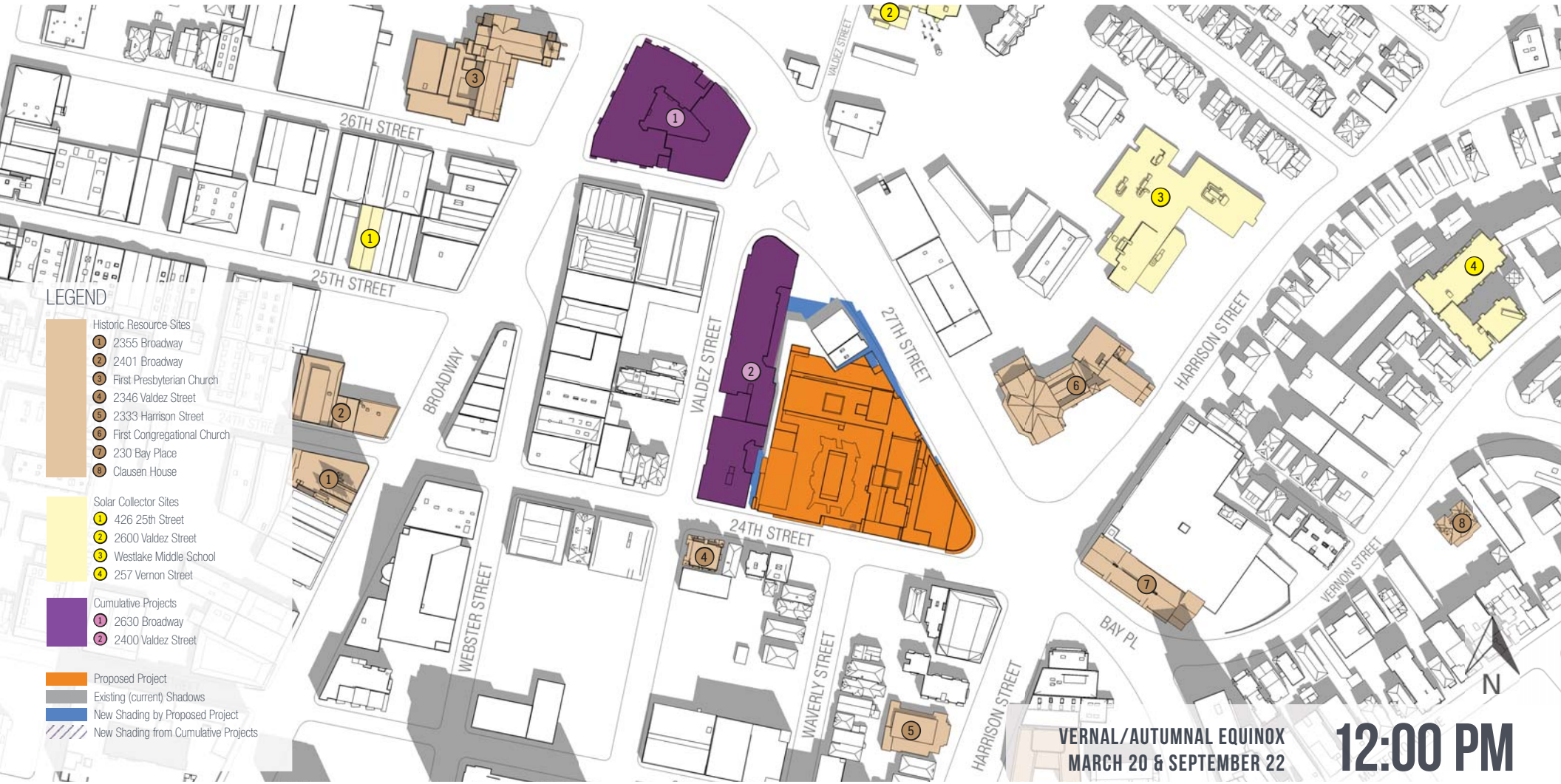
9:00 AM

PREVISION DESIGN

ACURA TOWER

Shading diagrams on the Vernal/Autumnal Equinoxes

E.2-A2



VERNAL/AUTUMNAL EQUINOX
MARCH 20 & SEPTEMBER 22

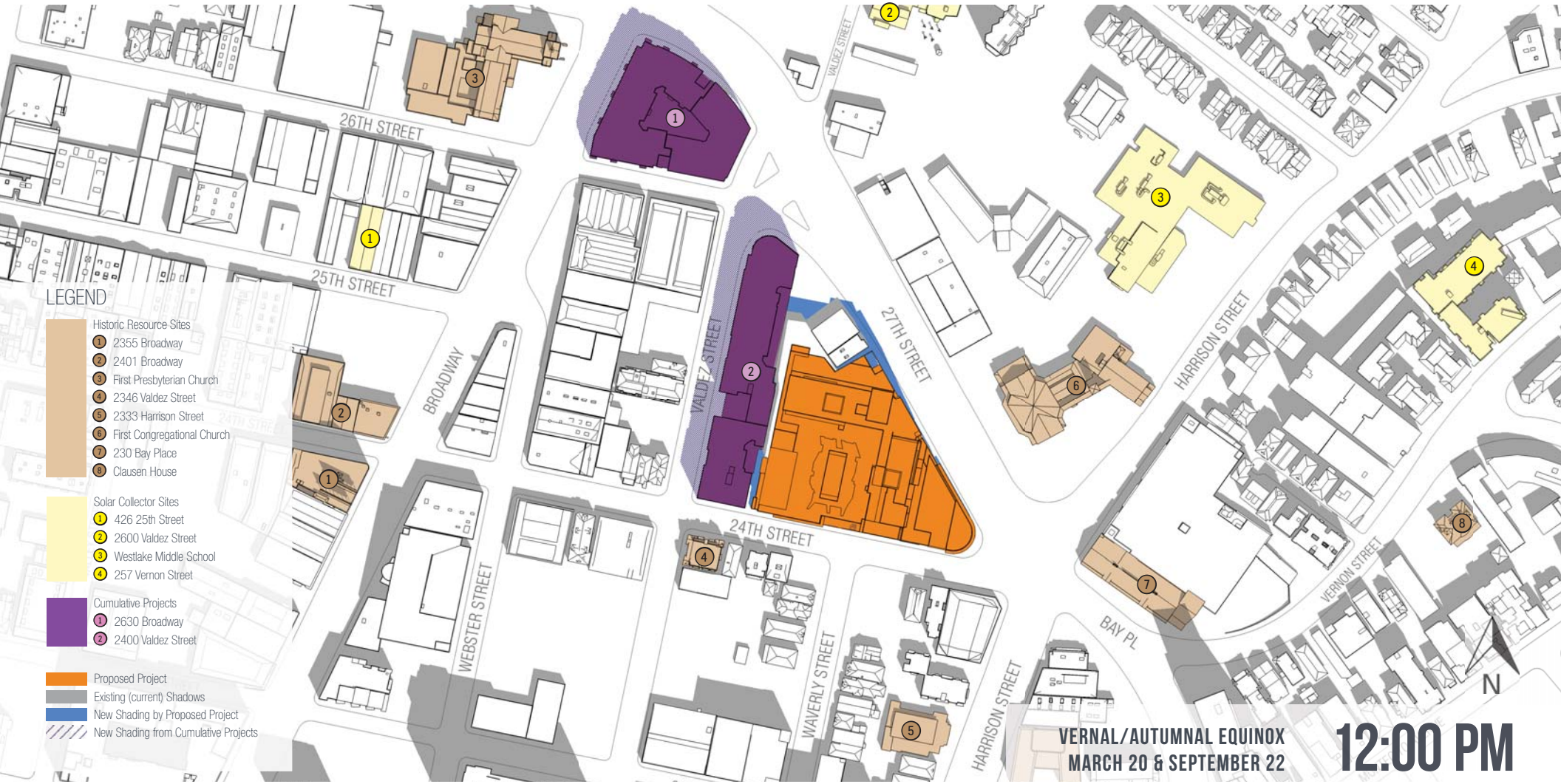
12:00 PM

PREVISION DESIGN

ACURA TOWER

Cumulative shading diagrams on the Vernal/Autumnal Equinoxes

E.2-B2



VERNAL/AUTUMNAL EQUINOX
MARCH 20 & SEPTEMBER 22

12:00 PM

PREVISION DESIGN

ACURA TOWER

Shading diagrams on the Vernal/Autumnal Equinoxes

E.2-A3

VERNAL/AUTUMNAL EQUINOX
MARCH 20 & SEPTEMBER 22

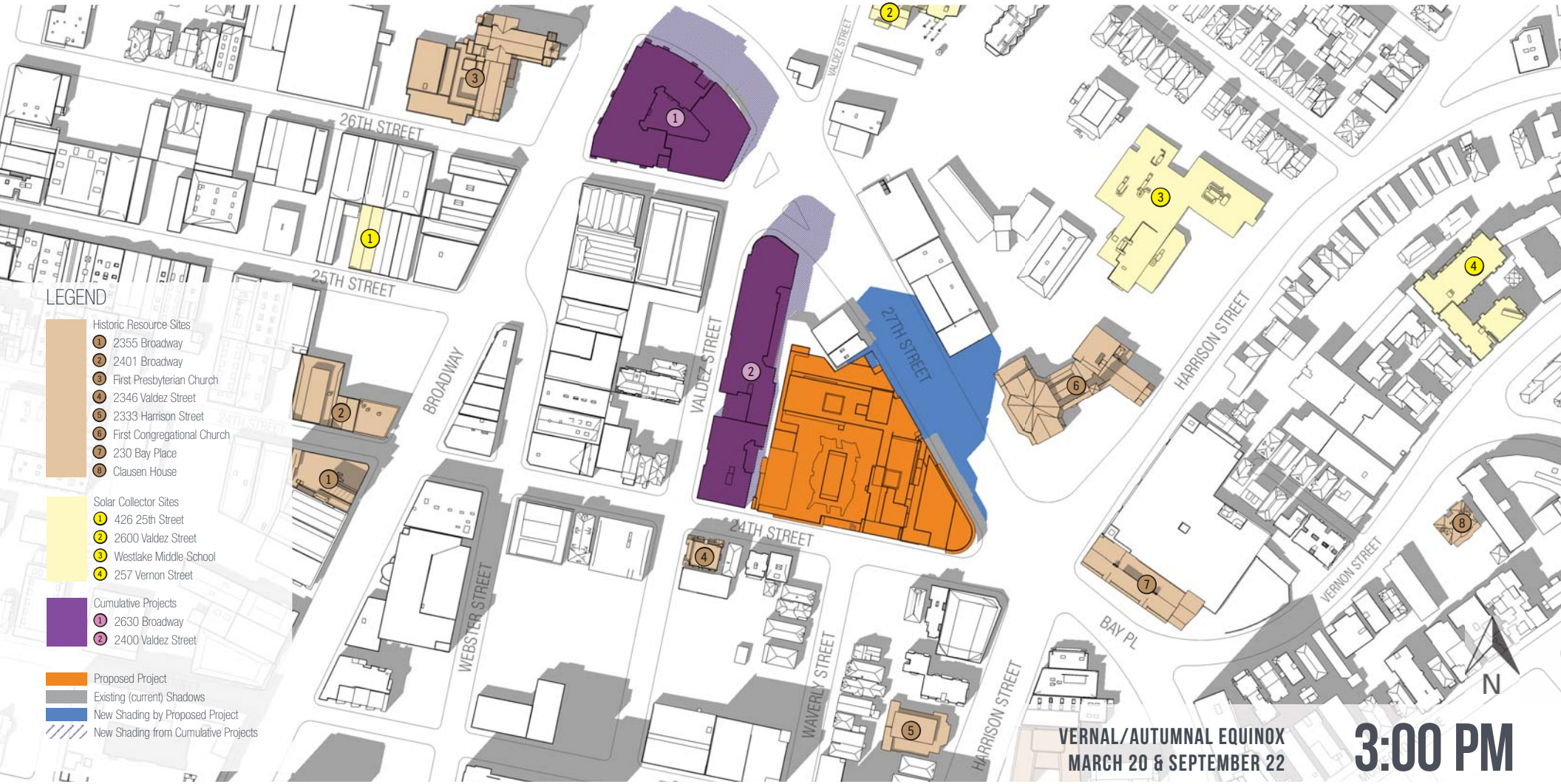
3:00 PM

PREVISION DESIGN

ACURA TOWER

Cumulative shading diagrams on the Vernal/Autumnal Equinoxes

E.2-B3



VERNAL/AUTUMNAL EQUINOX
MARCH 20 & SEPTEMBER 22

3:00 PM

PREVISION DESIGN

ACURA TOWER

Shading diagrams on the Winter Solstice

E.3-A1

WINTER SOLSTICE
DECEMBER 21

9:00 AM

PREVISION DESIGN

ACURA TOWER

Cumulative shading diagrams on the Winter Solstice

E.3-B1

PREVISION DESIGN

ACURA TOWER

Shading diagrams on the Winter Solstice

E.3-A2

WINTER SOLSTICE
DECEMBER 21

12:00 PM

PREVISION DESIGN

ACURA TOWER

Cumulative shading diagrams on the Winter Solstice

E.3-B2

WINTER SOLSTICE
DECEMBER 21

12:00 PM

PREVISION DESIGN

ACURA TOWER

Shading reaches First Congregational Church on Winter Solstice

E.3-A3

WINTER SOLSTICE
DECEMBER 21

2:15 PM

PREVISION DESIGN

ACURA TOWER

Shading reaches First Congregational Church on Winter Solstice

E.3-B3

WINTER SOLSTICE INCL CUMULATIVE
DECEMBER 21

2:15 PM

PREVISION DESIGN

ACURA TOWER

Shading diagrams on the Winter Solstice

E.3-A4

WINTER SOLSTICE
DECEMBER 21

3:00 PM

PREVISION DESIGN

ACURA TOWER

Cumulative shading diagrams on the Winter Solstice

E.3-B4

WINTER SOLSTICE
DECEMBER 21

3:00 PM

Attachment F: Wind Tunnel Study for the 24th and Harrison Streets Project

Tel: 519.823.1311
Fax: 519.823.1316

Rowan Williams Davies & Irwin Inc.
650 Woodlawn Road West
Guelph, Ontario, Canada
N1K 1B8

CONSULTING ENGINEERS & SCIENTISTS

CANADA'S BEST MANAGED COMPANIES Platinum member

277 27th Street
Oakland, CA

Report

Pedestrian Wind Study
RWDI # 1601491
July 14, 2016

SUBMITTED TO

Hannah Young, AICP
Urban Planning Partners, Inc.
505 17th Street, Floor 2
Oakland, CA
USA 94612
T: (510) 251-8210 x 1003
HYoung@up-partners.com

SUBMITTED BY

Nishat Nourin, M.Eng., EIT
Technical Coordinator
Nishat.Nourin@rwdi.com

Albert Brooks, M.A.Sc., EIT
Senior Technical Coordinator
Albert.Brooks@rwdi.com

Dan Bacon
Senior Project Manager / Associate
Dan.Bacon@rwdi.com

TABLE OF CONTENTS

Figures

Tables

Appendices

1. INTRODUCTION

Rowan Williams Davies & Irwin Inc. (RWDI) was retained by Urban Planning Partners, Inc. to conduct a Pedestrian Wind Study for the proposed development project at 277 27th Street in Oakland, California. The purpose of the study was to assess the wind environment around the development in terms of pedestrian comfort and hazard relative to wind metrics specified in the City of Oakland Significant Wind Impact Criterion. The study objective was achieved through wind tunnel testing of a 1:400 (1" = 33') scale model for the following three development configurations:

A – Existing: all existing buildings on-site and in the surroundings;

B – Existing + Project + Landscape: proposed 277 27th Street project with landscaping present and existing surrounding buildings;

C – Project + Cumulative + Landscape: proposed 277 27th Street project with landscaping present and existing surrounding buildings and the surrounding area and proposed cumulative landscaping around the courtyard and sidewalks.

The development site is located at the intersection of 24th Street and 27th Street in Oakland, California. The proposed tower is approximately 220 feet tall, inclusive of mechanical equipment. The test model was constructed using the design information and drawings listed in Appendix A.

This report summarizes the methodology of the wind tunnel studies for pedestrian wind conditions, describes the wind comfort and wind hazard criteria associated with wind force, as used in the current study, and presents the test results and recommendations of conceptual wind control measures, where necessary.

The placement for wind measurement locations was based on our experience and understanding of pedestrian usage for this site, and was reviewed by Urban Planning Partners, Inc., prior to the wind tunnel test.

2. PRINCIPAL RESULTS

The results of the tests are discussed in detail in Section 5 of this report and may be summarized as follows:

- Wind speeds on the existing project site are currently low with a few of the test locations exceeding the comfort criterion with no hazard exceedances.
- With Existing plus Project and Landscape in place, wind speeds are expected to increase slightly at the project perimeter. With the addition of the cumulative developments and landscaping, wind comfort conditions are expected to improve and generally remain similar to the Existing configuration.
- No hazard exceedances are predicted for all locations tested.

3. METHODOLOGY

3.1 Wind Tunnel Testing

As shown in Figures 1a through 1c, the wind tunnel model included the project site and all relevant surrounding buildings and topography within a 1600 foot radius of the study site. The mean speed profile and turbulence of the natural wind approaching the modelled area were simulated in RWDI's boundary-layer wind tunnel. The model was instrumented with 63 wind speed sensors to measure mean and gust wind speeds at a full-scale height of approximately 5 ft. Ten (10) of these measurement locations were on the podium of the proposed development and are not applicable to the Existing configuration (Locations 54 through 63). These measurements were recorded for 36 equally incremented wind directions.

3.2 Local Climate

Wind statistics recorded at the Metropolitan Oakland International Airport between 1984 and 2014 were analyzed for annual wind conditions. Figure 2 graphically depicts the directional distributions of annual wind frequencies and speeds. Winds are frequent from the northwest through west-southwest directions throughout the year, as indicated by the wind rose. Strong winds of a mean speed greater than 20 mph measured at the airport (at an anemometer height of 33ft) occur 2.6% of the time annually.

Wind statistics from the Metropolitan Oakland International Airport were combined with the wind tunnel data in order to predict the frequency of occurrence of full-scale wind speeds. The full-scale wind predictions were then compared with the City of Oakland Significant Wind Impact Criterion for pedestrian comfort and safety.

3.3 Planning Code Requirements

For the purposes of this study, the City of Oakland considers a significant wind impact to occur if a project were to “Create winds exceeding 36 mph for more than one hour during daylight hours during the year”. A wind analysis only need to be done if the project’s height is 100 feet or greater (Measured to the roof) and one of the following conditions exists: (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. Downtown is defined in the Land Use and Transportation Element 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. The wind analysis must consider the project’s contribution to wind impacts to on - and off-site public and private spaces. Only impacts to public spaces (on-and off-site) and off-site private spaces are considered CEQA impacts. Although impacts to on-site private spaces are considered a planning-related non-CEQA issue, such potential impacts still must be analysed.

Although the project site is not located in the Downtown defined by the City’s Thresholds of Significance, it is located in the Central Business District as defined in the Broadway Valdez District Specific Plan and is subject to the following mitigation measures:

Mitigation Measure AES-5: Wind Analysis. Project sponsors proposing buildings 100 feet tall or taller within the portion of the Plan Area designated Central Business District shall conduct detailed wind studies to evaluate the effects of the proposed project. If the wind study determines that the proposed project would create winds exceeding 36 mph for more than one hour during daylight hours during the year, the project sponsor shall develop and implement a wind reduction plan and incorporate measures to reduce such potential effects, as necessary, until a revised wind analysis demonstrates that the proposed project would not create winds in excess of this threshold. Examples of measures that such projects may incorporate, depending on the site-specific conditions, include structural and landscape design features and modified tower designs: wind protective structures or other apparatus to redirect downwash winds from tall buildings, tree plantings or dense bamboo plantings, arbors, canopies, lattice fencing, etc.

The equivalent wind speeds were calculated according to the specifications in the City of Oakland Significant Wind Impact Criterion, whereby the mean hourly wind speed is increased when the turbulence intensity is greater than 15% according to the following formula:

$$\boldsymbol{EWS} = \boldsymbol{V_m} \times (\mathbf{2} \times \boldsymbol{TI} + \mathbf{0.7})$$

where $\boldsymbol{EWS}$ = equivalent wind speed
$\boldsymbol{V_m}$ = mean pedestrian-level wind speed
$\boldsymbol{TI}$ = turbulence intensity

3.4 Cumulative Buildings

For the purposes of the wind study, past, present and reasonably foreseeable future projects considered in this analysis include buildings taller than 85 feet within an approximately 0.25-mile radius of the project site as these taller projects may have the potential to affect wind conditions in the immediate area surrounding the study site. As is the case for this proposed project, the majority of the cumulative buildings added for testing we located to the west of the project site, which is the predominant wind direction for the area. These projects included: 2270 Broadway, 2400 Valdez Street, and 2630 Broadway.

The proposed buildings that were modeled in the Project plus Cumulative with Landscape configuration are shown in green, in Image 1, with the corresponding addresses listed below. The proposed project is shown in red in Image 1.

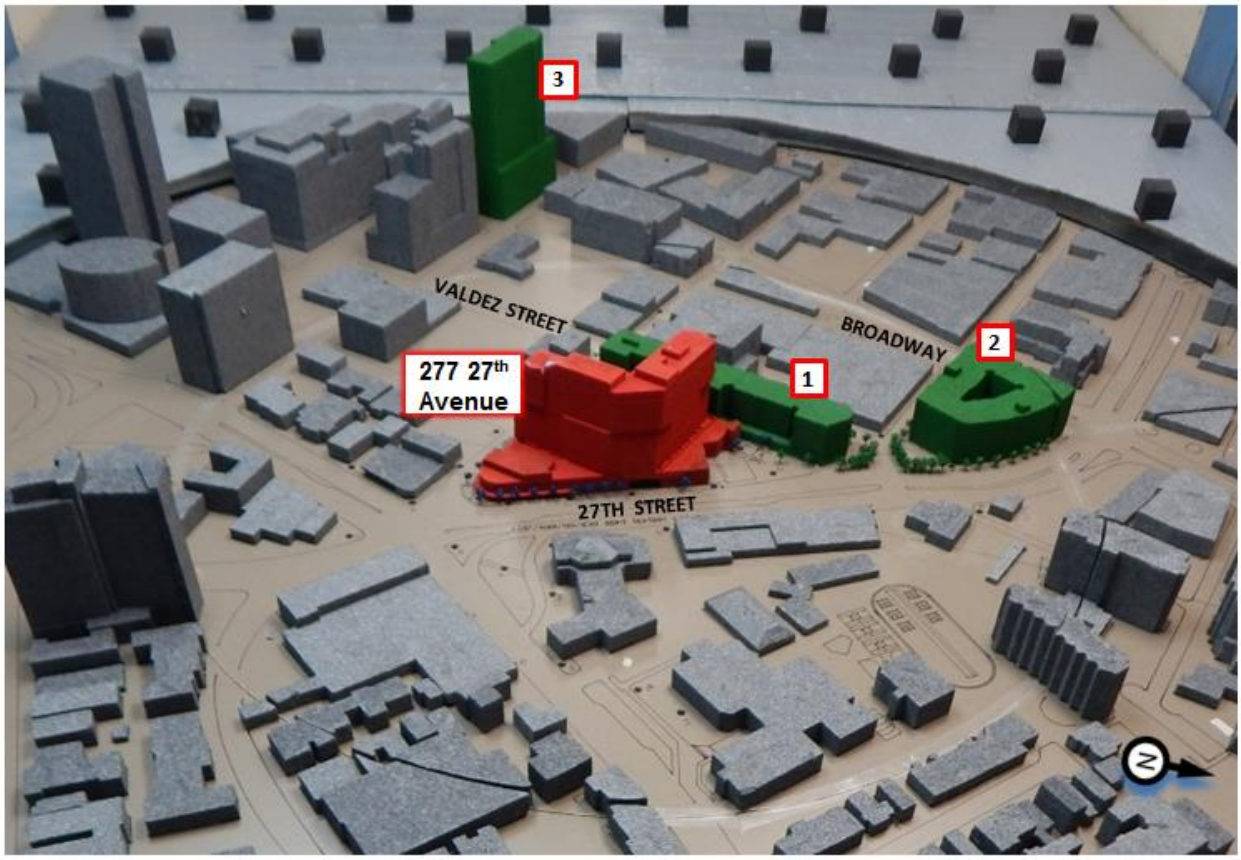


Image 1: Cumulative Buildings (numbered 1 - 3)

CUMULATIVE	
1	2400 Valdez Street
2	2630 Broadway
3	2270 Broadway

4. TEST RESULTS

This section presents the results of the wind tunnel measurements analyzed in terms of equivalent wind speeds as defined by the equation in Section 3.3. The text in the report simply refers to the data as wind speeds.

Table 1, located in the tables section of this report, presents the wind comfort results for the three configurations tested. For each measurement point, the measured 10% exceeded (90th percentile) equivalent wind speed and the percentage of time that the wind speed exceeds 11 mph are shown for areas considered to be used primarily for walking. A letter “e” in the last column of each configuration indicates a wind comfort exceedance.

Table 2 presents the wind hazard results, and lists the predicted wind speed to be exceeded one hour per year. The predicted number of hours per year that the City of Oakland Significant Wind Impact Criterion (one minute wind speed of 36 mph) is exceeded is also provided. A letter "e" in the last column of each configuration indicates a wind hazard exceedance.

4.1 Wind Comfort Conditions

Although the analysis of wind comfort conditions are not required by California Environmental Quality Act (CEQA), this section describes the wind comfort conditions on and around the project site and can be used as a reference for further improvements on the wind conditions.

4.1.1 Grade Level

For the Existing Configuration in the vicinity of the project site, wind conditions are generally low with 90th percentile wind speeds averaging 10 mph for all 53 measurement locations. The highest wind speeds exist at the west corner of the proposed development, at the intersection of 27th Street and Harrison Street and along Valdez Street to the north and south of the proposed development (see Figure 3a and Table 1). In the Existing Configuration, winds currently exceed the 11 mph criterion on average 7% of the time.

For the Existing plus Project with Landscape Configuration, wind speeds are generally expected to remain similar with the average 90th percentile wind speed for most of the test locations along Valdez Street and 27th Street; however wind speeds are expected to slightly increase along 24th Street. Few locations along the project perimeter are expected to exceed the 11 mph comfort threshold. The frequency that the 11 mph criterion was exceeded increased from 7% in the Existing Configuration to 9% with the Existing plus Project with Landscape Configuration (see Figure 3b and Table 1).

Wind conditions are expected to improve for the Existing plus Cumulative with Landscape Configuration. Wind speeds are generally anticipated to remain similar with the average 90th percentile wind speed for all test locations averaging 10 mph. Similar to the Existing Configuration, the 11 mph criterion is exceeded 7% of the time (see Figure 3c and Table 1).

Overall, as indicated in Table 1, wind speeds are predicted to slightly increase from the Existing Configuration with the proposed project and landscaping in place. With the addition of the cumulative developments and landscaping, overall wind conditions are expected to be similar to the Existing conditions.

4.1.2 Above Grade Level

Ten sensors were located above-grade to measure the wind speed conditions at the podium at Level 3 and at the sky deck at Level 18.

For the Existing plus Project Configuration with Landscape, 2 out of 10 locations exceed the 11mph comfort threshold and for the Project plus Cumulative with Landscape Configuration 3 locations are predicted to exceed the 11 mph comfort threshold (see Figures 3b, 3c and Table 1). The average wind speed at all 10 above-grade locations is 9 mph for Configuration B and 10 mph for Configuration C.

4.2 Wind Hazard Conditions

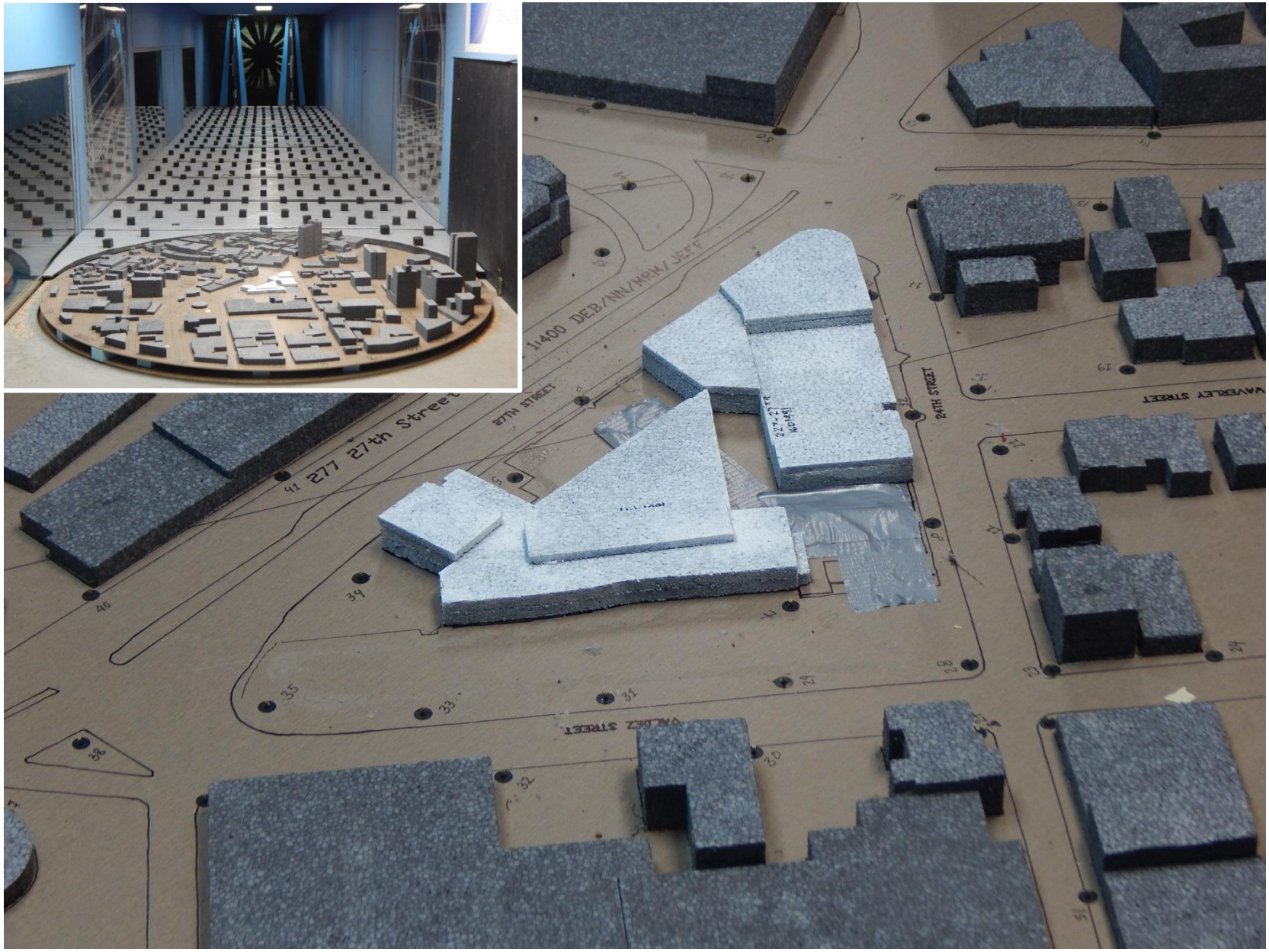
Of the 53 grade level locations tested for the Existing Configuration, none exceed the hazard criterion (presented in Table 2 and Figure 4a).

The addition of both Project with proposed landscaping and Cumulative with proposed landscaping are not expected to create any locations where wind exceeds the hazard criterion, as each of the 53 grade level and 10 above grade test locations met the hazard criterion (see Figures 4b and 4c).

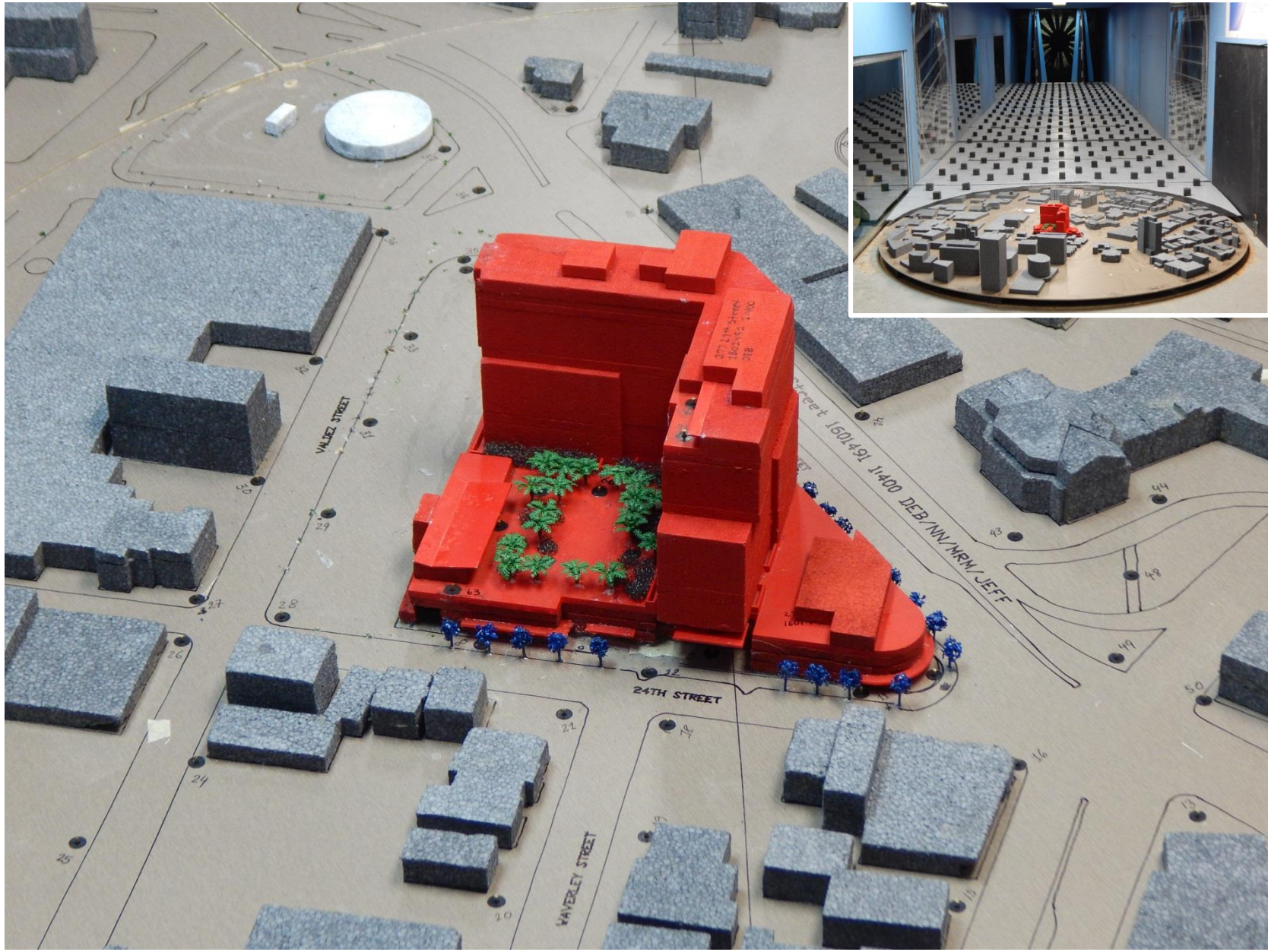
5. APPLICABILITY OF RESULTS

The results presented in this report pertain to the model of the proposed 277 27th Street project constructed using the architectural design drawings listed in Appendix A. Should there be design changes that deviate from this list of drawings, the results presented may change. Therefore, if substantial changes in the design are made, it is recommended that RWDI be contacted and requested to review their potential effects on wind conditions.

FIGURES



Wind Tunnel Study Model **Existing**		Figure No. 1a	RWDI
277 27th Street – Oakland, CA	Project #1601491	Date July 13, 2016	



Wind Tunnel Study Model
Existing + Project + Landscape

277 27th Street – Oakland, CA

Project #1601491

Figure No. 1b

Date: July 13, 2016

RWDI

Wind Tunnel Study Model
Project + Cumulative + Landscape

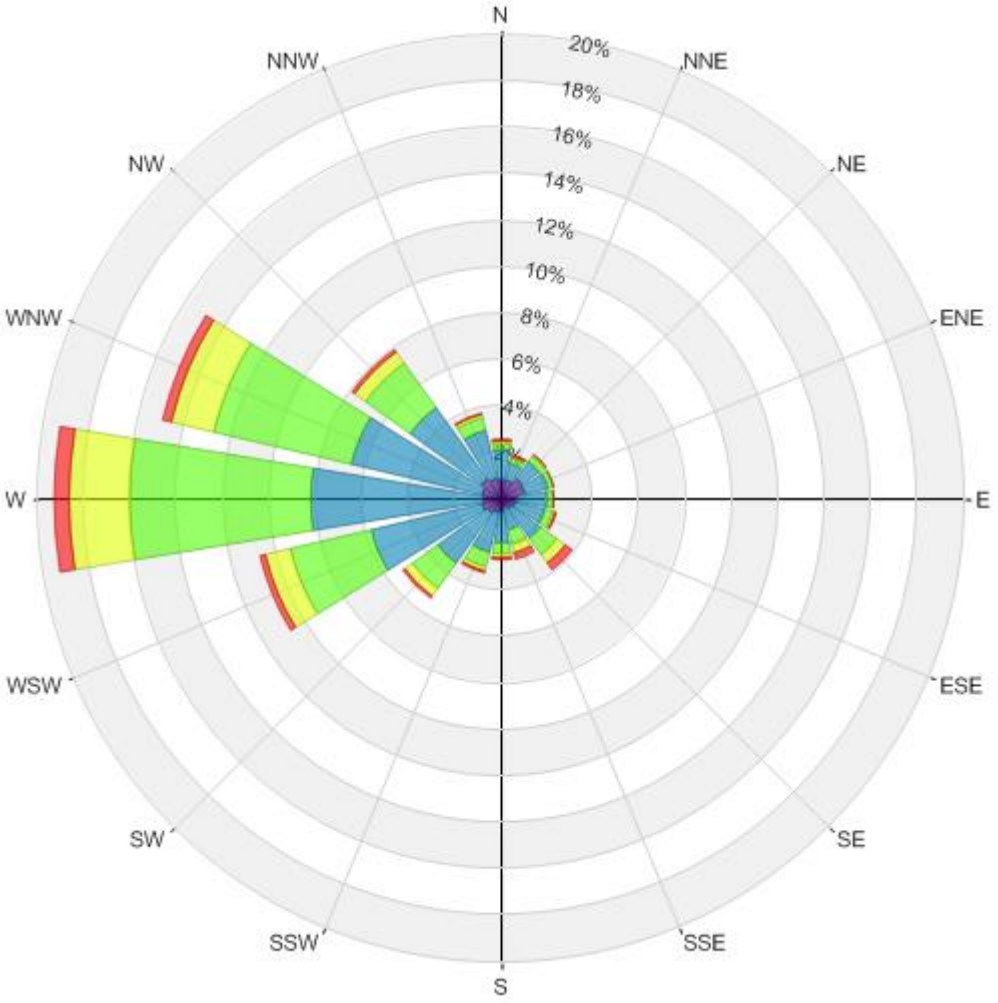
277 27th Street – Oakland, CA

Project #1601491

Figure No. 1c

Date: July 13, 2016

RWDI



Annual Winds

Wind Speed (mph)	Probability (%)
Calm	11.8
1-5	12.4
6-10	39.0
11-15	26.0
16-20	8.3
>20	2.6

Directional Distribution (%) of Winds (Blowing From)
Metropolitan Oakland International Airport (1984 - 2014)

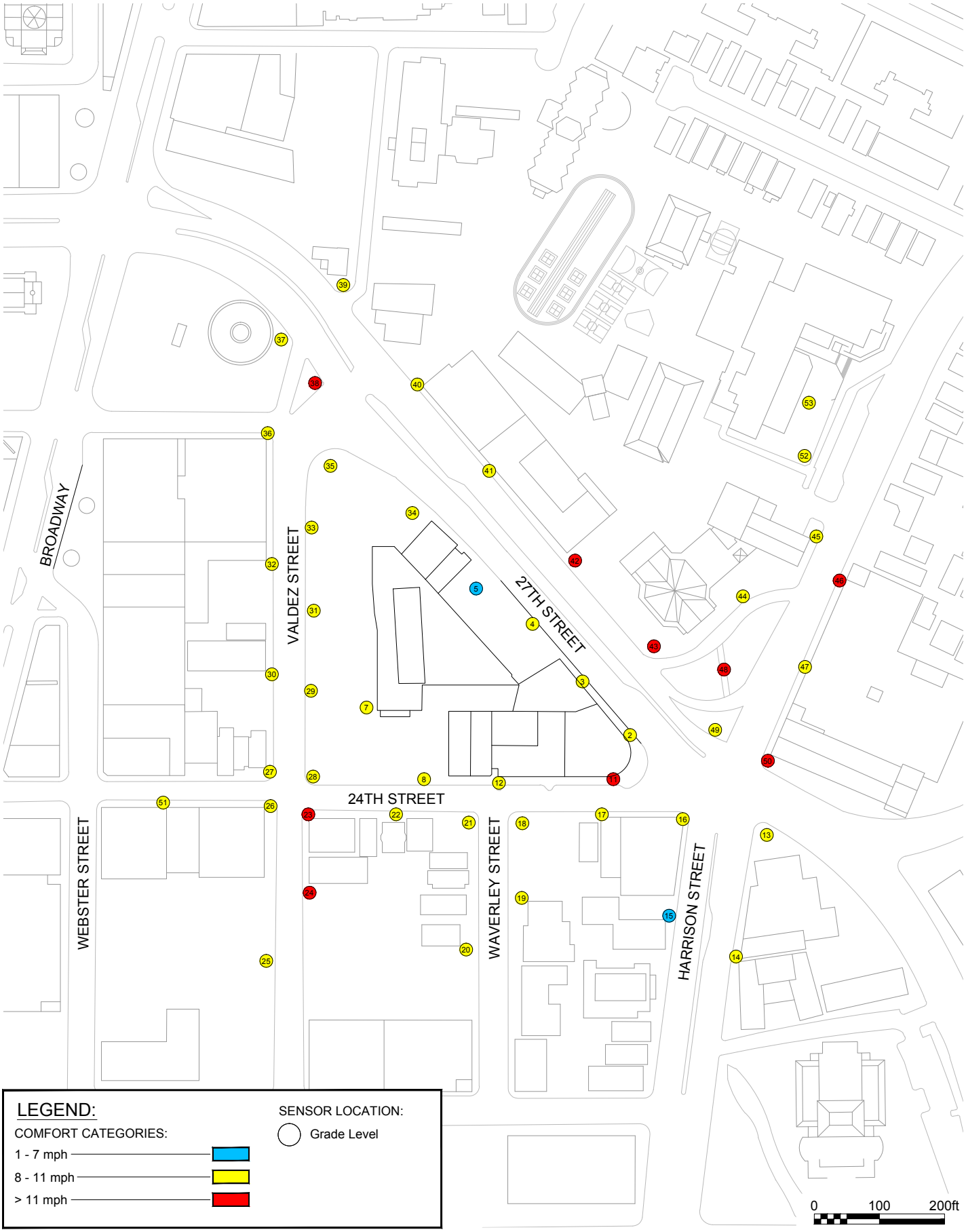
277 27th Street – Oakland, CA

Project #1601491

Figure No. 2

Date: July 13, 2016

RWDI



Pedestrian Wind Comfort Conditions - Existing
Annual (January to December)

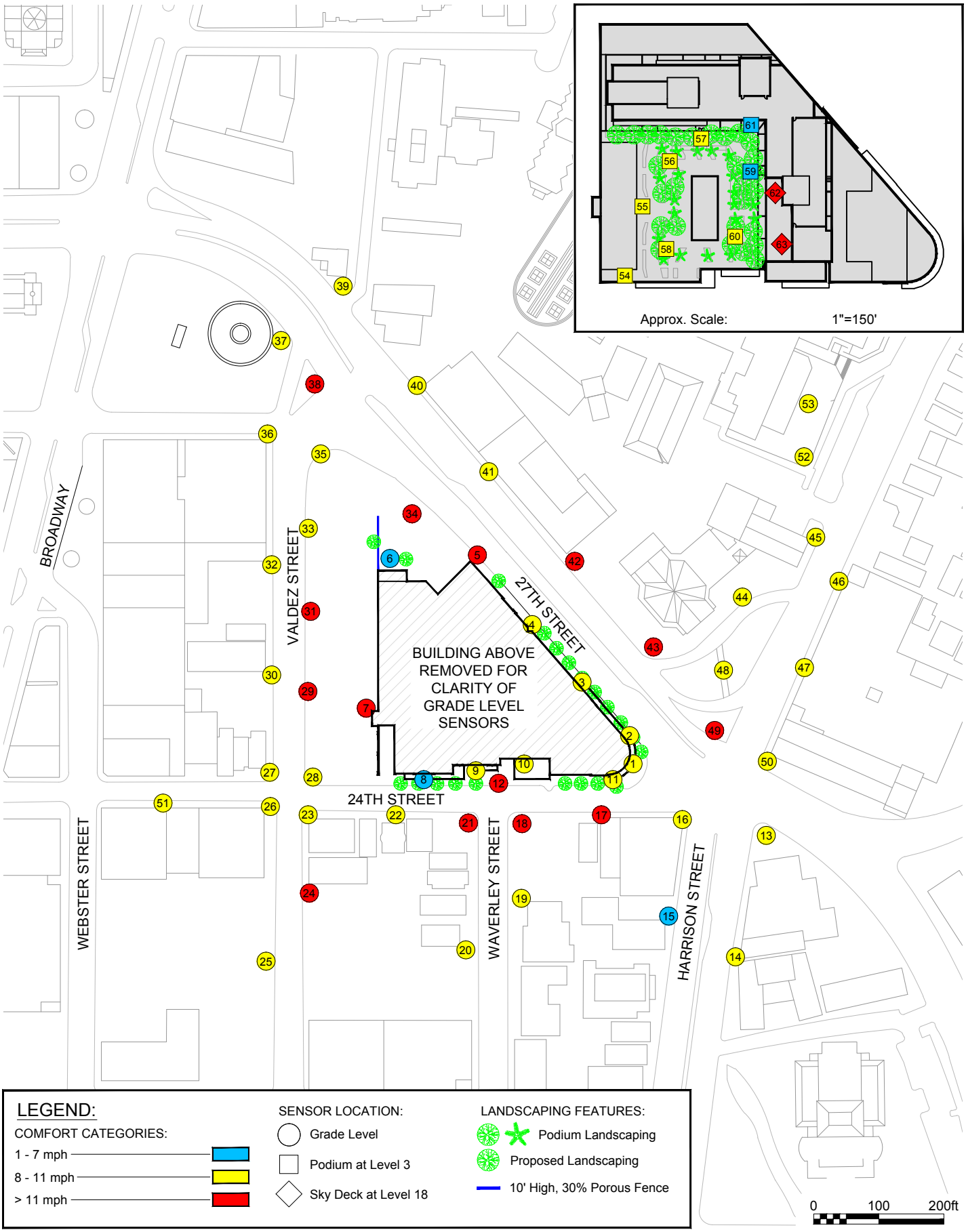
True North

277 27th Street - Oakland, CA

Project #1601491

Drawn by:	MDN	Figure:	3a
Approx. Scale:			1"=200'
Date Revised:			July 13, 2016

RWDI



Pedestrian Wind Comfort Conditions

Existing + Project + Landscape
Annual (January to December)

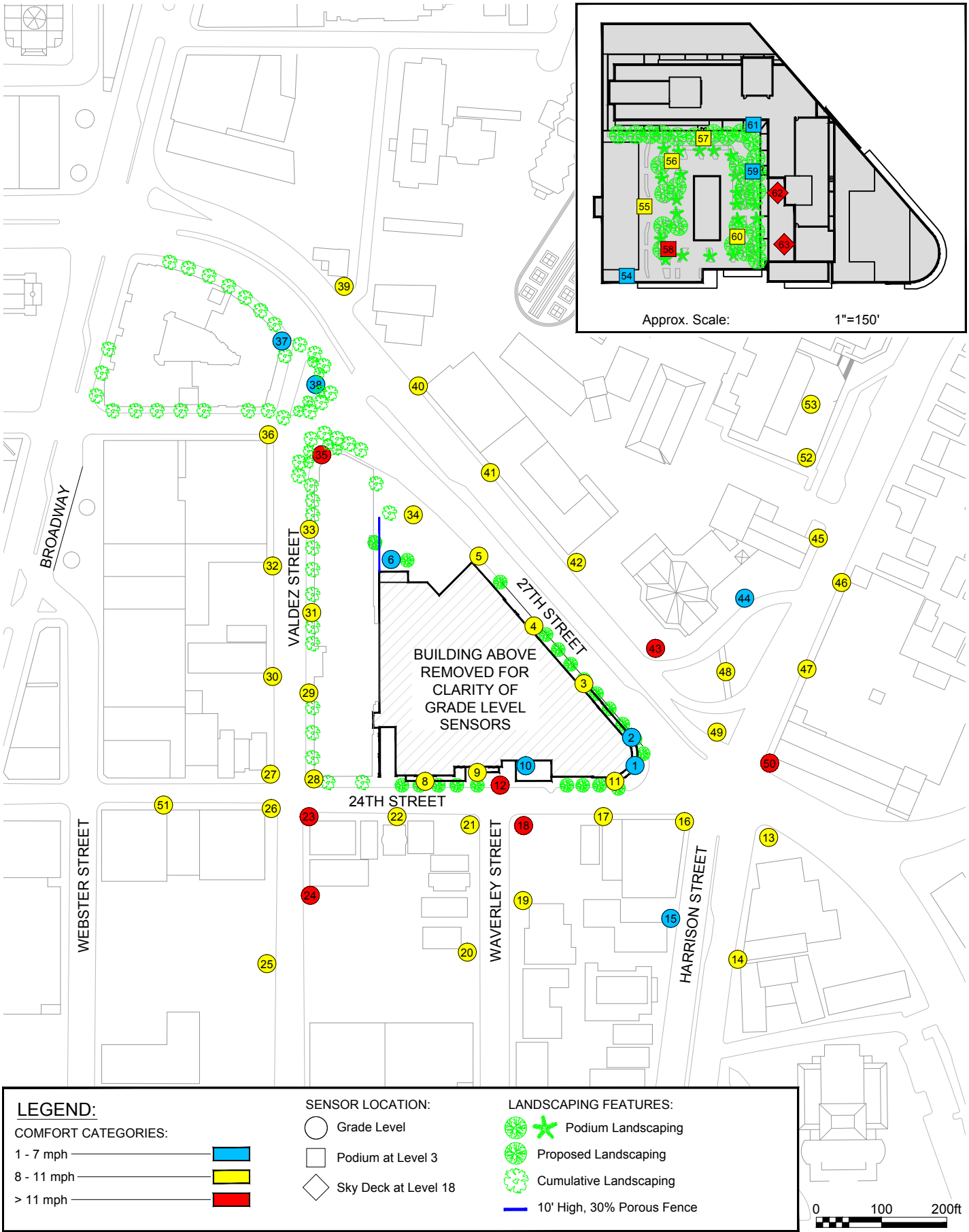
277 27th Street - Oakland, CA

Project #1601491

True North

Drawn by:	MDN	Figure:	3b
Approx. Scale:			1"=200'
Date Revised:			July 13, 2016

RWDI



Pedestrian Wind Comfort Conditions

Cumulative + Landscape - Comfort
Annual (January to December)

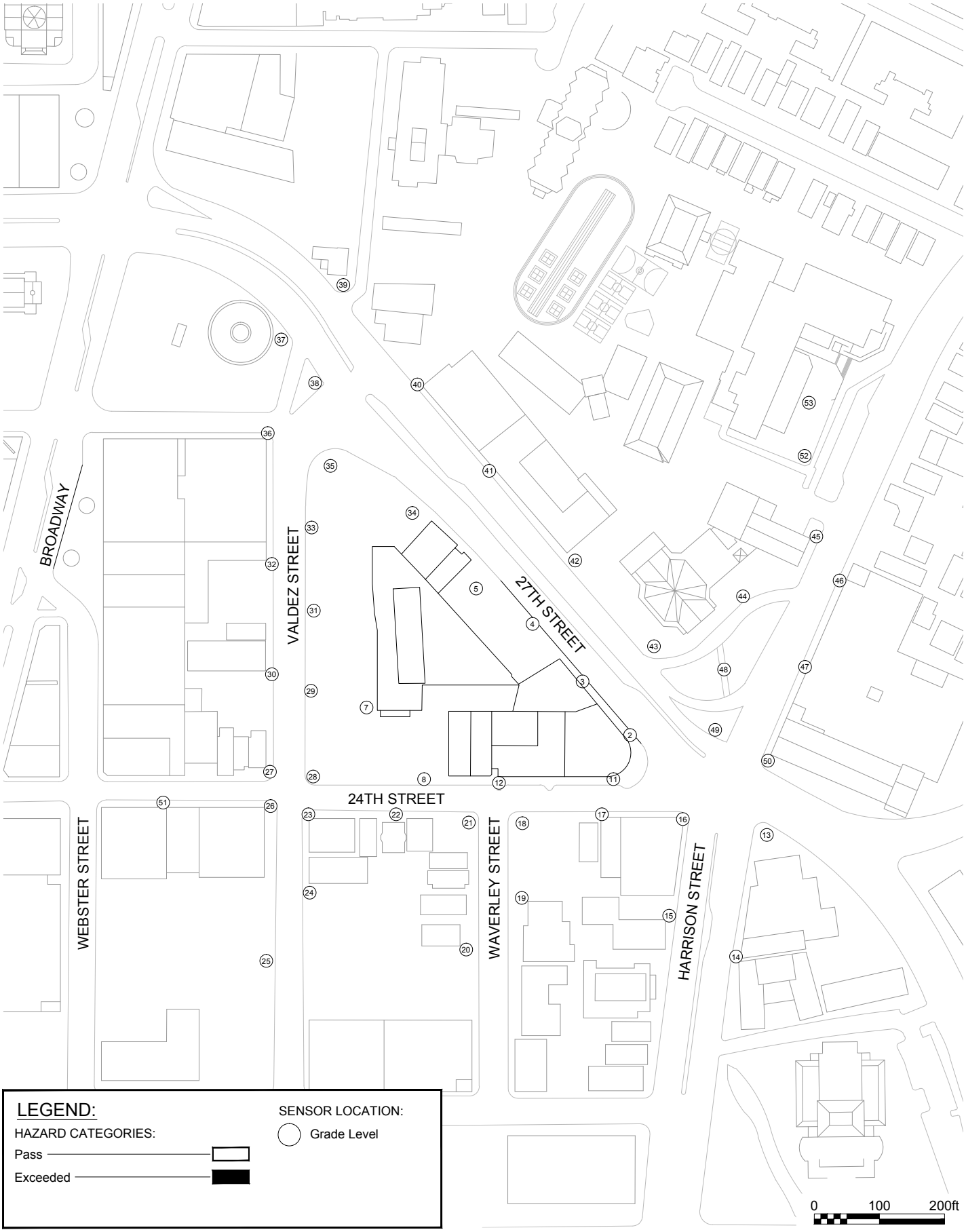
277 27th Street - Oakland, CA

Project #1601491

True North

Drawn by:	MDN	Figure:	3c
Approx. Scale:			1"=200'
Date Revised:			July 13, 2016

RWDI



Pedestrian Wind Hazard Conditions - Existing

Annual (January to December)

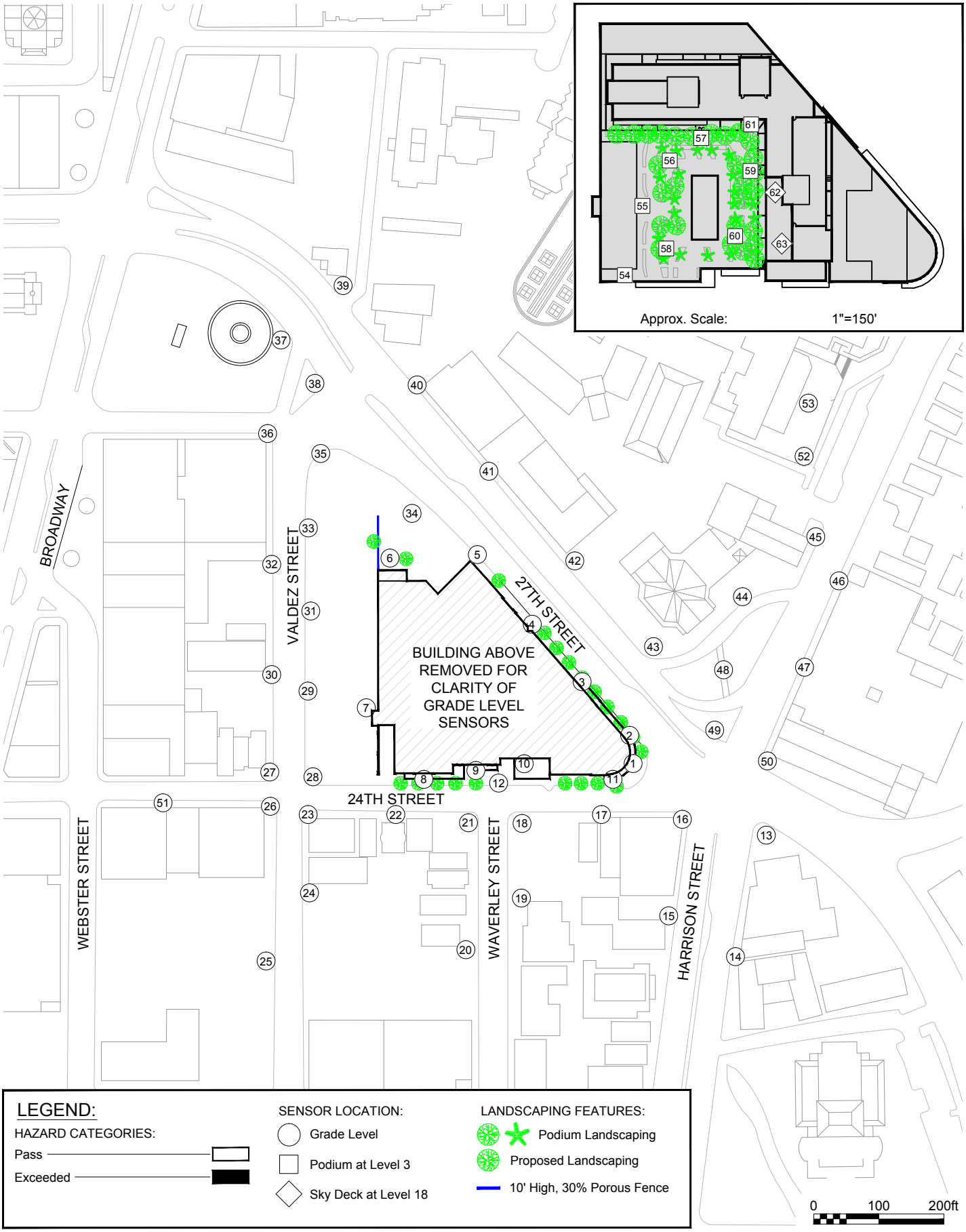
True North

277 27th Street - Oakland, CA

Project #1601491

Drawn by:	MDN	Figure:	4a
Approx. Scale:			1"=200'
Date Revised:			July 13, 2016

RWDI



Pedestrian Wind Hazard Conditions

Existing + Project + Landscape
Annual (January to December)

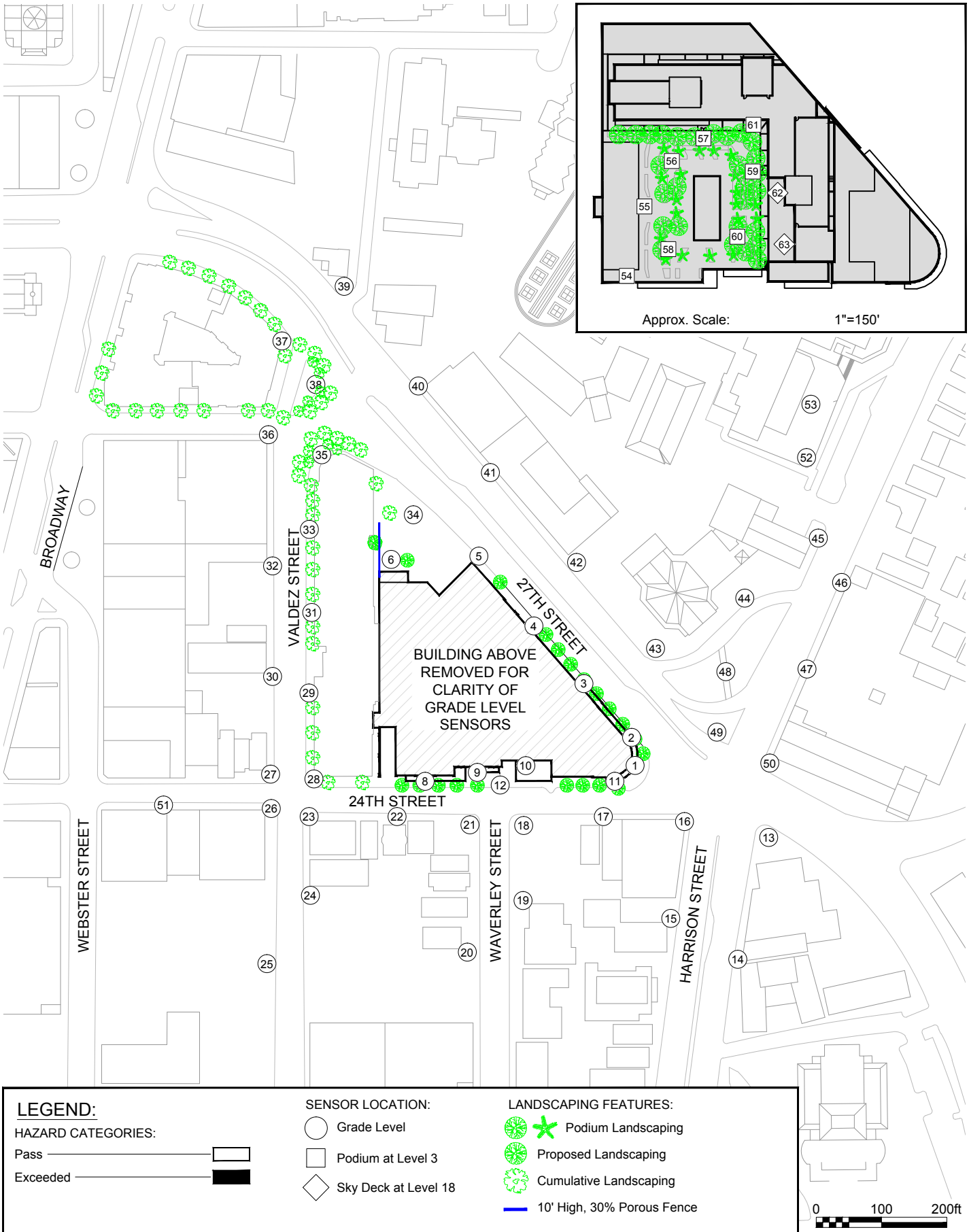
277 27th Street - Oakland, CA

Project #1601491

True North

Drawn by:	MDN	Figure:	4b
Approx. Scale:			1"=200'
Date Revised:			July 13, 2016

RWDI



Pedestrian Wind Hazard Conditions

Cumulative + Landscape
Annual (January to December)

277 27th Street - Oakland, CA

Project #1601491

True North

Drawn by: MDN	Figure:	4c
Approx. Scale:		1"=200'
Date Revised:		July 13, 2016

RWDI

TABLES

RWDI
CONSULTING ENGINEERS & SCIENTISTS

Table 1: Wind Comfort Results
Comfort Criterion Speed = 11 mph

References	Existing			Existing + Project + Landscaping				Project + Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11mph	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11mph	Speed Change Relative to Existing (mph)	Exceeds
1	5	1		8	2	3		7	2	2	
2	9	3		8	2	-1		7	2	-2	
3	9	3		9	3	0		8	2	-1	
4	9	3		11	10	2		9	6	0	
5	6	0		14	26	8	e	11	10	5	
6	3	0		7	1	4		7	0	4	
7	9	4		13	17	4	e	-	-	-	
8	10	7		7	2	-3		8	2	-2	
9	3	0		10	5	7		10	5	7	
10	3	0		9	3	6		7	1	4	
11	12	13	e	11	10	-1		11	10	-1	
12	9	3		15	30	6	e	14	23	5	e
13	9	4		9	3	0		8	2	-1	
14	10	7		9	3	-1		9	3	-1	
15	7	2		7	2	0		7	2	0	
16	10	7		9	3	-1		8	3	-2	
17	11	10		15	30	4	e	11	10	0	
18	10	7		14	29	4	e	14	22	4	e
19	10	5		10	5	0		10	7	0	
20	11	10		10	5	-1		10	5	-1	
21	10	6		12	13	2	e	11	10	1	
22	9	3		10	6	1		11	10	2	
23	12	14	e	11	10	-1		12	14	0	e
24	12	16	e	12	15	0	e	13	17	1	e
25	11	10		10	6	-1		10	6	-1	
26	8	2		8	2	0		9	3	1	
27	10	5		8	3	-2		9	4	-1	
28	10	5		11	10	1		11	10	1	
29	10	5		12	14	2	e	9	4	-1	
30	11	10		11	10	0		10	6	-1	
31	9	4		13	16	4	e	10	6	1	
32	8	2		9	4	1		10	5	2	
33	9	4		11	10	2		9	3	0	
34	10	7		12	14	2	e	9	5	-1	
35	9	4		10	7	1		14	23	5	e
36	11	10		10	5	-1		10	5	-1	

RWDI
CONSULTING ENGINEERS & SCIENTISTS

Table 1: Wind Comfort Results
Comfort Criterion Speed = 11 mph

References	Existing			Existing + Project + Landscaping				Project + Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11mph	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11mph	Speed Change Relative to Existing (mph)	Exceeds
37	10	6		9	3	-1		7	2	-3	
38	12	13	e	12	13	0	e	6	0	-6	
39	10	7		11	10	1		11	10	1	
40	10	7		10	7	0		10	5	0	
41	11	10		11	10	0		11	10	0	
42	12	15	e	13	22	1	e	11	10	-1	
43	13	22	e	15	28	2	e	14	21	1	e
44	9	3		8	2	-1		7	2	-2	
45	10	6		9	5	-1		9	4	-1	
46	12	15	e	10	6	-2		10	6	-2	
47	10	6		10	7	0		10	8	0	
48	13	19	e	11	10	-2		10	5	-3	
49	11	10		12	12	1	e	11	10	0	
50	12	14	e	12	12	1	e	11	10	-1	
51	10	4		9	4	-1		9	3	-1	
52	10	4		10	8	0		10	7	0	
53	9	4		9	4	0		9	2	0	
54	-	-		8	3	-		7	2	-	
55	-	-		9	4	-		8	3	-	
56	-	-		8	2	-		9	4	-	
57	-	-		8	1	-		10	5	-	
58	-	-		8	2	-		12	15	-	e
59	-	-		7	0	-		7	0	-	
60	-	-		10	7	-		11	10	-	
61	-	-		6	0	-		6	0	-	
62	-	-		12	13	-	e	12	15	-	e
63	-	-		12	16	-	e	13	19	-	e
GRADE LEVEL											
Average speed, Average %, Total exceedances	**10 mph**	**7 %**	**9 of 53**	**10 mph**	**9 %**	**0 mph**	**15 of 53**	**10 mph**	**7 %**	**0 mph**	**6 of 53**

RWDI
CONSULTING ENGINEERS & SCIENTISTS

Table 1: Wind Comfort Results
Comfort Criterion Speed = 11 mph

References	Existing			Existing + Project + Landscaping				Project + Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11mph	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of Time (mph)	Percent of Time Wind Speed Exceeds 11mph	Speed Change Relative to Existing (mph)	Exceeds
ABOVE GRADE LEVEL	**N/A**	**N/A**	**N/A**	**9 mph**	**5 %**	**N/A**	**2 of 10**	**10 mph**	**7 %**	**N/A**	**3 of 10**
Average speed, Total Hours, Total exceedances											

RWDI
CONSULTING ENGINEERS & SCIENTISTS

Table 2: Wind Hazard Results
Hazard Criterion Speed = 36 mph

References	Existing			Existing + Project + Landscaping				Project + Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Exceeds	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Hours Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Hours Change Relative to Existing (mph)	Exceeds
1	18	0		20	0	0		20	0	0	
2	22	0		22	0	0		22	0	0	
3	20	0		22	0	0		21	0	0	
4	20	0		28	0	0		27	0	0	
5	16	0		29	0	0		24	0	0	
6	7	0		22	0	0		16	0	0	
7	22	0		31	0	0		-	-	-	
8	22	0		24	0	0		20	0	0	
9	6	0		20	0	0		21	0	0	
10	6	0		18	0	0		17	0	0	
11	23	0		25	0	0		26	0	0	
12	19	0		33	0	0		29	0	0	
13	21	0		21	0	0		20	0	0	
14	23	0		22	0	0		22	0	0	
15	25	0		22	0	0		22	0	0	
16	24	0		25	0	0		26	0	0	
17	23	0		32	0	0		24	0	0	
18	21	0		30	0	0		28	0	0	
19	21	0		31	0	0		32	0	0	
20	22	0		23	0	0		24	0	0	
21	22	0		25	0	0		24	0	0	
22	20	0		25	0	0		23	0	0	
23	26	0		28	0	0		24	0	0	
24	25	0		25	0	0		26	0	0	
25	23	0		22	0	0		23	0	0	
26	20	0		24	0	0		20	0	0	
27	22	0		28	0	0		21	0	0	
28	20	0		26	0	0		24	0	0	
29	22	0		33	0	0		21	0	0	
30	24	0		33	0	0		23	0	0	
31	23	0		28	0	0		21	0	0	
32	19	0		24	0	0		21	0	0	
33	22	0		25	0	0		19	0	0	
34	22	0		26	0	0		23	0	0	
35	23	0		22	0	0		29	0	0	
36	28	0		25	0	0		22	0	0	

RWDI
CONSULTING ENGINEERS & SCIENTISTS

Table 2: Wind Hazard Results
Hazard Criterion Speed = 36 mph

References	Existing			Existing + Project + Landscaping				Project + Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Exceeds	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Hours Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Hours Change Relative to Existing (mph)	Exceeds
37	25	0		21	0	0		30	0	0	
38	24	0		24	0	0		15	0	0	
39	25	0		25	0	0		26	0	0	
40	23	0		21	0	0		21	0	0	
41	22	0		24	0	0		24	0	0	
42	24	0		27	0	0		24	0	0	
43	28	0		33	0	0		30	0	0	
44	24	0		24	0	0		25	0	0	
45	26	0		26	0	0		27	0	0	
46	25	0		21	0	0		20	0	0	
47	22	0		21	0	0		22	0	0	
48	26	0		22	0	0		22	0	0	
49	25	0		26	0	0		26	0	0	
50	31	0		26	0	0		26	0	0	
51	21	0		21	0	0		20	0	0	
52	21	0		21	0	0		21	0	0	
53	20	0		20	0	0		19	0	0	
54	-	-		29	0	-		23	0	-	
55	-	-		28	0	-		27	0	-	
56	-	-		18	0	-		19	0	-	
57	-	-		18	0	-		22	0	-	
58	-	-		21	0	-		26	0	-	
59	-	-		14	0	-		15	0	-	
60	-	-		22	0	-		24	0	-	
61	-	-		13	0	-		12	0	-	
62	-	-		24	0	-		25	0	-	
63	-	-		29	0	-		28	0	-	
GRADE LEVEL											
Average speed, Total Hours, Total exceedances	**22 mph**	**0 hrs**	**0 of 53**	**25 mph**	**0 hrs**	**0 mph**	**0 of 53**	**23 mph**	**0 hrs**	**0 mph**	**0 of 53**

RWDI
CONSULTING ENGINEERS & SCIENTISTS

Table 2: Wind Hazard Results
Hazard Criterion Speed = 36 mph

References	Existing			Existing + Project + Landscaping				Project + Cumulative + Landscaping			
Location Number	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Exceeds	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Hours Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 1 hour/year (mph)	Hours per Year Wind Speeds Exceed Hazard Criteria	Hours Change Relative to Existing (mph)	Exceeds
ABOVE GRADE LEVEL	**N/A**	**N/A**	**N/A**	**22 mph**	**0 hrs**	**N/A**	**0 of 10**	**22 mph**	**0 hrs**	**N/A**	**0 of 10**
Average speed, Total Hours, Total exceedances											

APPENDIX A

APPENDIX A: DRAWING LIST FOR MODEL CONSTRUCTION

The drawings and information listed below were received from Urban Planning Partners, Inc, and were used to construct the scale model of the proposed 277 27th Street. Should there be any design changes that deviate from this list of drawings, the results may change. Therefore, if changes in the design are made, it is recommended that RWDI be contacted and requested to review their potential effects on the pedestrian wind conditions presented in this report.

File Name	File Type	Date Received (dd/mm/yyyy)
2400 Valdez 16-0208-Design Review Submittal	PDF	(6/1/2016)
A_24TH&Harrision_Core_Shell	.rvt	(6/6/2016)
19885 24&H Podium Landscape Plan	PDF	(6/6/2016)
2400 Valdez_Offsite Landscape	PDF	(6/23/2016)
Pages from 2630 Broadway CEQA Analysis sm	PDF	(6/8/2016)

Attachment G: Air Quality and Health Risk Screening Analysis for the 24th and Harrison Streets Project

BASELINE ENVIRONMENTAL CONSULTING

MEMORANDUM

Date: July 11, 2016 **Job No.:** 16208-00.02422

To: Hannah Young, Urban Planning Partners, Inc.

From: Patrick Sutton, BASELINE Environmental Consulting

Subject: **Air Quality Health Risk Screening Analysis – 24th and Harrison**

Based on the findings of the Broadway Valdez District Specific Plan (BVDSP) Environmental Impact Report (EIR) and the City of Oakland's current Standard Condition of Approval (SCAs), the proposed 24th and Harrison project (project) in the City of Oakland is required to undergo a screening analysis to determine:

1) The potential cumulative health risks to existing sensitive receptors from the project, existing sources, and reasonably foreseeable future sources of toxic air contaminants (TACs); and

2) The potential cumulative health risks to new sensitive receptors at the project site from existing and reasonably foreseeable future sources of TACs.

BASELINE Environmental Consulting prepared this memorandum to summarize the screening analysis completed for the proposed project.

Background

The California Building Code requires a backup generator for elevators in buildings that are five or more stories in height (approximately 70 feet). Since the proposed building would have 18 floors plus the basement, the project would be required to install a backup generator. The primary TAC of concern associated with generators is diesel particulate matter. To operate a backup generator,[1] the project would be required to comply with the Bay Area Air Quality Management District's (BAAQMD's) permit requirements for a stationary source.

Screening Analysis for Cumulative Health Risks to Existing Sensitive Receptors

Projects that would operate a new generator within the BVDSP area are required to prepare and implement a Risk Reduction Plan in accordance with BVDSP EIR Mitigation Measure AIR-4:

[1] Assuming the generator has a diesel internal combustion engine greater than 50 brake horsepower.

Mitigation Measure AIR-4: Risk Reduction Plan

Applicants for projects that would include backup generators shall prepare and submit to the City, a Risk Reduction Plan for City review and approval. The applicant shall implement the approved plan. This Plan shall reduce cumulative localized cancer risks to the maximum feasible extent. The Risk Reduction Plan may contain, but is not limited to the following strategies:

- *Demonstration using screening analysis or a health risk assessment that project sources, when combined with local cancer risks from cumulative sources with 1,000 feet would be less than 100 in one million.*
- *Installation of non-diesel fueled generators.*
- *Installation of diesel generators with an EPA-certified Tier 4 engine or Engines that are retrofitted with a California Air Resources Board (CARB) Level 3 Verified Diesel Emissions Control Strategy (VDECS).*

Consistent with Mitigation Measure AIR-4, the City's current SCA 21: Stationary Sources of Air Pollution (Toxic Air Contaminants) requires all projects involving a stationary source (e.g., backup generator) permitted by BAAQMD to either conduct a health risk assessment, install non-diesel fuel generators, or install diesel generators with an EPA-certified Tier 4 engine or engines that are retrofitted with a CARB Level 3 VDEC. In accordance with Mitigation Measure AIR-4 and SCA 21, this screening analysis estimates the cumulative health risks to existing sensitive receptors from the proposed project, existing sources of TACs, and reasonably foreseeable future sources of TACs.

Sensitive receptors near the project site include residential dwellings and the West Lake Middle School. To evaluate the cumulative health risks to nearby sensitive receptors, the BAAQMD recommends using their online screening tools to evaluate existing TAC emissions from stationary and mobile sources within 1,000 feet of a sensitive receptor. The screening tools provide conservative estimates of how much existing TAC sources would contribute to cancer risk, chronic hazard index (HI), and/or fine particulate matter (PM2.5) concentrations in a community. The individual health risks associated with each source are summed to find the cumulative impact at the location of the maximally impacted receptor (MIR).[2] Based on proximity to the project site, the MIR was assumed to be a resident located at 319 24th Street approximately 60 feet south of the project site (Figure 1).

Based on the BAAQMD's *Stationary Source Screening Analysis Tool*,[3] fourteen existing stationary sources of TAC emissions were identified within 1,000 feet of the MIR (Table 1 and

[2] BAAQMD, 2012a. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. May.
[3] BAAQMD, 2012b. *Stationary Source Screening Analysis Tool*. 30 May.

Figure 1). Preliminary health risk screening values at the MIR from the stationary sources were determined using the BAAQMD's *Stationary Source Screening Analysis Tool*. The BAAQMD's *Diesel Internal Combustion Engine Distance Multiplier Tool* was used to refine the screening values associated with 8 of the 14 stationary sources that operate diesel engines to represent the attenuated health risks that can be expected with increasing distance from the source of emissions.[4] The screening values for one other facility that operates diesel engines (BAAQMD Plant 19269) was not refined because the values were based on a site-specific health risk assessment.

The BAAQMD recommends reviewing average annual daily traffic (AADT) counts estimated by the California Environmental Health Tracking Program (CEHTP) to identify major roads with an AADT volume greater than 10,000 vehicles per day.[5] Based on the review of CEHTP traffic data,[6] four major roadways with an AADT volume greater than 10,000 vehicles per day were identified within 1,000 feet of the MIR (Table 1 and Figure 1). The health risk screening values at the MIR from nearby major roadways were estimated using the BAAQMD's *Roadway Screening Analysis Calculator*.[7]

In addition to existing TAC sources, there are seven proposed developments within 1,000 feet of the MIR that are either under construction or could be constructed in the near future, and future operations could potentially include maintenance and testing of a backup diesel generator. The proposed project would also be required to operate a backup diesel generator. The BAAQMD does not issue permits for stationary sources that result in an excess cancer risk greater than 10 in one million or a chronic HI greater than 1.0.[8] Conservatively assuming each proposed generator would result in a maximum excess cancer risk of 10 in one million due to emissions of diesel particulate matter, the BAAQMD's *Risk and Hazards Emissions Screening Calculator (Beta Version)* [9] was used to estimate the equivalent screening-level health risks values for chronic HI and annual average PM2.5 concentrations. The health risk screening values were then refined based on the distance from each source to the MIR using the BAAQMD's *Diesel Internal Combustion Engine Distance Multiplier Tool* (Table 1 and Figure 1).

As shown in Table 1, the screening analysis, which is based on conservative assumptions, indicates that the cumulative excess cancer risk, chronic HI, and PM2.5 concentrations at the MIR from existing and reasonably foreseeable future sources of TACs would be less than the City's cumulative thresholds.

---

[4] BAAQMD, 2012c. *Diesel Internal Combustion Engine Distance Multiplier Tool*. 13 June.
[5] BAAQMD, 2012a. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. May.
[6] CEHTP, 2015. *CEHTP Traffic Linkage Service*. 27 August.
[7] BAAQMD, 2015. *Roadway Screening Analysis Calculator*. 16 April.
[8] BAAQMD's New Source Review for TACs (Regulation 2, Rule 5).
[9] BAAQMD, 2016. *Risk and Hazards Emissions Screening Calculator (Beta Version)*.

Table 1: Summary of Cumulative Health Risk at MIR

Source	Source Type	Distance from MIR (feet)	Cancer Risk (per million)	Chronic HI	PM2.5 Concentration (µg/m^3)
Proposed Project					
Backup Diesel Generator	Diesel Engine	200	4.10	0.001	0.007
Future Backup Generators [A]					
2400 Valdez Street	Diesel Engine	300	2.50	0.001	0.005
2302 Valdez Street	Diesel Engine	200	4.10	0.001	0.007
2345 Broadway	Diesel Engine	780	0.70	0.000	0.001
2425 Valdez Street	Diesel Engine	365	1.80	0.001	0.003
2270 Broadway	Diesel Engine	835	0.60	0.000	0.001
2315 Valdez Street	Diesel Engine	375	1.80	0.001	0.003
2630 Broadway	Diesel Engine	795	0.60	0.000	0.001
Existing Stationary Sources					
Caltrans (BAAQMD Plant 14195)	Diesel Engine	830	3.29	0.001	0.006
Essex Portfolio LLC (BAAQMD Plant 19971)	Diesel Engine	590	1.63	0.001	0.000
CalSTEARS 180 Grand, LLC (BAAQMD Plant 16640)	Diesel Engine	560	2.64	0.001	0.005
Brandywine Realty Trust (BAAQMD Plant 19467)	Diesel Engine	690	1.51	0.001	0.000
InSite Connect, LLC (BAAQMD Plant 19104)	Diesel Engine	560	1.96	0.001	0.004
Mpower Communications (BAAQMD Plant 20013)	Diesel Engine	380	0.00	0.000	0.000
Saint Pauls Tower (BAAQMD Plant 13705)	Diesel Engine	880	0.91	0.000	0.000
Whole Foods Market Cal. (BAAQMD Plant 18861)	Diesel Engine	675	0.00	0.000	0.000
West Lake Christian Terrace (BAAQMD Plant 19269)	Diesel Engine	995	12.92	0.005	0.013
Oakland Acura (BAAQMD Plant 12498)	Not Reported	250	0.00	0.000	0.000
Autotrends (BAAQMD Plant 15482)	Not Reported	180	0.00	0.000	0.000
Q & S Automotive (BAAQMD Plant 12434)	Not Reported	850	0.00	0.000	0.000
Label Art (BAAQMD Plant 7476)	Not Reported	575	0.00	0.000	0.000
VIP Auto Collision Repair (BAAQMD Plant 19344)	Not Reported	395	0.00	0.000	0.000
Major Roadways (More than 10,000 AADT)					
Broadway (30,200 AADT)	Roadway	675	3.52	NA	0.099

Source	Source Type	Distance from MIR (feet)	Cancer Risk (per million)	Chronic HI	PM2.5 Concentration (µg/m³)
Grand Avenue (24,800 AADT)	Roadway	615	3.17	NA	0.051
Harrison Street (22,800 AADT)	Roadway	420	2.25	NA	0.112
27th Street (17,700 AADT)	Roadway	350	2.05	NA	0.208
Cumulative Health Risks			52.1	0.02	0.53
City of Oakland's Cumulative Thresholds			100	10.0	0.8
Threshold Exceedance?			No	No	No

Source: Health risk screening values derived from the BAAQMD's online Tools and Methodologies. http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools. Accessed April 20016.
AADT volumes reported by CEHTP (2015).

Notes: NA = not available
[A] For this screening analysis, it was conservatively assumed that all listed proposed developments would operate a backup generator. However, it is not known whether 2345 Broadway and 2425 Valdez Street would have a backup generator.

Cumulative Health Risks to New Receptors

The City of Oakland requires implementation of health risk reduction measures under SCA 20: Exposure to Air Pollution (Toxic Air Contaminants) for any projects that meet all of the following criteria:

1. The project involves any of the following sensitive land uses:
    a. Residential uses (new dwelling units); or
    b. New or expanded schools, daycare centers, parks, nursing homes, or medical facilities; and
2. The project is located within 1,000' (or other distance as specified below) of one or more of the following sources of air pollution:
    a. Freeway;
    b. Roadway with significant traffic (at least 10,000 vehicles/day);
    c. Rail line (except BART) with over 30 trains per day;
    d. Distribution center that accommodates more than 100 trucks per day, more than 40 trucks with operating Transportation Refrigeration Units (TRU) per day, or where the TRU unit operations exceed 300 hours per week;
    e. Major rail or truck yard (such as the Union Pacific rail yard adjacent to the Port of Oakland);

f. Ferry terminal;

g. Stationary pollutant source requiring a permit from BAAQMD (such as a diesel generator);

h. Within 0.5 miles of the Port of Oakland or Oakland Airport;

i. Within 300 feet of a gas station; or

j. Within 300 feet of a dry cleaner with a machine using PERC (or within 500 feet of a dry cleaner with two or more machines using PERC); and

3. The project exceeds the health risk screening criteria after a screening analysis is conducted in accordance with the Bay Area Air Quality Management (BAAQMD) CEQA Guidelines.

Because the proposed project would involve new residential receptors (item 1a) and is located within 1,000 feet of major roadways (item 2b), BASELINE performed a screening analysis to determine whether the project would exceed the City's cumulative health risk thresholds (cancer risk of 100 in a million, chronic HI of 10, and PM2.5 concentration of 0.8 micrograms per cubic meter) per item 3 above. The approach was the same as the methods described above to determine potential health risks to existing sensitive receptors from the project and existing and reasonably foreseeable future TAC sources.

Based on the BAAQMD's *Stationary Source Screening Analysis Tool*, sixteen existing stationary sources of TAC emissions were identified within 1,000 feet of the project site (Table 2 and Figure 1). Preliminary health risk screening values at the project site from the stationary sources were determined using the BAAQMD's *Stationary Source Screening Analysis Tool*. The BAAQMD's *Diesel Internal Combustion Engine Distance Multiplier Tool* was used to refine the screening values associated with 8 of the 16 stationary sources that operate diesel engines. The screening values for one other facility that operates diesel engines (BAAQMD Plant 19269) was not refined because the values were based on a site-specific health risk assessment.

Based on review of CEHTP traffic data, four major roadways with an AADT volume greater than 10,000 vehicles per day were identified within 1,000 feet of the project site (Table 2 and Figure 1). The health risk screening values at the project site from nearby major roadways were estimated using the BAAQMD's *Roadway Screening Analysis Calculator*.

Eight proposed developments were identified within 1,000 feet of the project site that are either under construction or could be constructed in the near future, and future operations could potentially include maintenance and testing of a backup diesel generator. Health risks at the project site from future generators was estimated using the BAAQMD's *Risk and Hazards Emissions Screening Calculator (Beta Version)* and the BAAQMD's *Diesel Internal Combustion Engine Distance Multiplier Tool* (Table 2 and Figure 1).

As shown in Table 2, the screening analysis, which is based on conservative assumptions, indicates that the cumulative excess cancer risk, chronic HI, and PM2.5 concentrations at the project site from existing and reasonably foreseeable future sources of TACs within 1,000 feet of the project would be less than the City's cumulative thresholds. Therefore, the project would not be required to implement health risk reduction measures under SCA 20: Exposure to Air Pollution (Toxic Air Contaminants).

Table 2: Summary of Cumulative Health Risks at Project Site

Source	Source Type	Distance from Project Site (feet)	Cancer Risk (per million)	Chronic HI	PM2.5 Concentration ($\mu g/m^3$)
Future Backup Generators [A]					
2400 Valdez Street	Diesel Engine	45	10.00	0.004	0.018
2302 Valdez Street	Diesel Engine	280	2.80	0.001	0.005
2345 Broadway	Diesel Engine	795	0.60	0.000	0.001
2425 Valdez Street	Diesel Engine	185	5.00	0.002	0.009
2270 Broadway	Diesel Engine	850	0.60	0.000	0.001
2315 Valdez Street	Diesel Engine	420	1.60	0.001	0.003
2630 Broadway	Diesel Engine	315	2.50	0.001	0.005
2820 Broadway	Diesel Engine	830	0.60	0.000	0.001
Existing Stationary Sources					
Caltrans (BAAQMD Plant 14195)	Diesel Engine	965	2.19	0.001	0.004
Essex Portfolio LLC (BAAQMD Plant 19971)	Diesel Engine	670	1.30	0.000	0.000
CalSTEARS 180 Grand, LLC (BAAQMD Plant 16640)	Diesel Engine	645	2.38	0.001	0.004
Brandywine Realty Trust (BAAQMD Plant 19467)	Diesel Engine	775	1.32	0.000	0.000
InSite Connect, LLC (BAAQMD Plant 19104)	Diesel Engine	600	1.76	0.001	0.003
Mpower Communications (BAAQMD Plant 20013)	Diesel Engine	385	0.00	0.000	0.000
Saint Pauls Tower (BAAQMD Plant 13705)	Diesel Engine	365	3.29	0.001	0.001
Whole Foods Market Cal. (BAAQMD Plant 18861)	Diesel Engine	340	0.00	0.000	0.000
West Lake Christian Terrace (BAAQMD Plant 19269)	Diesel Engine	470	12.92	0.005	0.013
Oakland Acura (BAAQMD Plant 12498)	Not Reported	130	0.00	0.000	0.000
Autotrends (BAAQMD Plant 15482)	Not Reported	20	0.00	0.000	0.000
Q & S Automotive (BAAQMD Plant 12434)	Not Reported	920	0.00	0.000	0.000

Source	Source Type	Distance from Project Site (feet)	Cancer Risk (per million)	Chronic HI	PM2.5 Concentration ($\mu g/m^3$)
Label Art (BAAQMD Plant 7476)	Not Reported	260	0.00	0.000	0.000
VIP Auto Collision Repair (BAAQMD Plant 19344)	Not Reported	50	0.00	0.000	0.000
Autotrends (BAAQMD Plant 15483)	Not Reported	865	0.00	0.000	0.000
Collision Service Center (BAAQMD Plant 15919)	Not Reported	940	0.00	0.000	0.000
Major Roadways (More than 10,000 AADT)					
Broadway (30,200 AADT)	Roadway	450	5.01	NA	0.099
Grand Avenue (24,800 AADT)	Roadway	690	2.85	NA	0.051
Harrison Street (22,800 AADT)	Roadway	130	6.38	NA	0.112
27th Street (17,700 AADT)	Roadway	20	11.64	NA	0.208
Cumulative Health Risks			74.7	0.02	0.54
City of Oakland's Cumulative Threshold			100	10.0	0.8
Threshold Exceedance?			No	No	No

Source: Health risk screening values derived from the BAAQMD's online Tools and Methodologies. http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools. Accessed April 20016.
AADT volumes reported by CEHTP (2015).

Notes: NA = not available.
[A] For this screening analysis, it was conservatively assumed that all proposed developments would operate a backup generator. However, it is not known whether 2345 Broadway and 2425 Valdez Street would have a backup generator.

Toxic Air Contaminant Sources near the Project Site

Figure 1

Legend

- Project Site
- 1,000-Foot Buffer around Project Site
- 1,000-Foot Buffer around Maximally Impacted Receptor
- Existing Stationary Source (with BAAQMD Plant ID)[1]
- Future Backup Generator[2]
- Maximally Impacted Receptor

Base: Google Earth Pro, 2016.

Note: BAAQMD = Bay Area Air Quality Management District

[1] The location of existing stationary sources reported by BAAQMD adjusted according to the street address.

[2] Potential backup generators assumed to be located near the center of future buildings.

0 400 Feet N

24th and Harrison
Oakland

BASELINE ENVIRONMENTAL CONSULTING

This page intentionally left blank.

Attachment H: Greenhouse Gases and Climate Change Screening Analysis for the 24th and Harrison Streets Project

BASELINE ENVIRONMENTAL CONSULTING

MEMORANDUM

Date: July 11, 2016 **Job No.:** 16208-00.02423

To: Hannah Young, Urban Planning Partners, Inc.

From: Patrick Sutton, BASELINE Environmental Consulting

Subject: **Greenhouse Gases and Climate Change Screening Analysis – 24th and Harrison**

Based on the findings of the Broadway Valdez District Specific Plan (BVDSP) Environmental Impact Report (EIR), the proposed 24th and Harrison project (project) in the City of Oakland is required to determine if a Greenhouse Gas (GHG) Reduction Plan is required in accordance with the City of Oakland's current Standard Condition of Approvals (SCAs). The City's current SCA for a GHG Reduction Plan (SCA 38) applies to any project that meets one or more of the following three scenarios and has a net increase in GHG emissions:

- **Scenario A:** Projects which (a) involve a land use development (i.e., a project that does not require a permit from the Bay Area Air Quality Management District [BAAQMD] to operate), (b) exceed the GHG emissions screening criteria contained in the BAAQMD CEQA Guidelines, and (c) after a GHG analysis is prepared would exceed both of the City's applicable thresholds of significance (1,100 metric tons of carbon dioxide equivalents [CO2e] annually and 4.6 metric tons of CO2e per service population[1] annually).

- **Scenario B:** Projects which (a) involve a land use development, (b) exceed the GHG emissions screening criteria contained in the BAAQMD CEQA Guidelines, (c) after a GHG analysis is prepared would exceed at least one of the City's applicable thresholds of significance (1,100 metric tons of CO2e annually or 4.6 metric tons of CO2e per service population annually), and (d) are considered to be "Very Large Projects."

- **Scenario C:** Projects which (a) involve a stationary source of GHG (i.e., a project that requires a permit from BAAQMD to operate) and (b) after a GHG analysis is prepared would exceed the City's applicable threshold of significance (10,000 metric tons of CO2e annually).

SCA 38 requires a project applicant to prepare a GHG Reduction Plan to increase energy efficiency and reduce GHG emissions to the greatest extent feasible below the BAAQMD's

[1] The "service population" is the total number of employees and residents of a proposed project.

thresholds of significance. The GHG Reduction Plan would include a detailed GHG emissions inventory and a comprehensive set of quantified GHG emissions reduction measures.

The BAAQMD's screening criteria are included in Table 3-1 of the BAAQMD's 2011 *CEQA Air Quality Guidelines*. The screening criteria indicate which projects, based on land use and size, would have impacts that would be considered less than significant without a quantitative analysis of project emissions. The City's numeric thresholds of significance for GHG emissions from proposed land use developments and stationary sources are also derived from the BAAQMD's 2011 *CEQA Air Quality Guidelines*.

Table 1 compares the proposed maximum development scenario for the project to the criteria associated with each of the City of Oakland's three GHG emissions scenarios for SCA 38. For a project to be subject to SCA 38 (and be required to prepare a GHG Reduction Plan), the project must meet all the criteria of one or more of the scenarios. As indicated in Table 1, the proposed project would not trigger the GHG Reduction Plan requirement because none of the three scenarios of SCA 38 are fully satisfied. Supporting analysis for the findings summarized in Table 1 is provided in Attachments A through C.

Conclusion

The analysis above indicates that the proposed project would not meet all the criteria described under Scenarios A, B, and C of SCA 38. Therefore, the proposed project would not be required to prepare a GHG Reduction Plan.

Table 1: Comparison of Proposed Project with Scenarios for SCA 38

Scenario	Criterion (a)	Criterion (b)	Criterion (c)	Criterion (d)	Applies to Project?
Scenario A	*Involve land use development*	*Exceed BAAQMD's screening criteria* [A]	*Exceed both of the City's applicable thresholds* [B]	---	No
24th & Harrison Project	Yes (mixed use)	Yes (450 dwelling units and 65,000 ft^2 retail)	No (See Table B2)	---	
Scenario B	*Involve land use development*	*Exceed BAAQMD's screening criteria* [A]	*Exceed one of the City's applicable thresholds* [B]	*Very Large Project*	No
24th & Harrison Project	Yes (mixed use)	Yes (450 dwelling units and 65,000 ft^2 retail)	No (See Table B2)	Yes (See Table A1)	
Scenario C	*Involve a stationary source*	*Exceed the City's applicable threshold* [C]	---	---	No
24th & Harrison	Yes (backup generator)	No (See Table B3)	---	---	

Notes: ft^2 = square feet, --- = *Not Applicable*

[A] Based on Table 3-1 of the BAAQMD's 2011 *CEQA Air Quality Guidelines*, a high-rise apartment building with 91 or less dwelling units or a strip mall/regional shopping center with 19,000 or less square feet of area would have GHG emission levels below the City's applicable thresholds.

[B] For land use developments, the City's threshold of significance are 1,100 metric tons of CO2e annually and 4.6 metric tons of CO2e per service population annually.

[C] For stationary sources, the City's threshold of significance is 10,000 metric tons of CO2e annually.

ATTACHMENT A

Comparison of Project with Very Large Project

As outlined in Scenario B of SCA 38 (Table 1), the proposed project should be compared to the City's criteria for identifying a Very Large Project. The City defines a Very Large Project as any of the following:

(A) Residential development of more than 500 dwelling units;
(B) Shopping center or business establishment employing more than 1,000 persons or encompassing more than 500,000 square feet of floor space;
(C) Commercial office building employing more than 1,000 persons or encompassing more than 250,000 square feet of floor space;
(D) Hotel/motel development of more than 500 rooms;
(E) Industrial, manufacturing, processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or encompassing more than 650,000 square feet of floor area; or
(F) Any combination of smaller versions of the above that when combined result in equivalent annual GHG emissions as the above.

The project does not meet any of the Criteria A through E. The proposed 450 residential units are below the 500-dwelling-unit threshold. The retail component of the project would not employ more than 1,000 persons and would have less than 500,000 square feet of floor space. The proposed project does not include commercial office uses, hotel/motel uses, or industrial/manufacturing uses.

Criterion F is assessed in Table A1, which shows the combined residential and retail uses, and evaluates the percentage of each component of the project to the criteria for Very Large Projects. If the sum of these percentages adds up to 100 or more, then the project would constitute a Very Large Project. As shown in Table A1, the combined project components would result in equivalent GHG emissions that represent a Very Large Project. Therefore, the proposed project would be considered a Very Large Project.

Table A1: Comparison of Proposed Project with Criterion F for a Very Large Project

Land Use	Unit Metric	Proposed Project	Very Large Project	Project Component's Percentage of a Very Large Project
Residential	Dwelling Units	450	500	90%
Retail	Square Feet	65,000	500,000	13%
Total (Combined Land Use Components)				103%

Note: Square footage shown for the maximum scenario considered for the project.

ATTACHMENT B

Quantification of Project GHG Emissions

As outlined in Scenarios A, B, and C of SCA 38 (Table 1), the project's GHG emissions from land use development and stationary sources (a backup generator) should be estimated and compared to the City's thresholds of significance to determine if a GHG Reduction Plan is required. The BAAQMD recommends using the most current version of the California Emissions Estimator Model (CalEEMod) to estimate construction and operational emissions of GHGs for a proposed project. CalEEMod utilizes widely accepted models for emission estimates combined with appropriate default data for a variety of land-use projects that can be used if site-specific information is not available. The primary input data used to estimate emissions associated with each of the project's land-use types are summarized in Table B1. A copy of the CalEEMod report for the project, which summarizes the input parameters, assumptions, and findings, is included in the Attachment.

Table B1: Summary of Land-Use Input Parameters for CalEEMod

Project Land-Use Type	CalEEMod Land-Use Type	24th & Harrison Project Uses (Square Feet)
Apartments, including amenities	Apartments High Rise	454,530
Retail	Regional Shopping Center	65,000
Parking Garage	Enclosed Parking with Elevator	186,726

Notes: Square footage shown for the maximum scenario considered for the project.
The total dwelling units for the project = 450
The total lot acreage for project = 2.28

Emissions of GHGs during project construction and operation were estimated using the CalEEMod input parameters summarized in Table B1 and the following information:

- Site preparation (i.e., vegetation removal) was not included in the analysis because the project site is devoid of vegetation.
- Approximately 3,632 tons of demolition debris and 49,000 cubic yards of soil export was assumed to calculate emissions from off-site hauling trips.
- Based on the design of the East Bay Municipal Utility District's wastewater treatment plant, emissions estimated from wastewater treatment assumed a process with 100 percent aerobic biodegradation and 100 percent anaerobic digestion with cogeneration.
- Based on the project design, no fireplaces or woodstoves would be included in the project operations.

- Sequestration from landscaping was assumed to be negligible and, therefore, was not included in the analysis.

The 2013 California Building Energy Efficiency Standards (Title 24, Part 6) adopted by the City of Oakland use 25 percent less energy for lighting, heating, cooling, ventilation, and water heating than the default 2008 Standards used in CalEEMod.[2] This energy use reduction was included in the analysis to estimate unmitigated emissions of criteria pollutants for the 2016 Modified Project. The City of Oakland has also adopted a Green Building Ordinance for private development projects. In accordance with the Green Building Ordinance, the proposed project must implement mandatory measures from the statewide CALGreen Code and complete a Green Building Compliance Checklist (e.g., LEED or GreenPoint Rater).[3] Compliance with the mandatory measures described under the current CALGreen Code would reduce indoor water use by approximately 20 percent.[4] These GHG reductions were included in the GHG analysis for the proposed project.

In accordance with the City of Oakland's CEQA guidance for evaluating the GHG thresholds of significance, the construction CO2e emissions were annualized over a period of 40 years and then added to the expected CO2e emissions during operation. The average annual CO2e emissions per service population were determined based on a service population of 972 people for the maximum development scenario.[5]

For this GHG analysis, it was assumed that mobile emissions during project operations would predominantly be from cars and light-duty trucks. According to the CEQA streamlining provisions described under Senate Bill (SB) 375, certain "mixed-use residential projects" that are consistent with the general use designation, density, building intensity, and applicable policies specified in a Sustainable Communities Strategy (SCS) do not need to analyze climate change impacts resulting from cars and light-duty trucks. As defined in Public Resources Code (PRC) Section 21159.28(d), a mixed-use residential project is a project where at least 75 percent of the total building square footage of the project consists of residential use or a "Transit Priority Project" as defined in PRC Section 21155(b). A Transit Priority Project must contain the following:

1) At least 50 percent residential use based on total building square footage and, if the project contains between 26 and 50 percent non-residential uses, a floor area ratio of not less than 0.75;

---

[2] California Energy Commission, 2012. *Building Energy Efficiency Standards: Frequently Asked Questions*. May.
[3] Rating system and checklist determined by City of Oakland Planning Department based on square footage of each use.
[4] California Energy Commission, 2012. *Building Energy Efficiency Standards: Frequently Asked Questions*. May.
[5] Based on the generation rate established for the BVDSP area of 1.87 persons per household (842 residents) and a standard assumption of 1 employee per 500 square feet (130 employees).

2) A minimum net density of at least 20 dwelling units per acre; and

3) Be within 0.5 mile of a major transit stop or high-quality transit corridor[6] included in a regional transportation plan.

The proposed project meets the definition of a Transit Priority Project (and thereby a mixed-use residential project per PRC Section 21159.28[d]) based on the following comparison:

1) The proposed project would be up to 736,737 square feet in size, with up to 454,530 square feet of residential uses, and therefore would contain residential uses in approximately 61.7 percent of the total development area. Since the proposed project will include up to 454,530 square feet of residential and 251,726 square feet of non-residential uses (retail and parking) over a total site area of 99,202 square feet, both the residential floor area ratio (4.6) and non-residential floor area ratio (2.5) would exceed 0.75 under the maximum development scenario.

2) The project site is 2.28 acres in area, and the proposed project would construct up to 450 dwelling units (under the maximum development scenario); therefore, the net density would be approximately 197 dwelling units per acre.

3) The proposed project is within 0.5 miles of the 19th Street Oakland Bay Area Rapid Transit (BART) station, which is a major transit stop; in addition, Broadway just west of the project site qualifies as a "High Quality Transit Corridor" because fixed bus route services are provided through AC Transit with service intervals no longer than 15 minutes during peak commute hours.

The adopted *Plan Bay Area*[7] serves as the SCS for the Bay Area. As defined by *Plan Bay Area*, Priority Development Areas (PDAs) are areas where new development will support the needs of residents and workers in a pedestrian-friendly environment served by transit. As stated in the BVDSP, the Broadway Valdez District is considered a PDA. The proposed project is consistent with the general use designation, density, building intensity, and applicable policies specified in the BVDSP. Therefore, since the proposed project qualifies as a mixed-use residential project pursuant to PRC Section 21159.28(d) and is consistent with the applicable provisions of *Plan Bay Area*, the project's estimated GHG emissions from cars and light-duty trucks are excluded from the GHG analysis. It was assumed that the only mobile emissions of GHGs during operation would be generated by 14 medium-duty truck trips per week for retail purposes and 2 medium-duty truck trips per week for residential purposes.

[6] A high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

[7] Metropolitan Transportation Commission and Association of Bay Area Governments, 2013. *Plan Bay Area, Strategy for a Sustainable Region*. Adopted July 18, 2013.

The total average annual CO2e emissions and the total average annual CO2e emissions per service population for the proposed project are compared to the City's thresholds in Table B2. The project's estimated CO2e emissions are below the City's annual emissions threshold and the efficiency-based threshold in terms of annual emissions per service population.

Table B2: Summary of Average Greenhouse Gas Emissions from Operation of the Project

Emissions Scenario	CO2e (metric tons/year)	CO2e (metric tons/year/ service population)
Construction [A]	27	0.027
Operation – Area	6	0.006
Operation – Energy	842	0.866
Operation – Mobile [B]	2	0.002
Operation – Waste	125	0.129
Operation – Water	60	0.062
Total Project Emissions	1,061	1.09
City of Oakland's Thresholds	1,100	4.6
Threshold Exceedance?	No	No

Source: CalEEMod (Attachment C)
Notes:
[A] In accordance with CEQA guidance from the City of Oakland, GHG emissions during construction are amortized over 40 years.
[B] In accordance with SB 375 CEQA streamlining provisions, GHG emissions during operation exclude vehicle trips from cars and light-duty trucks. For this analysis, it was assumed the only mobile emissions of GHGs during operation would be generated by 14 medium-duty truck trips per week for retail purposes and 2 medium-duty truck trips per week for residential purposes.

The BAAQMD recommends analyzing GHG emissions from permitted stationary sources separately from a project's operational emissions. The proposed project will install a backup generator because the California Building Code requires a backup generator for elevators in buildings that are five or more stories in height (about 70 feet). GHG emissions from a diesel generator were estimated in accordance with methodologies presented in the California Air Resources Board's (CARB's) 2010 *Off-road Simulation Model and Summary of Off-Road Emissions Inventory Update* and using data derived from the CARB's *Off-Road Emissions Inventory Model* (OFFROAD2011). It was assumed that a maximum 1,000 horsepower diesel generator would be used for non-emergency operation up to 50 hours per year (for routine testing and maintenance). The CO2e emissions from the backup generator were calculated using the following equation:

$$\text{Emissions in pounds } = (Pop)(HP_{Ave})(LF)(Hr)(EF)\left(\frac{1\ pound}{454\ grams}\right)$$

Where:
Pop = Population of equipment
HP_{Ave} = Maximum-rated average horse power (hp)
LF = Load factor

Hr = total operating hours (per equipment)
EF = Emissions factor (grams/hp-hour)

The model input parameters and assumptions used to estimate emissions from a new backup diesel generator are included in Attachment C. The total average annual emissions of CO2e from a backup generator on the project site would be below the City's stationary source threshold (Table B3).

Table B3: Summary of Average Greenhouse Emissions from the Project Backup Generator

Source	CO2e (metric tons/year)
Project Backup Generator	28.6
City of Oakland's Thresholds	10,000
Threshold Exceedance?	No

Source: See Attachment C
Note: Assumes backup generators with up to 1,000 horsepower that is maintained and tested up to 50 hours per year.

ATTACHMENT C

Model Results

24th and Harrison Project

Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	167.41	1000sqft	0.00	186,726.00	0
Apartments High Rise	450.00	Dwelling Unit	2.28	454,530.00	972
Regional Shopping Center	65.00	1000sqft	0.00	65,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	63
Climate Zone	5			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	427	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor changed to the 2013 emission factor reported in PG&E's (2015) Greenhouse Gas Emission Factors: Guidance for PG&E Customers

Land Use - Lot acreage, building square footage, and residential population based on project design for max development scenario.
Non-residential acreages zeroed out since the project is a mixed-use development located on the same footprint.

Construction Phase - No site preparation included because the project site is devoid of vegetation.

Demolition - Building demo assumption: (Area of buildings)(CalEEMod conversion factor)=(63.740 KSF)(0.046 tons/SF)=2,932 tons
Parking Lot demo assumption:(Area of parking lot)(Depth of asphalt)(Density asphalt)=(38.612 KSF)(0.25 ft)(0.0725 tons/ft^3)=700 tons

Grading - 49,000 cubic yards is max amount of soil excavation based on project design.

Architectural Coating -

Vehicle Trips - In accordance with CEQA streamlining under SB 375, cars and light-duty truck trips excluded. Assumed 14 medium-duty truck trips per week for retail and 2 medium-duty truck trips per week for residential.

Vechicle Emission Factors - Fleet mix evaluated only includes medium-duty trucks.

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves - No woodstoves or fireplaces.

Energy Use - CO2 intensity factor changed to the 2013 emission factor reported in PG&E's (2015) Greenhouse Gas Emission Factors: Guidance for PG&E Customers.

Water And Wastewater - EBMUD services at the project site and applies 100 percent aerobic process and 100 percent cogeneration.

Energy Mitigation - Current 2013 Title 24 energy standards exceed 2008 Title 24 energy standards by 25%. These emission reductions are considered part of the project's unmitigated emissions.

Water Mitigation - CALGreen Code mandatory requirement. These emission reductions are considered part of the project's unmitigated emissions.

Operational Off-Road Equipment - Empty

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	247.50	0.00
tblFireplaces	NumberNoFireplace	139.50	0.00
tblFireplaces	NumberWood	63.00	0.00
tblGrading	MaterialExported	0.00	49,000.00
tblLandUse	LandUseSquareFeet	167,410.00	186,726.00
tblLandUse	LandUseSquareFeet	450,000.00	454,530.00
tblLandUse	LotAcreage	3.84	0.00

tblLandUse	LotAcreage	7.26	2.28
tblLandUse	LotAcreage	1.49	0.00
tblLandUse	Population	1,287.00	972.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	427
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleEF	HHD	0.05	0.00
tblVehicleEF	LDA	0.54	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.17	0.00
tblVehicleEF	LHD1	0.03	0.00
tblVehicleEF	LHD2	4.5640e-003	0.00
tblVehicleEF	MCY	5.6840e-003	0.00
tblVehicleEF	MDV	0.11	1.00
tblVehicleEF	MH	1.4180e-003	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	OBUS	1.7890e-003	0.00
tblVehicleEF	SBUS	1.9900e-004	0.00
tblVehicleEF	UBUS	3.6610e-003	0.00
tblVehicleTrips	ST_TR	7.16	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	SU_TR	6.07	4.0000e-003
tblVehicleTrips	SU_TR	25.24	0.22
tblVehicleTrips	WD_TR	6.59	0.00
tblVehicleTrips	WD_TR	42.94	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00

tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00
tblWater	AnaDigestCogenCombDigestGasPercent	0.00	100.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	2.25	0.00
tblWoodstoves	NumberNoncatalytic	2.25	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	2.5064	4.9137	6.4251	0.0128	0.5951	0.2141	0.8093	0.1602	0.2033	0.3635	0.0000	1,057.9003	1,057.9003	0.0845	0.0000	1,059.6749
2018	2.6486	7.1500e-003	0.0163	4.0000e-005	2.2600e-003	4.7000e-004	2.7300e-003	6.0000e-004	4.7000e-004	1.0700e-003	0.0000	2.6701	2.6701	1.7000e-004	0.0000	2.6736
Total	**5.1550**	**4.9209**	**6.4414**	**0.0129**	**0.5974**	**0.2146**	**0.8120**	**0.1608**	**0.2037**	**0.3645**	**0.0000**	**1,060.5703**	**1,060.5703**	**0.0847**	**0.0000**	**1,062.3485**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	2.5064	4.9137	6.4250	0.0128	0.5951	0.2141	0.8093	0.1602	0.2033	0.3635	0.0000	1,057.8999	1,057.8999	0.0845	0.0000	1,059.6746
2018	2.6486	7.1500e-003	0.0163	4.0000e-005	2.2600e-003	4.7000e-004	2.7300e-003	6.0000e-004	4.7000e-004	1.0700e-003	0.0000	2.6701	2.6701	1.7000e-004	0.0000	2.6736
Total	**5.1550**	**4.9209**	**6.4414**	**0.0129**	**0.5974**	**0.2146**	**0.8120**	**0.1608**	**0.2037**	**0.3645**	**0.0000**	**1,060.5700**	**1,060.5700**	**0.0847**	**0.0000**	**1,062.3482**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.3017	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741
Energy	0.0232	0.1989	0.0910	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	934.2861	934.2861	0.0523	0.0141	939.7580
Mobile	1.5600e-003	1.6200e-003	0.0132	3.0000e-005	1.5200e-003	1.0000e-005	1.5300e-003	4.0000e-004	1.0000e-005	4.2000e-004	0.0000	2.0336	2.0336	1.2000e-004	0.0000	2.0361
Waste						0.0000	0.0000		0.0000	0.0000	55.8733	0.0000	55.8733	3.3020	0.0000	125.2156
Water						0.0000	0.0000		0.0000	0.0000	12.0767	46.9718	59.0485	0.0448	0.0269	68.3344
Total	**3.3265**	**0.2393**	**3.4587**	**1.4700e-003**	**1.5200e-003**	**0.0345**	**0.0360**	**4.0000e-004**	**0.0345**	**0.0349**	**67.9499**	**988.7537**	**1,056.7036**	**3.4045**	**0.0410**	**1,140.9182**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.3017	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741
Energy	0.0184	0.1583	0.0724	1.0100e-003		0.0127	0.0127		0.0127	0.0127	0.0000	836.6904	836.6904	0.0479	0.0125	841.5837
Mobile	1.5600e-003	1.6200e-003	0.0132	3.0000e-005	1.5200e-003	1.0000e-005	1.5300e-003	4.0000e-004	1.0000e-005	4.2000e-004	0.0000	2.0336	2.0336	1.2000e-004	0.0000	2.0361
Waste						0.0000	0.0000		0.0000	0.0000	55.8733	0.0000	55.8733	3.3020	0.0000	125.2156
Water						0.0000	0.0000		0.0000	0.0000	9.6613	43.1492	52.8105	0.0362	0.0216	60.2715
Total	**3.3217**	**0.1987**	**3.4401**	**1.2200e-003**	**1.5200e-003**	**0.0312**	**0.0327**	**4.0000e-004**	**0.0312**	**0.0316**	**65.5346**	**887.3353**	**952.8699**	**3.3916**	**0.0342**	**1,034.6810**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.14**	**16.95**	**0.54**	**17.01**	**0.00**	**9.49**	**9.09**	**0.00**	**9.49**	**9.38**	**3.55**	**10.26**	**9.83**	**0.38**	**16.74**	**9.31**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Grading	Grading	1/28/2017	2/6/2017	5	6	
3	Building Construction	Building Construction	2/7/2017	12/11/2017	5	220	
4	Paving	Paving	12/12/2017	12/25/2017	5	10	
5	Architectural Coating	Architectural Coating	12/26/2017	1/8/2018	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 920,423; Residential Outdoor: 306,808; Non-Residential Indoor: 348,621; Non-Residential Outdoor: 116,207 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	359.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	6,125.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	415.00	86.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	83.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0389	0.0000	0.0389	5.8800e-003	0.0000	5.8800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0272	0.2659	0.2087	2.4000e-004		0.0161	0.0161		0.0150	0.0150	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4126
Total	**0.0272**	**0.2659**	**0.2087**	**2.4000e-004**	**0.0389**	**0.0161**	**0.0549**	**5.8800e-003**	**0.0150**	**0.0209**	**0.0000**	**22.2938**	**22.2938**	**5.6600e-003**	**0.0000**	**22.4126**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8400e-003	0.0483	0.0428	1.4000e-004	3.0300e-003	6.2000e-004	3.6500e-003	8.3000e-004	5.7000e-004	1.4000e-003	0.0000	12.1744	12.1744	9.0000e-005	0.0000	12.1763
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.6000e-004	6.3100e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0324	1.0324	6.0000e-005	0.0000	1.0336
Total	**4.2800e-003**	**0.0489**	**0.0491**	**1.5000e-004**	**4.2100e-003**	**6.3000e-004**	**4.8400e-003**	**1.1400e-003**	**5.8000e-004**	**1.7200e-003**	**0.0000**	**13.2068**	**13.2068**	**1.5000e-004**	**0.0000**	**13.2099**

3.2 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0389	0.0000	0.0389	5.8800e-003	0.0000	5.8800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0272	0.2659	0.2087	2.4000e-004		0.0161	0.0161		0.0150	0.0150	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4125
Total	**0.0272**	**0.2659**	**0.2087**	**2.4000e-004**	**0.0389**	**0.0161**	**0.0549**	**5.8800e-003**	**0.0150**	**0.0209**	**0.0000**	**22.2938**	**22.2938**	**5.6600e-003**	**0.0000**	**22.4125**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8400e-003	0.0483	0.0428	1.4000e-004	3.0300e-003	6.2000e-004	3.6500e-003	8.3000e-004	5.7000e-004	1.4000e-003	0.0000	12.1744	12.1744	9.0000e-005	0.0000	12.1763
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.6000e-004	6.3100e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0324	1.0324	6.0000e-005	0.0000	1.0336
Total	**4.2800e-003**	**0.0489**	**0.0491**	**1.5000e-004**	**4.2100e-003**	**6.3000e-004**	**4.8400e-003**	**1.1400e-003**	**5.8000e-004**	**1.7200e-003**	**0.0000**	**13.2068**	**13.2068**	**1.5000e-004**	**0.0000**	**13.2099**

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0224	0.0000	0.0224	0.0105	0.0000	0.0105	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0900e-003	0.0845	0.0569	6.0000e-005		4.6700e-003	4.6700e-003		4.2900e-003	4.2900e-003	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646
Total	**8.0900e-003**	**0.0845**	**0.0569**	**6.0000e-005**	**0.0224**	**4.6700e-003**	**0.0271**	**0.0105**	**4.2900e-003**	**0.0148**	**0.0000**	**5.7277**	**5.7277**	**1.7500e-003**	**0.0000**	**5.7646**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0655	0.8238	0.7296	2.3100e-003	0.0517	0.0106	0.0623	0.0142	9.7600e-003	0.0240	0.0000	207.7109	207.7109	1.5100e-003	0.0000	207.7427
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.5000e-004	1.4600e-003	0.0000	2.7000e-004	0.0000	2.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2383	0.2383	1.0000e-005	0.0000	0.2385
Total	**0.0656**	**0.8239**	**0.7311**	**2.3100e-003**	**0.0520**	**0.0106**	**0.0626**	**0.0143**	**9.7600e-003**	**0.0240**	**0.0000**	**207.9492**	**207.9492**	**1.5200e-003**	**0.0000**	**207.9812**

3.3 Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0224	0.0000	0.0224	0.0105	0.0000	0.0105	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0900e-003	0.0845	0.0569	6.0000e-005		4.6700e-003	4.6700e-003		4.2900e-003	4.2900e-003	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646
Total	**8.0900e-003**	**0.0845**	**0.0569**	**6.0000e-005**	**0.0224**	**4.6700e-003**	**0.0271**	**0.0105**	**4.2900e-003**	**0.0148**	**0.0000**	**5.7277**	**5.7277**	**1.7500e-003**	**0.0000**	**5.7646**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0655	0.8238	0.7296	2.3100e-003	0.0517	0.0106	0.0623	0.0142	9.7600e-003	0.0240	0.0000	207.7109	207.7109	1.5100e-003	0.0000	207.7427
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	1.5000e-004	1.4600e-003	0.0000	2.7000e-004	0.0000	2.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2383	0.2383	1.0000e-005	0.0000	0.2385
Total	**0.0656**	**0.8239**	**0.7311**	**2.3100e-003**	**0.0520**	**0.0106**	**0.0626**	**0.0143**	**9.7600e-003**	**0.0240**	**0.0000**	**207.9492**	**207.9492**	**1.5200e-003**	**0.0000**	**207.9812**

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9955	232.9955	0.0518	0.0000	234.0829
Total	**0.3660**	**2.5144**	**1.7874**	**2.7400e-003**		**0.1608**	**0.1608**		**0.1540**	**0.1540**	**0.0000**	**232.9955**	**232.9955**	**0.0518**	**0.0000**	**234.0829**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1064	0.8570	1.2998	2.2700e-003	0.0612	0.0125	0.0736	0.0176	0.0115	0.0290	0.0000	202.6938	202.6938	1.5800e-003	0.0000	202.7270
Worker	0.1546	0.2312	2.2164	4.9500e-003	0.4144	3.3700e-003	0.4177	0.1102	3.1000e-003	0.1133	0.0000	362.5464	362.5464	0.0195	0.0000	362.9554
Total	**0.2610**	**1.0882**	**3.5162**	**7.2200e-003**	**0.4755**	**0.0158**	**0.4913**	**0.1278**	**0.0146**	**0.1424**	**0.0000**	**565.2402**	**565.2402**	**0.0211**	**0.0000**	**565.6824**

3.4 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9952	232.9952	0.0518	0.0000	234.0827
Total	**0.3660**	**2.5144**	**1.7874**	**2.7400e-003**		**0.1608**	**0.1608**		**0.1540**	**0.1540**	**0.0000**	**232.9952**	**232.9952**	**0.0518**	**0.0000**	**234.0827**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1064	0.8570	1.2998	2.2700e-003	0.0612	0.0125	0.0736	0.0176	0.0115	0.0290	0.0000	202.6938	202.6938	1.5800e-003	0.0000	202.7270
Worker	0.1546	0.2312	2.2164	4.9500e-003	0.4144	3.3700e-003	0.4177	0.1102	3.1000e-003	0.1133	0.0000	362.5464	362.5464	0.0195	0.0000	362.9554
Total	**0.2610**	**1.0882**	**3.5162**	**7.2200e-003**	**0.4755**	**0.0158**	**0.4913**	**0.1278**	**0.0146**	**0.1424**	**0.0000**	**565.2402**	**565.2402**	**0.0211**	**0.0000**	**565.6824**

3.5 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2000e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.2000e-003**	**0.0823**	**0.0603**	**9.0000e-005**		**5.1100e-003**	**5.1100e-003**		**4.7100e-003**	**4.7100e-003**	**0.0000**	**8.0625**	**8.0625**	**2.4200e-003**	**0.0000**	**8.1134**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	3.8000e-004	3.6400e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.5956	0.5956	3.0000e-005	0.0000	0.5963
Total	**2.5000e-004**	**3.8000e-004**	**3.6400e-003**	**1.0000e-005**	**6.8000e-004**	**1.0000e-005**	**6.9000e-004**	**1.8000e-004**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**0.5956**	**0.5956**	**3.0000e-005**	**0.0000**	**0.5963**

3.5 Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.2000e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.2000e-003**	**0.0823**	**0.0603**	**9.0000e-005**		**5.1100e-003**	**5.1100e-003**		**4.7100e-003**	**4.7100e-003**	**0.0000**	**8.0625**	**8.0625**	**2.4200e-003**	**0.0000**	**8.1134**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	3.8000e-004	3.6400e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.5956	0.5956	3.0000e-005	0.0000	0.5963
Total	**2.5000e-004**	**3.8000e-004**	**3.6400e-003**	**1.0000e-005**	**6.8000e-004**	**1.0000e-005**	**6.9000e-004**	**1.8000e-004**	**1.0000e-005**	**1.9000e-004**	**0.0000**	**0.5956**	**0.5956**	**3.0000e-005**	**0.0000**	**0.5963**

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7646					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	4.3700e-003	3.7400e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	0.5107	0.5107	5.0000e-005	0.0000	0.5118
Total	**1.7653**	**4.3700e-003**	**3.7400e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**0.5107**	**0.5107**	**5.0000e-005**	**0.0000**	**0.5118**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	8.4000e-004	8.0600e-003	2.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3184	1.3184	7.0000e-005	0.0000	1.3198
Total	**5.6000e-004**	**8.4000e-004**	**8.0600e-003**	**2.0000e-005**	**1.5100e-003**	**1.0000e-005**	**1.5200e-003**	**4.0000e-004**	**1.0000e-005**	**4.1000e-004**	**0.0000**	**1.3184**	**1.3184**	**7.0000e-005**	**0.0000**	**1.3198**

3.6 Architectural Coating - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7646					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6000e-004	4.3700e-003	3.7400e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	0.5107	0.5107	5.0000e-005	0.0000	0.5118
Total	**1.7653**	**4.3700e-003**	**3.7400e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**0.5107**	**0.5107**	**5.0000e-005**	**0.0000**	**0.5118**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	8.4000e-004	8.0600e-003	2.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3184	1.3184	7.0000e-005	0.0000	1.3198
Total	**5.6000e-004**	**8.4000e-004**	**8.0600e-003**	**2.0000e-005**	**1.5100e-003**	**1.0000e-005**	**1.5200e-003**	**4.0000e-004**	**1.0000e-005**	**4.1000e-004**	**0.0000**	**1.3184**	**1.3184**	**7.0000e-005**	**0.0000**	**1.3198**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6469					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0200e-003	5.5600e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.7660	0.7660	7.0000e-005	0.0000	0.7675
Total	**2.6478**	**6.0200e-003**	**5.5600e-003**	**1.0000e-005**		**4.5000e-004**	**4.5000e-004**		**4.5000e-004**	**4.5000e-004**	**0.0000**	**0.7660**	**0.7660**	**7.0000e-005**	**0.0000**	**0.7675**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	1.1300e-003	0.0108	3.0000e-005	2.2600e-003	2.0000e-005	2.2800e-003	6.0000e-004	2.0000e-005	6.2000e-004	0.0000	1.9041	1.9041	1.0000e-004	0.0000	1.9061
Total	**7.5000e-004**	**1.1300e-003**	**0.0108**	**3.0000e-005**	**2.2600e-003**	**2.0000e-005**	**2.2800e-003**	**6.0000e-004**	**2.0000e-005**	**6.2000e-004**	**0.0000**	**1.9041**	**1.9041**	**1.0000e-004**	**0.0000**	**1.9061**

3.6 Architectural Coating - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.6469					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0200e-003	5.5600e-003	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.7660	0.7660	7.0000e-005	0.0000	0.7675
Total	**2.6478**	**6.0200e-003**	**5.5600e-003**	**1.0000e-005**		**4.5000e-004**	**4.5000e-004**		**4.5000e-004**	**4.5000e-004**	**0.0000**	**0.7660**	**0.7660**	**7.0000e-005**	**0.0000**	**0.7675**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.5000e-004	1.1300e-003	0.0108	3.0000e-005	2.2600e-003	2.0000e-005	2.2800e-003	6.0000e-004	2.0000e-005	6.2000e-004	0.0000	1.9041	1.9041	1.0000e-004	0.0000	1.9061
Total	**7.5000e-004**	**1.1300e-003**	**0.0108**	**3.0000e-005**	**2.2600e-003**	**2.0000e-005**	**2.2800e-003**	**6.0000e-004**	**2.0000e-005**	**6.2000e-004**	**0.0000**	**1.9041**	**1.9041**	**1.0000e-004**	**0.0000**	**1.9061**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5600e-003	1.6200e-003	0.0132	3.0000e-005	1.5200e-003	1.0000e-005	1.5300e-003	4.0000e-004	1.0000e-005	4.2000e-004	0.0000	2.0336	2.0336	1.2000e-004	0.0000	2.0361
Unmitigated	1.5600e-003	1.6200e-003	0.0132	3.0000e-005	1.5200e-003	1.0000e-005	1.5300e-003	4.0000e-004	1.0000e-005	4.2000e-004	0.0000	2.0336	2.0336	1.2000e-004	0.0000	2.0361

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	0.00	0.00	1.80	574	574
Enclosed Parking with Elevator	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	14.30	3,582	3,582
Total	0.00	0.00	16.10	4,156	4,156

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	12.40	4.30	5.40	26.10	29.10	44.80	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	654.1614	654.1614	0.0444	9.1900e-003	657.9439
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	705.0271	705.0271	0.0479	9.9100e-003	709.1037
NaturalGas Mitigated	0.0184	0.1583	0.0724	1.0100e-003		0.0127	0.0127		0.0127	0.0127	0.0000	182.5290	182.5290	3.5000e-003	3.3500e-003	183.6398
NaturalGas Unmitigated	0.0232	0.1989	0.0910	1.2600e-003		0.0160	0.0160		0.0160	0.0160	0.0000	229.2590	229.2590	4.3900e-003	4.2000e-003	230.6542

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	312000	1.6800e-003	0.0153	0.0129	9.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	16.6495	16.6495	3.2000e-004	3.1000e-004	16.7508
Apartments High Rise	3.98415e+006	0.0215	0.1836	0.0781	1.1700e-003		0.0148	0.0148		0.0148	0.0148	0.0000	212.6095	212.6095	4.0800e-003	3.9000e-003	213.9034
Total		**0.0232**	**0.1989**	**0.0910**	**1.2600e-003**		**0.0160**	**0.0160**		**0.0160**	**0.0160**	**0.0000**	**229.2590**	**229.2590**	**4.4000e-003**	**4.2100e-003**	**230.6542**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	245375	1.3200e-003	0.0120	0.0101	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	13.0941	13.0941	2.5000e-004	2.4000e-004	13.1738
Apartments High Rise	3.17509e+006	0.0171	0.1463	0.0623	9.3000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	169.4348	169.4348	3.2500e-003	3.1100e-003	170.4660
Total		**0.0184**	**0.1583**	**0.0724**	**1.0000e-003**		**0.0127**	**0.0127**		**0.0127**	**0.0127**	**0.0000**	**182.5290**	**182.5290**	**3.5000e-003**	**3.3500e-003**	**183.6398**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.62691e+006	315.1059	0.0214	4.4300e-003	316.9279
Enclosed Parking with Elevator	1.25853e+006	243.7577	0.0166	3.4300e-003	245.1671
Regional Shopping Center	754650	146.1636	9.9300e-003	2.0500e-003	147.0087
Total		**705.0271**	**0.0479**	**9.9100e-003**	**709.1037**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.5918e+006	308.3065	0.0209	4.3300e-003	310.0892
Enclosed Parking with Elevator	1.07554e+006	208.3152	0.0142	2.9300e-003	209.5197
Regional Shopping Center	710125	137.5398	9.3400e-003	1.9300e-003	138.3351
Total		**654.1614**	**0.0444**	**9.1900e-003**	**657.9439**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.3017	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741
Unmitigated	3.3017	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4412					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.7583					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1023	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741
Total	**3.3017**	**0.0388**	**3.3546**	**1.8000e-004**		**0.0184**	**0.0184**		**0.0184**	**0.0184**	**0.0000**	**5.4621**	**5.4621**	**5.3300e-003**	**0.0000**	**5.5741**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4412					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.7583					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1023	0.0388	3.3546	1.8000e-004		0.0184	0.0184		0.0184	0.0184	0.0000	5.4621	5.4621	5.3300e-003	0.0000	5.5741
Total	**3.3017**	**0.0388**	**3.3546**	**1.8000e-004**		**0.0184**	**0.0184**		**0.0184**	**0.0184**	**0.0000**	**5.4621**	**5.4621**	**5.3300e-003**	**0.0000**	**5.5741**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	52.8105	0.0362	0.0216	60.2715
Unmitigated	59.0485	0.0448	0.0269	68.3344

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	29.3193 / 18.4839	50.7686	0.0385	0.0231	58.7451
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.81471 / 2.95095	8.2798	6.3100e-003	3.8000e-003	9.5894
Total		**59.0485**	**0.0448**	**0.0269**	**68.3344**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	23.4554 / 18.4839	45.4106	0.0311	0.0186	51.8195
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.85177 / 2.95095	7.3999	5.1000e-003	3.0500e-003	8.4521
Total		**52.8105**	**0.0362**	**0.0216**	**60.2715**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	55.8733	3.3020	0.0000	125.2156
Unmitigated	55.8733	3.3020	0.0000	125.2156

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	207	42.0191	2.4833	0.0000	94.1676
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	68.25	13.8541	0.8188	0.0000	31.0480
Total		**55.8733**	**3.3020**	**0.0000**	**125.2156**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	207	42.0191	2.4833	0.0000	94.1676
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	68.25	13.8541	0.8188	0.0000	31.0480
Total		**55.8733**	**3.3020**	**0.0000**	**125.2156**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Summary of Backup Diesel Generator Model Parameters

Model Input Parameters						Emission Factors			Emissions	
Off-Road Equipment	Quantity	Days per year	Hours per day	Engine Horsepower	Load Factor	CO2 (g/bhp-hr)	CH4 (g/bhp-hr)	N2O (g/bhp-hr)	CO2eq (lb/year)	CO2eq (metric tons/year)
Backup Diesel Generator	1	50	1	1,000	1	568.3	0.0210	0.0096	62,960	28.6

Notes:

Emission rates for greenhouse gases derived from CalEEMod assuming statewide average for 2020.

Emissions = [quantity x total hours x hp x LF x EF]/454 g/lb

Load factor conservatively assumed to equal one.

$CO2eq = CO2 \times GWP_{CO2} + CH4 \times GWP_{CH4} + N2O \times GWP_{N2O}$

CalEEMod = California Emissions Estimator Model (ENVIRON International Corporation and the California Air Districts, 2013)

Emission factors for N2O based on the ratio of the CH4 emission factor (0.57 g/gallon) to the N20 emission factor (0.26 g/gallon) for diesel construction equipment reported in Table 5 of the U.S. Environmental Protection Agency's (2014) *Emission Factors for Greenhouse Gas Inventories* .

lb = pounds
g = grams
hp = horse power
bhp = brake horsepower
LF = load factor
EF = emission factor
hr = hour

CO2 = carbon dioxide
CH4 = methane
N2O = nitrous oxide
CO2eq - carbdon dioxide equivalent

Global Warming Potentials

CO2	1
CH4	25
N2O	298

Source: Title 40 Code of Federal Regulations, Chapter I, Subchapter C, Part 98, Subpart A, Table A-1